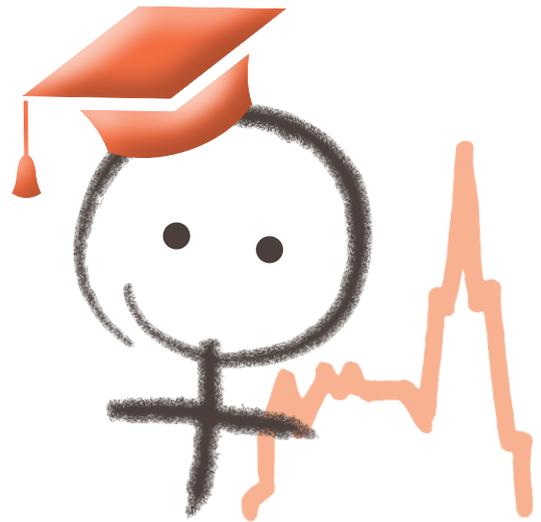


Book of Abstracts



8th European Conference
on Gender Equality in Higher Education

September 3-5, 2014 · Vienna University of Technology, Austria

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WEDNESDAY, SEPTEMBER 3, 2014, 11:45 – 12:30

Room: Sibylla Zech

LOUKAS BALAFOUTAS: USING EXPERIMENTS TO EVALUATE AFFIRMATIVE ACTION POLICIES.

Gender differences in choosing to enter competitions are one source of unequal labor market outcomes concerning wages and promotions. Given that studying the effects of policy interventions to support women is difficult with field data due to measurement problems and potential lack of control, we evaluate in a set of controlled laboratory experiments four interventions: Quotas for a minimum representation of women among the winners of a competition, two variants of preferential treatment of female candidates, and repetition of the competition if no woman is among the winners. Compared to no intervention, all interventions are effective in encouraging women to enter competitions more often. Moreover, they do not lead to inefficiencies in the sense that performance is at least equally good, both during and after the competition. Based on these findings we conclude that policy interventions in the spirit of affirmative action can “kill two birds with one stone”.

THURSDAY, SEPTEMBER 4, 2014, 11:00 – 12:30

Room: Sibylla Zech

ELIZABETH POLLITZER: CHANGING THE MEANING OF NORMAL SCIENCE

With the inclusion of gender as a criterion of success in Horizon 2020, and in the European Research Area, the quest to mainstream gender into EU policies and programmes, and in particular in the context of science, has taken a giant leap forward. Horizon 2020 introduces a paradigm change in how the role of gender in science is perceived. It confronts the illusion that ‘science is gender neutral’ by identifying gender as a cross cutting issue; as a dimension of research quality; and as an equality issue. Proposals are expected to respond by showing if and how these considerations of gender fit into their project. Whilst gender equality is a concept that science community is well acquainted with, the concept of gender dimension and the cross cutting role will be new to most researchers and their institutions. In my talk, I will focus on these two aspects of the new paradigm. Using research evidence and scientific consensus why actions are needed to improve quality of research and researcher training, I will show what practitioners, policy makers, administrators and researchers themselves can do to help integrate the new considerations of gender into scientific knowledge and practice.

FRIDAY, SEPTEMBER 5, 2014, 11:00 – 12:30

Room: Sibylla Zech

ANGELIKA PASEKA: BRINGING GENDER INTO THE MAINSTREAM OF SCHOOLS: ON CRISES, LEARNING INDIVIDUALS AND LEARNING ORGANISATIONS.

After almost 20 years of gender mainstreaming and plenty of targeted projects and initiatives, it is now time to step back and reflect on the actual depth and sustainability of this strategy in schools. A closer look reveals a certain level of resistance in schools to the gender issue. To determine why this is the case, we must in an initial step take a look at teachers and at the ‘reality’ they see and experience in their everyday work. We must then go on to critically examine the current different gender discourses and their influence on the debate. In a second step, we need to ask what might serve as a ‘door opener’ for getting gender equality issues into the mainstream of schools. At first glance, the recommendations made by the OECD (2013) appear quite simple: “Stereotyping needs to be addressed in educational choices at school from a young age. For example, adapt teaching strategies and material to increase engagement of boys in reading and of girls in maths and science; encourage more girls to follow science, engineering and maths courses in higher education and seek employment in these fields.” But how can this engagement in subjects and topics which still have a clear gender bias actually be encouraged and increased? To answer this question, we have to look at the concrete learning processes and not just at the figures and statistics which reveal the observable side of the issue. When and how do individuals learn gender awareness? It is the teachers who are responsible for such learning processes in their classes. But are the teachers themselves aware of such gender equality issues? Likewise, do the people who train these teachers share this gender awareness? My own research reveals that the conditions for implementing gender mainstreaming in its full sense are not really good – neither on the teacher/teacher trainer level nor on the level of schools and their motivation to become active in this regard. In a third step, this presentation demonstrates that there is a clear need to anchor the gender issue within a broader debate on professionalism and to extend school development efforts beyond superficial events and projects.

WEDNESDAY, SEPTEMBER 3, 2014

09:00 – 10:30

Parallel Sessions WED 1 – 7

Room: **Margarete Schütte-Lihotzky**

WED1 : Explorations & Interventions in Work-Life-Balance and Academic Working Cultures

TANJA PAULITZ, SUSANNE KINK, BIANCA PRIETL:

How to tackle methodologically implicit gender norms in academic working cultures? Challenges for Gender Studies in Higher Education

Promoting gender equality still is a challenge in academia as are the effects of these interventions for gender studies on higher education. When it comes to analyzing epistemic and working cultures in academia and the underlying gender norms, gender studies have to face certain 'pitfalls' of empirical fieldwork – namely, scientist's persistent claim for neutrality and objectivity. Thus, questions arise as how to analyze gender norms underlying epistemic and everyday practices as well as professional images, if the informants strictly claim neutrality, or, how to reconstruct the ways actors in higher education engender their professional work, their profession and their objects, if they increasingly find themselves confronted with the imperative of embarking on a governing discourse of gender equality.

The paper is situated within constructivist Feminist Science and Technology Studies and aims at discussing these challenges of empirical fieldwork in higher education as the effect of current gender equality interventions. Thus, it is generally committed to the goal of opening the black box of science which mostly regards itself as socially neutral and therefore also gender neutral.

On the basis of qualitative empirical data the paper shows how the gender issue in academic working cultures is dominated by and limited to addressing the difficulties with the new legal requirements of equality politics (such as increasing the numbers, fulfilling quotas in administrative committees or following the legal regulations for parental leave). At the same time, science itself is more than ever presented as absolutely neutral and independent from any social shaping. Even more, professional practices and gender politics occur as highly separated topics when faculty talk about their work. Consequently, this situation calls for new approaches in empirical research in order to learn more about implicit gender norms in a field that is itself already shaped by gender politics. Focusing on areas of engineering and of the natural sciences our paper shows how to reflectively reconstruct the implicit gendering of the apparently neutral norms of science, especially when it comes to academic working cultures and the therewith combined forms of reconciling work and life.

RENATE ORTLIEB, SILVANA WEISS:

Work-life Balance and Career Aspirations of Junior Faculty

The high persistence of under-representation of women among professoriates continues to be of great interest. Since working in academia is characterized by high expectations regarding individual flexibility and the prevalent belief that only extensive time investment leads to extraordinary performance, balancing different life areas is a challenging task for researchers. At the same time, creativity and innovative thinking – hence, spaces of silence, muse and contemplation – are important requirements of doing research. Accordingly, it is important for universities to ensure working conditions that allow faculty members a healthy relation between strain and relaxation. Thereby, despite the strong interest of universities in their current faculty's productivity, the topic of work-life balance also relates to the attractiveness of an academic career. In particular, the combination of high professional and time demands with high career insecurity may discourage young researchers from pursuing an academic career. Thus, to prevent best qualified researchers from abandoning their academic career, universities should be interested in providing attractive working conditions and career prospects to their junior faculty.

Against this background, the aim of this study was to examine the work-life balance and academic career aspirations of female and male junior faculty members. For this purpose, we conducted an online survey of the scientific staff of an Austrian university. In addition to the topic of work-life balance, the survey covered questions concerning social support and inclusion at the workplace, organizational and temporal flexibility, the individuals' extent of calling to the profession as a professor and the permeability of the individuals' boundary between work and private life. Related to academic career aspirations, geographic mobility and attitudes toward temporal availability were measured. Finally, information concerning the individuals' private life such as care duties towards children or elderly people, leisure time activities and the desire to have (further) children were gathered.

The sample comprises 202 junior researchers, i.e., university employees having a temporary contract with the university either in a predoc or in a postdoc position or as an assistant professor. 60 per cent of the respondents are women. Regression analyses of work-life balance revealed quite identical patterns of explanatory effects for women and men. While social support and inclusion facilitate balancing work and private life, high permeability of the work-life boundary presents a barrier to it. Further, doing manifold leisure time activities increases work-life balance. Regarding academic career aspirations we found different factors to play a role for women and men. For women, high permeability of the work-life boundary is related to higher aspirations toward an

academic career. Geographic mobility is positively related to the wish to stay in academia while the assumption that only an immense time investment allows a successful academic career diminishes the desire of female junior researchers to pursue an academic career in the future.

Altogether, the results provide a solid starting point for the design of measures aiming at an improvement of working conditions in academia and the promotion of women academics. In addition, they point to several promising avenues for future research.

TANJA PAULITZ, MELANIE GOISAUFG, SARAH ZAPUSEK:
Gendered relations of work and life in academia:
Findings from a qualitative study at the University of Graz

The topic of work-life-balance (WLB) has become popular in academic, professional and popular literature in the last decades. The aim of WLB-approaches is to enhance the balance between work and life/family demands, and to promote a more gender-neutral discourse on that matter.

The presented project is part of a broader still ongoing program with the goal to improve the balance between *academic* work and life among the scientific staff at the University of Graz. The aim of the qualitative study was to explore the current state of this relationship in detail. Of particular interest have been how academics perceive and manage their professional and other parts of life in the context of the demands, norms and values of the academic field, and how their academic practice is framed in a gendered way. Taking a constructivist gender perspective and approaches of practice theory as a starting point, we conducted 44 qualitative problem-focused interviews with PhD candidates, post-docs, and scholars on later stages of their academic career and from various academic disciplines at the University of Graz. The analysis of the data was qualitative and inductive. We generated our theses from the material, by following a theoretical sampling strategy.

The paper will focus on the central findings of this study: The guiding image of a “life for academia” dominates the discourse on professional academic practice and private life. This prevailing orientation pattern organizes representations of academic working practice such as a multifaceted understanding of what “work” means. It turns out that our informants consider only research as “real work”. And only “real work” meets more or less completely the concept of living for academia. On the other hand, what is generally understood as “life” in work-life-balance occurs in our interviews almost entirely as a blank space. In order to live for academia, scholars are required to make themselves continuously present, be it in terms of continuous publishing activities, in terms of showing-up at conferences, at the department or via e-mail-communication.

Gender became pivotal in the way academics talk about reconciling academic work and other aspects of life. In doing so, interviewees create an image of the demands of academic working practice which are in conflict with family demands, an area primarily assigned to women. In this regard, our study gives evidence that WLB becomes a highly gendered

issue when it comes to reconciling academic work and particularly family life.

In conclusion, appropriate initiatives to promote WLB in academia need to be put in context of the special demands and orientations in the respective field. The way in which academics talk about their working practice shows that prevalent understandings of WLB do not meet the requirements in academia. Our findings also indicate that attributing family responsibilities to women and regarding women as prospective mothers obstruct equal opportunities issues in academia. This becomes specifically crucial because both aspects of gender stereotypical ideas are considered as being in conflict to fully living for academia.

BARBARA HEY:
Reflecting a research-based intervention in academic work-life-balance

The proposed contribution presents reflections on a still ongoing intervention addressing the gendered organization. It will focus on advantages and limitations of making practical use of the results of thematically and organizationally targeted gender-research to transform everyday practices and professional images at a university.

Work-life-balance is the topic of the intervention in question (at an Austrian University). Work-life-balance is a classical element of equal opportunities policies with a multitude of different measures tried and tested, but mainly in enterprises. The goal of the presented intervention is to adapt this approach to the specific configurations of work-life-balance in universities, taking into account the typical time regimes, working practices and career requirements.

To accomplish this, in a first step research was performed on the current state of the relationship between professional and other aspects of life amongst the scientific staff. The second step, and this is the main object of the presentation, consists in several interventions based on the findings of the research. A workshop-design making use of the results of the research done within the university is co-developed by researchers and organizational change agents. Several workshops with different interdisciplinary groups of university-staff are carried out and documented, aiming at two interrelated goals:

- 1) awareness raising and organizational learning through discussing and comparing different ways of performing science, eventually splitting up and differentiating the imagined homogeneities (P. Essed) of scientific working practices
- 2) developing measures to support academic staff to reconcile academic work and other aspects of life, which might also contribute to promoting a less gender-biased view on the academic potential of women.

Several PR-activities and events will follow and result in a university-wide strategy-discussion on academic work-life-balance. The presentation will depict the workshop design, the experiences and results obtained during the workshops, and offer some considerations on the applied methods and their usefulness.

Room: **Marilda Azulay**

WED2 : Gender Studies in Engineering and Planning Faculties. Spotlights from Austria, Germany and Netherlands

BENTE KNOLL:

Gender Studies at Engineering Faculties in Austria

Looking at the Austria Technical universities and faculties one has to state just a low increase of women students over the last decades. At the Vienna University of Technology the overall women's quota among all studies was 24 % (2013). At the Faculty of Science and Engineering at the University in Linz, Upper Austria, the quota was 34 % (2011/12).

Over the last about 15 years "Gender Studies" become part of the curricula also at technical universities. Most of the universities have implemented gender studies lectures as non-compulsory course ("Wahlfach"). Some studies, such as Architecture at the Vienna University of Technology provide a compulsory course. The Johannes Kepler University in Linz with its various faculties (law, social sciences, ...) has an outstanding position in Austria: Gender Studies as an compulsory class is implemented within all faculties and also at the faculty of science and engineering – that means all alumnae and alumni have had learnt on gender studies and technology and engineering for at least 3 ETCS during their studies.

Since 2005 the author holds various teaching assignments (seminars and lectures) at different universities in Austria in the field of gender studies and engineering. From her practical experience the author will provide an overview about the topics that are mostly discussed during her classes:

- Historical background and perspectives of women's liberation movement and its relation to science and technology
- Recent findings of gender inequalities in our society and their relation to the working conditions in Austria
- Day-to-day gender-stereotype assumptions concerning technical competences and abilities of women/girls and men/boy on different educational levels (kindergarten, primary and secondary school, higher education and working lives) and their de-construction
- Representation of technology as well as people dealing with technology within mass media and websites
- Gender scripts within technological artefacts and technological research and development processes
- Legal background of gender equality at the Austrian and European level

During her lecture the author wants to share her practical experiences in teaching students in gender studies courses.

DORIS DAMYANOVIC, BRITTA FUCHS:

Gender Studies in Planning Processes – examples from Austria

Feminist and gender-sensitive aspects in teaching and research were introduced at the University of Natural Resources and Life Sciences Vienna (BOKU Vienna) at the end of the 1980's.

When in 2003 the curricula at the BOKU Vienna were restructured according to the principles of the Bologna process, feminist and gender-aware competences were integrated into the profiles of the bachelor's and master's degree programmes for Landscape Planning and Architecture.

At present there are two approaches to the integration of gender planning knowledge in the Landscape Planning and Landscape Architecture Bachelor's and Master's degree programmes. The first approach is to integrate gender planning knowledge in the compulsory courses at both levels. The second approach is to teach courses that are explicitly focusing on gender issues in planning.

The author will present the content of the gender planning knowledge which is taught in these programmes. The knowledge brokerage process is closely linked to planning and participatory processes.

Following topics are:

- Debate of theoretical feminist and gender approaches in the context of planning sciences,
- Debate of approaches in planning sciences in the context of feminist and gender approaches,
- Gendered planning tools and methods,
- Legal framework for gender equality and gender planning on local, national and international levels,
- Global and European strategies to implement equality in planning (e.g. Gender Mainstreaming)
- Global and European case studies

Furthermore, the process-oriented design for the knowledge brokerage process and the underlying didactical and methodological concepts will be exemplified. Inter- and trans-disciplinary approaches are particularly needed to advance and develop the knowledge in gender studies.

PETRA HIRSCHLER, GESA WITTHÖFT:

Gender Studies in Spatial Planning

Basically gender issues in spatial planning and spatial development are manifold and should be taken into account in all actions. Of course some fields of interventions are easy to spot and very well analyzed like the labour market, education, mobility or settlements. But also in the case of environment, water and waste management inequalities can occur. There is no universal recipe for implementation, but countless guidelines and checklists have been developed over the years. Gender issues in planning intend to add a different perspective and special focus to the planning process. Gender planning asks:

- Who is concerned?
- What are the different needs of women and men? How do other dimensions of inequality take effect with sex/gender dimensions?
- Which targets and measures ensure equal rights?

The integration of Austria's spatial policies into the European Union's Structural Funds policy supported an increasingly strong orientation towards cooperation and strategic concepts. The monitoring and evaluation of spatial policy interventions gained importance as well as the number of involved actors grew significantly. Women have always played an important role in development processes and planning. To maximize human resources in maintaining the social fabric of rural communities and revitalizing local economies, the full involvement of women is vital. In some regions of Europe, economic recession and cutbacks in public services have led to further rural decline, remoteness and poor infrastructure.

In general mega transport infrastructure projects should focus on gender issues in the following planning stages:

- Planning, process and design to include the needs of both sexes,
- Gender-specific data collection and analysis,
- Balanced share of both sexes in the participation process,
- Sensitization and awareness rising of stakeholders and decision makers.

Based on the assumptions from the first Paper of the complete Panel the authors will point out and discuss important aspects of planning discipline:

- Historical background and perspectives of women's liberation movement and its relation to planning theory, practice and education
- Impacts of gender inequalities in the West European and Austrian society as well as day-to-day gender-stereotype assumptions on planning theory, practice and education
- Representation of planning concerning gender aspects and dimensions
- Gender scripts within planning research and development processes
- Gender impacts of the Legal background Austrian and European level on planning theory, practice and education

Still to less consideration is given to the tiny changes which can hugely increase the contribution which gender issues in planning can make to regional competitiveness, growth and quality of life. Perhaps the idea of a gender-centred planning is scary, and challenges the accepted order where there are often a minority of women in positions of importance. But the point is that it is not just about tackling inequality in decision-making. What is important is an alternative way of thinking about what matters to society, and about the way people have to organise their lives to participate in the economy and their communities.

DÖRTE KUHLMANN:

What's wrong with the Fountainhead?

Despite nearly equal numbers of male and female students entering architectural studies, there is a certain attrition of female students and not even those who graduate become all practicing architects. In this paper we want to take a look at various reasons why there is still a lack of women architects. There are numerous articles about the what of gender inequality in architecture – in Austria, for example, only 10% of architects (Ziviltechnikerinnen) are women, and they earn 50 % less than their male counterparts – but there are very few strategies how to lessen that gender gap. Even though it has become clear that it is necessary to include women architects to ensure gender diversity and gender budgeting in planning and architecture, women continue to be extremely under-represented in the architectural profession. In both the academic and the professional fields of architecture, positions of authority are almost entirely male, and as such, the profession is defined by a heterosexual, white, male perspective. In fact, the famous radical role model Ayn Rand envisioned in her great novel *The Fountainhead* – the visionary architect Howard Roark seems to live on. Ayn Rand depicted Roark as being everything a young architect was supposed to be: brilliant, self-absorbed, creative, headstrong, invincible. On the other hand, it seems that today a distinctly different kind of role model is at stake – namely the “responsible” architect who practices gender mainstreaming, who is kinder, gentler, environmentally sensitive, civic-minded, politically correct and, above all, humble – all attributes that have a feminine connotation. However, the stake holders still seem to stick to the old model. Hence, it is vital for all architectural students and practitioners to be exposed to a diversity of contemporary architectural practices, as this might be the only way into broadening awareness and future change.

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Room: **Inés Novella**

WED3 : Family and Career

ISABELLA BUBER-ENNSER:

Childbearing ideals and intentions of female researchers

This study analyses fertility ideals, intentions and behaviour by educational attainment focusing on female researchers in Austria as a distinct group among the highly educated. Childlessness among female researchers is very pronounced. Our aim is to investigate whether or not the high childlessness and the low number of children are intended. The analysis is based on a specific sample of female researchers aged 25-45 (N=196), carried out in the framework of the Generations and Gender Survey. Results indicate that the low level of realised fertility among the researchers is in sharp contrast to their personal ideals and intentions. The gap between ideals and intentions is evident and becomes more pronounced with age because childbearing intentions decrease more steeply than ideals. For most researchers, children are part of their life concept, but they only manage to have about half of their personal ideal number. Regarding intended childlessness, our data indicate that the great majority intends to have children in the short or long run. Probit regression analyses reveal that personal and professional obstacles are associated with voluntary childlessness.

SUSANN KUNADT:

Family Friendliness at German Higher Education Institutions: About the Effectiveness of Strategies and Measures for the Reconciliation of Science and Care

In Germany, the challenges in balancing an academic career and founding a family as well as fulfilling family-related obligations are a highly controversial topic in the science policy debates and within higher education institutions. Politics and higher education institutions are establishing numerous individual measures, research projects, audits and political guidelines to deal with the diverse barriers of founding a family and the problems of finding work-life balance. There is, however, only little systematic knowledge on the effectiveness of these measures: What are effective strategies and measures for greater family friendliness at German higher education institutions?

This question is thus at the core of the project "Effektiv! – For Greater Family Friendliness in German Higher Education Institutions" (www.familienfreundliche-hochschule.org) which is being conducted by the Center of Excellence Women and Science (CEWS) and funded by the Federal Ministry of Education and Research (BMBF). One objective of the project was to analyse the effectiveness of existing initiatives to gain new insights. Therefore, a systematic review of relevant studies with emphasis on German higher education sector was carried out. Moreover, quantitative and qualitative empirical surveys were conducted at four higher education institutions: One the one hand online-interviews with the academic personnel (comprehensive survey) focussed the perception and effects of family friendly measures at the individual level.

On the other hand, group discussions were conducted at the institutional level to discover how higher education leadership, decisions makers and practitioners deal with family friendliness and which effects or consequences they report.

In my paper I would like to present selected survey results regarding the effects of family friendly measures on the reconciliation of science and family from the perspective of the academic personnel (individual level) and on the academic institution itself (institutional level).

MARTA VOHLÍDALOVÁ:

Once children come, it puts sand in the wheels of career opportunities

Academe is an area that has been historically constructed to fit the traditional male career model, one that assumes a perfectly mobile and flexible worker who is willing to entirely devote himself to his job, has no caring commitments, and builds his career without longer breaks and interruptions (Bagilhole 2002, Manson, Gulden 2004). However, such a notion of an academic career is in conflict with parental commitments (especially with motherhood and active fatherhood not reduced to the bread-winning role only). Therefore, values associated with academic careers seem to be incompatible with life biographies of a majority of women (Acker, Weber 2009, Harley 2003, Bagilhole 2002). Family and social policies create an important context in which women academics cope with requirements of research careers, e.g., by promoting active involvement of fathers in childcare, allowing maximum flexibility to combine work and parenthood, by ensuring a sufficient supply of childcare facilities, etc. However, a previous study has shown (e.g., Vohlídalová 2013) women-researchers as well as other career-oriented women in the Czech Republic have very poor conditions for combining work and care for small children, especially children up to 3 years of age. A conservative family policy based on the assumption that women should stay at home until the child reaches 3 years of age, along with a lack of childcare facilities for young children up to the age of 3 and an absence of incentives for fathers to get more involved in childcare, creates an extremely unfriendly environment for combining parenthood with careers (not only) in academy. In my paper I will focus on how the conditions of scientific work and academic careers as well as conditions for combining parenthood with academic careers are reflected in career paths and career plans of young women academics. The analysis is based on unique data from a quasi-longitudinal project, which included 14 in-depth interviews with early-stage career women academics repeated in two waves i) between 2005-2007 (when they were Ph.D. students or fresh Ph.D. holders and majority of them was child-free); and ii) between 2013-2014 (where majority of them started a family and their career paths have significantly diversified).

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FLORIAN HOLZINGER, SYBILLE REIDL:

Organisational Practices of Paternity Leave

High work connection and career orientation are central to the concept of hegemonic masculinity (vgl. Connell, 2006; Connell/Messerschmidt, 2005; Meuser, 2010). The main role of men as fathers is therefore the breadwinner who sustains his family with income from a fulltime occupation. Responsibility for child care and housework are not relevant for men in this context. Also in their working environments men are not recognized and addressed as fathers – their private family lives and responsibilities are excluded by organizational practices (Burnett *et al.*, 2012). This is also reflected in the gendered division of labor and the participation of men in parental leave schemes in Austria: women are still the main carer who are reducing their working time after giving birth to a child and take a long parental leave break. Whereas men are hardly involved in child caring activities and only a small share of fathers take parental leave time (see Reidl/Schiffbänker, 2013, Tazi-Preve, 2009). We will present and discuss main findings of an ongoing research project about impact of paternity leave on the career of highly qualified fathers. We will focus on fathers who are working in greedy organizations (Coser, 1967, Kvande, 2009) and have interrupted their careers for parental leave. Greedy organizations are organizations which demand the total commitment of their employees. This means long working hours, high flexibility and total availability and no other private commitments or obligations beside work. Especially science organizations can be labeled as greedy organizations (see Lind, 2013). These demands are based on organizational norms and practices which have a gendered dimension. Especially women who are responsible for childcare are penalized by these organizations and their gendered substructures (Acker, 1992). But if men take over responsibilities for childcare they experience the same disadvantages (see Haas *et al.*, 2002, Haas/Hwang, 2007, Allard *et al.*, 2007, Sallee, 2012).

For our research project on consequences of paternity leave on the career of fathers we have interviewed fathers and their supervisors in companies of different size and sectors. We have focused our research on following questions: what are the impacts of paternity leave on male career progression? What are the framework conditions in companies for paternity leave and what effect do they have for fathers taking parental leave? Does the parental leave policy in Austria lead to changes in individual behavior as well as in organizational cultures? For this presentation we will select those fathers who work in greedy organizations and analyze how these fathers manage to interrupt their careers and the

consequences they are experiencing. Based on interviews with supervisors and focus groups with colleagues of these fathers we will also be able to focus on rules and practices in these organizations that enable fathers to take parental leave. Based on our findings we will be able to present recommendations how to change greedy organizations so that more fathers can take parental leave and how to improve the participation of fathers in parental leave schemes.

Room: **Brigitte Nieße**

WED4: Recruitment Policies

PAT O'CONNOR, CLARE O'HAGAN:

Excellence into Managerialism: Will it go?

This paper is concerned with the macro-cultural ideal or institutional myth of excellence in higher education institutions. Since Peters and Waterman (1982), 'excellence' has become part of a global managerialist discourse, although elite constructions of it are increasingly problematic. Meyer and Scott (1983) highlighted the importance of such myths in contexts where legitimacy is crucial, given the absence of more 'bottom line' indicators of success. Universities, with their multiple stakeholders, are seen as organisations whose 'success depends on legitimacy acquired from conformity to macro-cultural myths' (Hallett, 2010:54).

Excellence can be seen as a 'hooray word' (Whyte, 2005) which has been widely used, entirely uncritically, in universities and which, at first glance, appears to be gender neutral. Taking an 'inhabited institutionalism' approach which stresses 'intra-organisational gendered politics' including 'social interaction and local meaning-making' (Hallett, 2010:53) the paper looks at constructions of excellence and their deployment, drawing on documentary sources and 22 interviews and focus groups with those involved in two advancement processes in a case study university.

This paper explores the manifestations of both tight and loose coupling (Hallett, 2010) between the myth of excellence and advancement practices. A critical level of coupling is necessary to maintain organisation myths. Loose coupling avoids defining the myth, thereby facilitating different interpretations, while a tighter coupling makes explicit standards of excellence. The myth of excellence 'has teeth because resources, rewards and punishments are tied to compliance and performance' (Hallett, 2010:68) but if the processes, structures and procedures involved in its construction and application are too loosely coupled, its legitimacy is eroded.

Building on the work of Van Den Brink and Benschop (2012), who demonstrated that 'excellence' in a university setting is a gendered concept, we highlight the fact that apparently neutral, objective and transparent criteria of excellence, the hallmark of managerialism, potentially both facilitate the persistence of gendered inequalities, and disrupt them. The paper indicates the myriad ways 'excellence' is interpreted and deployed to advance political interests by those who make decisions regarding advancement in the organisation. Thus it challenges the myth of excellence, adds to debates about managerialism's 'objectivity', highlights the ways in

which gendered inequalities are maintained/reduced, and suggests some of the conditions under which the myth of excellence itself is undermined. In a globalised managerialist context where excellence is used to legitimate the under-representation of women, deconstructing excellence has crucial policy implications. Finally the paper raises the question of whether it is possible to devise gender neutral constructions of excellence.

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SUSANNE ACHTERBERG, JENNIFER DAHMEN:

How much gender equality policies fit into the university? – A case study from Germany

In Germany, universities are obliged to reduce gender inequality by taking effective measures, since the entry into force of the Third Act amending the Higher Education Act in 1985. The effectiveness of the measures depends to a considerable extent on whether gender equality policies in higher education meets acceptance.

This presentation highlights the current state of perceived gender equality of academic staff members at the University of Wuppertal, a midsized German institution of higher education. We will do this by connecting data from two studies, which were carried out separately but their results are strongly linked.

The first study is part of the European project 'GenderTime', which wants to tackle the challenge of a gender equal organization by initializing organizational structural change through identifying the best systematic approaches in the participating institutions with the help of tailor-made gender action plans including gender equality measures.

How does the female academic staff, who is mainly the target group of those implemented gender measures perceive their organizational work culture? Are the activities considered as helpful and/or career supporting? Or are informal support mechanisms much more efficient in term of achieving a scientific career? Our deliberations are based on the results of a quantitative survey on 'working culture' carried at the institution supplemented by qualitative focus groups.

But even though these individual measures benefiting career progression of academic staff can be considered as a crucial factor, it is important to focus on the prevalent organizational structure itself for achieving gender equal workplace conditions. Furthermore the success of gender equality measures will depend to a high extent on the level

of acceptance which gender equality policies meet in organizations.

Thus results of the GenderTime study will be combined by data of a second study, which was collected in appointment procedures for new professorships. Since 2009 the University of Wuppertal tries to appoint more new professors who accept the gender equality policy and are willing to use these to eliminate sustained inequality. This aim is accompanied by the so called 'gender consulting in appointment procedures', an initiative taken up by the Office for Gender Equality. In the period from 2009 to 201 responses of 350 candidates were collected out of 50 appointment committees. In these interviews members of the appointment committee asked the candidates what ideas, experiences and plans they have to bring forward equality between women and men at university. From the various responses of the candidates the idea emerged to analyze these utterances with the aim to identify, which conceptions of gender equality the new generation of future professors has and how far the applicants are open to gender equality policy. The data was analyzed by using the method of circular deconstruction. The analysis shows that gender inequality as a topic and as well as equality policy as a strategy to overcome inequality has arrived in higher education, but also shows clearly its limitations.

MATHIAS WULLUM NIELSEN:

Limits to meritocracy? Gender in academic recruitment and selection processes.

Recent years' public debates on the skewed gender distribution in Danish academia, reveals a high degree of contestation over the relevance and extent of the problem. Particular attention has been given to the question of whether the low representation of female senior researchers can be ascribed to hidden mechanisms of structural discrimination in academic practices of recruitment and promotion, or should simply be interpreted as results of individualistic matters such as personal ambition, motivation and merit.

With the ambition to contribute to a more nuanced understanding of this particular problem, the case-study at hand investigates academic practices of recruitment and promotion at Aarhus University. As pointed out by Van Den Brink (2011), there is relatively little research on this topic, as academic practices of recruitment are often treated with a high degree of confidentiality and sensitivity. In this sense, the study at hand provides a unique opportunity to gain new insights into an otherwise closed world of evaluation and selection. On the basis of a mixed-methods approach combining 24 elite interviews with department heads, a qualitative content analysis of 48 systematically selected evaluation reports, as well as a quantitative analysis of a comprehensive dataset including statistical information on all academic appoints at Aarhus University during the period 2004-2013 (N 2239), the following research objectives are pursued: A) To identify potential quantitative patterns and regularities indicative of the existing gender segregation among senior research staff; and b) to reach an in-depth qualitative understanding of the internally related organizational processes and practices explaining these patterns

and regularities. In dealing with these objectives, the article draws on the literature on institutional logics (Scott, 1995; Thornton & Ocasio, 1999), Boltanski & Thévenot's theoretical model of the orders of worth, as well as insights of foundational feminist organizational researchers such as Kanter (1977) and Witz & Savage (1992).

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YVES JEANRENAUD:

Generation BeSt – Investigation of gender-neutral and gender-sensitive academic recruiting strategies

Careers of women in science run along a gendered “leaky pipeline” (cf. European Commission 2001: 12). With each career level the percentage of women decreases. The German average of female professors currently reaches only about 20% (cf. European Commission 2013: 90). On average, the percentage of female professors in EU-25 is 18 per cent (cf. European Commission 2013: 90). Recent studies about the marginalization of women in the German science system suggest that the under-representation of female scientists has to be analysed through deep insight of the scientific system and its structures in order to understand and explain the background.

The main objective of “Generation BeSt” was to analyse the habits and rules of appointment procedures at universities and to develop gender-sensitive and gender-neutral methods for assignment and personnel recruitment at German universities.

A first work package included qualitative interviews with members of appointment committees to evaluate which structural and cultural mechanisms exist and influence the proportion of female professors at German universities. Since the amount of external funding serves as an essential quality feature in appointment processes – particularly within STEM faculties –, the next step was to analyse whether and to what extent external funding calls of the leading German research institutions contribute to a gender asymmetry. This was achieved via text mining procedures and expert interviews.

The investigations resulted in targeted recommendations to higher education, research institutions and science policy regarding gender-sensitive and gender-neutral appoint-

ment methods and recruitment strategies for the promoted appointment of women in academia.

1. Universities are “gendered organisations” (Meuser, 2005). Members but at least heads of appointment commissions should be qualified in gender-sensitive and gender-neutral procedures.
2. Calls for applications should be reviewed for gender impact factors. Especially the role of acquired funding or potential funding opportunities should be questioned.
3. Many processes within the appointment of professorships are suffering weaknesses from prejudiced reviewers and informal communication. Reviewers therefore should be selected randomly, from other universities and not by peers.
4. Often, reviews are not comparable. There should be guidelines for the reviewers to follow.
5. Incoming applications are sorted in advance. This must be reviewed by an equal opportunity commissioner.
6. Equal opportunity commissioners are structurally disadvantaged. They should have equal votes within the commission and structural support.
7. A restructuring of so-called core structure professorships or chairs on the level of faculties would be necessary.

Further recommendations for Higher Education Institutions (HEI) will be outlined in the course of the paper.

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Room: Alison Brooks

WED4: Gender Didactics

LISA MENSE, EVA WEGRZYN:

Frustrating, but fruitful frictions

The paper addresses the controversial implications of gender competence as an educational goal in awareness trainings and seminars in higher education. Based on theoretical assumptions we reflect our teaching experiences with different audiences and try to reframe the gap between feminist theory, political action and higher education development. Our theses are backed by a documentary analyses of participants feedback and seminar output. The aim is to shed light on the potentials and problems of teaching gender issues.

Decades of gender research seem to have made it clear what gender competence means, but is this true? When planning a workshop in the setting of higher education the first challenging question is: Is the notion of gender competence that clear both to the trainers and to the participants? What subset of competences is really addressed?

We emphasize the need for a concise working definition in the first place. In this paper gender competence is considered as the growing personal ability of reflecting one's biography, social interactions in e. g. teaching, on the job or in everyday life in relation to the interplay of gender and power.

Consequently one has to face the didactic challenge of complexity reduction which is due to the abundance of gender theories: When deciding which theoretical perspectives are chosen one should be aware of the fact that every choice is subjective, driven by disciplinary affiliations, path dependencies or canonization of feminist theory. Furthermore one's own standpoint and experience have an influence on selecting the appropriate theoretical positions.

This leads us to the question to which extent the audience should shape the choice of theoretical framework for the seminar or training setup. Should the audience's presupposed disciplinary preferences play a significant role in the preparation of the training? How does the audience react when confronted with the thesis that knowledge related to bodies and gender is contingent and that there are many ways for dealing with problems?

We will present key results of three different teaching formats which address the development of gender competence: One workshop for lecturers on the topic "Didactics and gender", one introductory blended-learning-seminar to gender studies for undergraduate students and one seminar for master level students in adult education. The groups were highly heterogeneous concerning age, faculty and previous knowledge in feminist theory and practice.

Based on document analysis of evaluations and participants output, we will present the following theses:

1. Teaching gender issues implies questioning everyday knowledge of women, men and sexuality but also reproducing stereotypes by constantly pointing on certain problems.
2. The paradox is fruitful and frustrating at the same time – the challenge is leaving it open to the participants.
3. Presenting paradoxes and leaving challenges unsolved may lead to frustrations and frictions in the seminar setting.
4. The participant's output and feedback reflecting these frustrations and frictions are a fruitful basis for discussing the tension between feminist theories and practice.

BETTINA JANSEN-SCHULZ:

„Integrative Gendering-Diversity“ - A Strategy for Universities Structures, Teaching and Higher Education Didactics

In the course of the Bologna Process "gender equity" has been legally established as a goal for universities throughout Europe. Furthermore, "gender" has been accepted by the accreditation council as a quality related criterion for accrediting all programmes, thus supporting a "top-down" process. Within the accreditation and re-accreditation processes which have already taken place, universities have considered gender aspects to varying degrees and have implemented different strategies (Becker/ Jansen-Schulz/ Kortendiek/ Schäfer 2006, new revised edition an 2012).

Integrative gendering is a strategy for consider gender-diversity dimensions in the all day teaching in higher education. It is applicable not only to the content, but also to behaviours and levels of awareness. Gender-diversity related dimensions and knowledge effect the professional skills and knowledge of those active in the higher education system. As such, in addition to academic instruction, gender-diversity dimensions are part of a university's staff development plan. Integrative, therefore, also means communicating gender-diversity in discipline related events through specific sequences and using specific teaching methods.

Developing 'gender-diversity competency' is aimed at recognizing gender relationships in staff development, in faculty cultures, including their positive and negative dimensions. In the future, university and college teachers not only have to acquire gender-diversity competency, but also have to be able to teach it to others and take it into account in their research. Students need to obtain these skills, because they will be considered a key competency in their future work.

Moreover, establishing gender equity among teachers, researchers and students will bring with it a new realm of aspects and perspectives, greatly contributing to the content in each of these areas. Innovative processes will thus be promoted and the faculty habituses and cultures can be changed, leading in the long run to a paradigmatic shift within academia.

Higher education didactic is confronted with two innovations: first the modularization of studies needs a shift from teaching to learning. Second good teaching integrates gender-diversity dimensions structurally as well as in the contents and in the interactions. Both is not yet regarded systematically in the higher education didactic. In this contribution will be presented concepts and approaches of the integrative gendering strategy in teaching and gender-integrated higher education didactic of the University of Luebeck systematically as well as integrated in the higher education courses.

Keywords:

Gender, higher education didactics, integrative gendering

MARION KAMPHANS:

Including Gender and Diversity in Teaching or About the Gradualness of Implementation – Empirical Findings of a Process in Slow-Motion

The competence of a differentiated perception of students' needs and students' heterogeneousness is a presupposition in the context of student-focused teaching. Simultaneously, this differentiated perception contrasts with the widespread conviction in the academic system where the belief in the principles of meritocracy still exists (cf. Merton 1985). The universities' self-attributions claim that they naturally follow the principles of strict gender neutrality and non-discrimination and that their members have good teaching competencies. Lecturers also assume that they naturally do not discriminate against students in teaching and learning contexts, but are fair to all students.

In my presentation I would like to introduce some empirical findings of a qualitative study based on a series of interviews (n=80) (cf. Kamphans et al. 2013; Metz-Göckel et al. 2010) which analysed the subjective understanding of gender, diversity, and teaching competencies of scientists/ lecturers with a combined theoretical approach (the structural perspective of Bourdieu, the concept of gender knowledge of gender studies, and several approaches of neo-institutionalism and from research on teaching and learning).

I want to consider the question if and how coherencies between these three mentioned competencies manifest themselves. The levels of the competences shift between a professional, academic, and restricted dimension. That means some lecturers include professional knowledge from gender and diversity studies into their lecture courses; others are acting intuitively and/ or experientially – with no or fewer references to empirically based gender/diversity knowledge. On the one hand, these findings provide broader insights into the gradual process of implementing gender and diversity aspects into teaching and learning. On the other hand, the subjective understanding can deliver productive connecting factors for the refinement of the methods of implementing gender and diversity aspects into teaching and learning interactions.

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MARGARETE MAURER:

Progress & perspectives of Gender Studies in Science & Engineering curricula: For what, for whom, how, & with which aims & perspectives, challenges, risks, & chances do we teach Gender Studies in S & T?

On the basis of about 35 years of experience in teaching “Metathemen” (philosophy, history, sociology) of S & T fields, mostly from a specified gender perspective, a short overview is given about this field. Its challenges, its progress, & its future perspectives are described, with the aim to discuss new strategies for the future individually and socially.

At least in Austria there results an ongoing struggle. Some temporary success can be seen. In medicine recent years resp. efforts by interested professionals have brought significant implementation, as MAN/WOMAN, and intersex persons, & their sensitivities, represent direct subjects of research and therapy. This looks very different for mathematical and technical S & T studies which are seen as NOT belonging to the faculties, but to the “meta-fields”. Life sciences stand in between. To establish chairs like in German social sciences has resulted to become very hard.

The hypothesis of a “rebound effect” is presented.

As to gender equality: this is seen as an aim & and an effect in the midst of a complex system & its frameworks, consisting of interacting spheres with different levels like symbolic (re) presentation, acting, organizational settings, traditions of teaching and learning, different national contexts, individual backgrounds and networks, etc. Here, I focus on the relevance of Gender Studies in S & T for Gender Equality in Higher Education, and also vice versa. The potential, the risks and the challenges are illuminated. E.g.: on the one hand, by presenting role models, Gender Studies can promote female S & T students in their professional self image and ambitions, in branches of study with great quantitative or traditional symbolic malestreams resp. male dominance. On the other hand, there exists the risk of discouragement when the “real” historical & present situation of women scientists & engineers, esp. in German speaking countries, is exemplified. This challenge & bias has already been discussed in some of the “Nationalen Treffen von Frauen in Technik und Naturwissenschaften” in the 80s, and is still virulent. Which construction of curriculum, & which didactics can result as “good” or “best practices” to overcome such challenges, for the pursuit of happiness of the female students in S&T? It is argued that these methods also foster their male comrades and intersex persons anyway, and so contribute to more humanity and democratic character of the society as a whole.

It is to be asked: How can Gender Studies in S & T become an innovative interesting field of study & research, indispensable for any research which wants to reach the aims of “objectivity” and/or political correctness? It is presumed that this is the best way, & may be the only one with a chance of success, to better establish Gender Studies in S & T in universities and technical universities, esp. in German speaking countries, in a sustainable way.

Room: **Theresia Oedl-Wieser**

WED6 : Gender-sensitive teaching at school – a basis for a successful college career?

ILSE BARTOSCH:

STEM Gender Bias in Austria – the result of a segregated Educational Schooling System and an exclusive masculine STEM Culture?

International student assessment studies (e.g. PISA) as well as local data on the participation of young women in upper secondary and higher education provide evidence for remarkably large gender inequities in Austria in attainment as well as in engagement in the field of STEM (Science, Technology, Mathematics). This gender bias is encapsulated and pre-formed in the Austrian schooling system which can be characterized by choices at an early stage and an elaborated vocational education sector organized along the so-called ‘gender spheres of knowledge’. Efforts undertaken to meet the challenge of establishing more equity like ‘girls into science and technology’ or ‘girls days’ fail to change the segregation as these interventions do not tackle the masculinity of the field of science and technology which is deeply rooted in the culture of the field of STEM. This culture is gendered by the historical predominance of men in the field of STEM. Moreover, STEM, especially physics, has an aura of exclusivity due to the epistemological myth that the theories and concepts of physics are absolute and unaffected by values and beliefs (Brickhouse, 2001; Willems, 2007).

This paper discusses how the culture of physics forms the beliefs, norms and values of physics teachers. The study is based on in-depth interviews with four Austrian physics teachers (two male/two female who look back on different length of service) and a close observation of their physics classrooms’ micro-processes of interaction. The analysis of the data is rooted in theories of pedagogical content knowledge which highlight the importance of the teachers’ implicit theories of teaching for the teachers’ instructional decisions (Park & Oliver, 2007).

The data provides evidence that the aura of exclusivity of physics is incorporated in the teachers’ habitus as well as the specific discourse and the artefacts used in physics classrooms. Though all the interviewees articulate experiences of humiliation and more or less open discrimination by their physics teachers at school or university they enact these experiences in their every-day-classroom-practices in manifold ways thus sustaining the masculinisation of physics.

Overcoming gender inequalities in the STEM-field is therefore highly dependent on facilitating a structured debate which unmask the ‘choices’ young women make as a consequence of the exclusive and masculine image of STEM. Following Louise Archer (2012, p. 984) I thus propose a bottom up – top down strategy for raising STEM participation: “interventions need to integrate ways for young people (and staff) to engage with and challenge dominant gender discourses”.

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LORENZ LASSNIGG, PETRA WEJWAR:

Quantitative Information about sex and gender issues in the Austrian National Education Report – overview and assessment

This paper is a contribution to the planned panel about ‘Gender-sensitive teaching in school – a basis for a successful college career?’ In 2012 the second version of a national report about schooling in Austria has been published (https://www.bifie.at/system/files/dl/en_NBB_band3_web.pdf). The paper will give an overview about how issues of sex and gender are taken up in this kind of reporting, and will also discuss the information given in a broader context of equity.

The following topics are of broader interest:

- Participation of female and male children and youth in the tracked and segregated Austrian system: differences are much more marked with respect to specialisations in vocational education and training (VET) than concerning levels in the tracking structure (the occupational distribution will be discussed more deeply)
- There are big differences in interests and achievement between male and female children and youth concerning the different domains of mathematics and language
- Among teachers a strong process of ‘feminization’ has taken place, as in most other countries, with contradictory implications, as on the one hand the teaching occupation is a relatively well positioned one for females, and on the other hand, tied to the broadly ‘half-day’-organization of schooling, this organization also supports the sex and gender inequalities in the employment structures
- The segregation among pupils is also reflected in similar segregation structures among teachers, which might be interpreted as constituting more ‘pooled’ structures of sex and gender oriented occupational groups, which are self-stabilizing
- There are specifically strong sex and gender differences concerning the Math-Inf-Science-Tech (German: MINT) subjects, which are taken up as challenge also by industry representatives, however, seem not easy to change in the Austrian structure.

The assessment will discuss firstly the quality of the reporting (and ask about which issues seem underdeveloped, and why), and secondly ask some more explanatory questions, and present also some hypotheses which might be supported by the data:

- To which degree might the segregation be attributed to be reproduced by structural features of the education institutions?
- How might the sex and gendered structures among teachers and pupils be related to issues of achievement?
- To which degree must the sex and gender differences in schooling be attributed to broader patterns in society and the structures of employment and social security?

A more political issue seems the new discourse about the disadvantages of boys and male youth as compared to girls and female youth, and the 'intersectionality' of disadvantage, in particular in relation to migration.

MARIA ETTL:

Gender Mainstreaming as Instrument of School Development - Reflections on a long-standing Practise at the Herta Firnberg Schools for Business and Tourism (HFS) using the example „Computer Science Management“

As head mistress of a higher school I want to present the experience in gender sensitive education and school development of the Hertha Firnberg Secondary School for Business and Tourism. Since 10 years we are part of the network "GeKo", which promote gender competence in schools. Our school pursues full support of the EU legal requirements and the Austrian constitution of gender mainstreaming (equal opportunities for women and men at all levels) to be considered. The implementation of gender mainstreaming was favored by the participation in the EU program "Gender Mainstreaming Cluster Schools 2003-05".

Our aims:

The strategy of Gender Mainstreaming as Top-down-instrument of school development:

Computer Science Management (CSM) / Kommunikations- und Mediendesign (KoMd): an educational program which combines the advantages of education in humanities with training in technology and science in cooperation with the University of Applied Sciences (Fachhochschule Technikum Wien).

Integrating gender issues in every-day-classroom-practices

With this training we give to female and male students good opportunities for graduate school and we prepare them for further studies.

Fixed points in the school year are Gender Mania and the Gender Symposium, which form the Genderday.

Other projects are: Hertha goes Science (IMST-Projekt) –students of Hertha Firnberg school train a group of children in 2 different kindergardens (Entwicklung naturwissenschaftlicher Kompetenzen in fruemem Alter)

Some achievements:

Gender Mainstreaming is an efficient tool of school development: implementation of Gender sensitive education is implemented in our everyday work.

An innovative educational program is implanted which provides gender sensitive information technology and science training in cooperation with the University of Applied Sciences (FH Technikum Wien).

But it is still a lot do. In the future we want to improve the quality of gender sensitive education in science and information technology training.

We want to gain more students of the adequate target group for the "information technology and science training" program" (KoMd) by intensifying the public work.

Aufbrechen von geschlechtlich-konnotierten Schultypen (Höhere Lehranstalt für wirtschaftliche Berufe vs. Höhere Technische Lehranstalt) durch Anbieten „hybrider“ Curricula, um die Zielgruppe von jenen Mädchen zu erreichen, die auf herkömmliche technische Ausbildungsangebote nicht ansprechen.

INGRID SCHWARZ:

Gender, geography and global education – challenges and implication

Room: **Eva Maria Álvarez**

WED7 : Women's Participation in Turkish Higher Education (Workshop)

The aim of the panel is to provide comprehensive information about present situation of women's participation in Turkish Higher Education System by three presentations based on a joint project carried out by 7 Turkish universities between 2011-2013 under the coordination of Istanbul Technical University (ITU).

The project aims to enhance the existing knowledge on the gender (dis)parity and career patterns of female academics in science, engineering and technology in Turkey. Main topics are the gender differences in research careers, critical areas where women are underrepresented, leading university positions, access to funding, mobility and work life balance. In addition to the quantitative statistical information collected by the partner universities, two different methods were used to obtain qualitative data; an online questionnaire was filled by female and male scientists and interviews with a selected group of female and male scientists were carried out.

In the panel first speaker will compare the collected statistical data with EU and OECD countries. Second speaker will be focusing on the results from the interviews and online questionnaires. Third speaker will present the main conclusions of the project and the recommendations that were developed to be presented to the university administrations. She will also be highlighting Turkey's situation, where Turkey is one of the leading countries in terms of women's participation in STEM disciplines, compared to other European Coun-

tries. We are also planning to include one discussant from each of the partner universities to compare the general findings of the project with the findings from her own university.

GÜLSÜN SAĞLAMER:

Comparative Analysis of Quantitative Data on Gender Equality in Higher Education

HÜLYA CAGLAYAN:

Assessment of Qualitative Data on Gender Equality in

Higher Education:

Online Questionnaires and In-Depth Interviews

MINE G. TAN:

Conclusions, Recommendations and Gap Analysis between Turkey and other European countries

13:30 – 15:00

Parallel Sessions WED 8 – 13

Room: **Margarete Schütte-Lihotzky**

WED8: Recruitment Policies

YLVA FÄLTHOLM:

Gender aware recruitment and promotion practices at Luleå University of Technology

In the beginning of the 1990s there was not a single woman professor at Luleå University of Technology (LTU) in Sweden. In line with current gender equality discourse, which is underpinned by the assumption that increasing the number of women to a “critical mass” rebalances the dynamics of power and, ultimately, contributes to a changed gender order, LTU has implemented several initiatives, e.g. women’s network, mentoring and leadership development programmes. However, the most important measure is the faculty boards’ financing of women’s further qualification for eligibility for positions as associate professors and professors. Since 2006, approximately 40 women have received funds, and, probably as a result of this initiative, in 2013 17 % of the professors were women. This means that it took as much as twenty years to move from 0 % to 17 %, a manifestation of our conviction that it is not merely liberal feminist approaches based on the concept of critical mass that dissolves the tokenization of women, nor transforms academia. Rather, there is an urgent need for innovative approaches and solutions.

In this paper, we describe a project based on a social constructivist approach in which we wanted to demonstrate how gender is “done” within the recruitment and promotion process at LTU and what consequences this has for the opportunities men and women have for career advancement. In the project, we conducted interviews with researchers, observations of the employment committee meetings and participated in the recruitment process of a chaired professorship. For example, we saw that the employment committee discussed men and women in different ways, how sloppy applications by men and women were assessed differently, and how men discussing their family situations was seen as a sign of social competence, while women’s family orientation was taken for granted. In the next phase of the project, actors involved in recruitment processes at LTU participated in interactive activities aiming to reflect on

and critically explore situations where gender was “done” in stereotypical and problematic ways. These activities resulted in insights, such as whether men and women are basically perceived as alike or different, whether or not they are subject to different expectations, consciously or unconsciously. As a concrete result, problem areas were identified within the recruitment process, called “waypoints”. The idea behind these waypoints is to highlight where in the recruitment process extra thought, support and resources should be given to gender issues, as markers for how the requirement process should be improved.

The question of whether and how this kind of initiative contributes to systematic change is discussed by gender researchers, but generally not at Swedish HEI’s. In addition to providing knowledge about the development of initiatives that transfer focus from individuals to processes, the project presented in this paper also contributes to a shift from targeting only women targeting participants from both genders. Although it is difficult to determine whether the project contributes to sustainable change, we believe it is an attempt to reduce the gap between current research and the development of gender equality initiatives in academia.

NINA STEINWEG:

Obstacles to the recruitment of female scientists for leadership positions? – Theory and reality of recruiting policies aimed at increasing the number of female scientists in non-university research institutions in Germany

For equity reasons but also due to a feared lack of human resources, increasing the number of female scientists has become one of the main objectives of gender equality politics in the past years.

In Germany, the recruitment procedures for professors are strongly regulated because the universities and the non-university research organizations (Fraunhofer-Gesellschaft, Helmholtz Association, Leibniz Association, Max Planck Society) are an amendable part of the public sector. Gender Equality regulations aiming at the promotion of the under-represented sex have been in force for the research organizations for over 10 years now. The relevant provisions include quotas for employment and for selection committees, stan-

dards on the public advertisement of the professorship as well as family-friendly assessments of performance. But the number of female scientists in leading positions in research organizations in Germany has only increased from 2 % in 1992 to 12 % in 2011. Therefore, in 2012 the political strategy was changed from a voluntary self-commitment to a stronger policy guidance by the adoption of target quotas according to the “cascade principle” by the Joint Science Conference (GWK). In the past there has been almost no data or scientific evidence on the specific situation of the approximately 270 institutes that belong to the four research organizations. As in these organizations the appointment of professors is predominantly carried out in joint appointment processes with the universities (“gemeinsame Berufungen”), it is particularly interesting to analyze if the introduction of binding targets had an impact on the gender equality dimensions of recruitment and appointment procedures and practices.

The paper will be based on the results of over 10 qualitative expert interviews and a comprehensive online survey conducted by CEWS in 2013 addressing all the gender equality officers, the heads of the institutions, personnel managers and recruiters. With a response rate of 35,4 % and the participation of institutes from all 16 federal states, the online survey can be considered as a representative sample. The aim of the paper is to trace recruitment procedures in the non-university research organizations, and to determine the degree of implementation of gender equality regulations and policies considering both the perspective of the gender equality officers and the recruitment stakeholders. Furthermore, the paper seeks to identify a correlation between the “gender equality profile” of the organization, the status of the implementation of gender equality policies and the percentage of female scientists in leading positions. These results will be critically analyzed taking into account the theories and knowledge about the obstacles for women in higher education selection processes. On the basis of this analysis, the paper will address the forthcoming challenges to structural change in personnel management in academia. How can a substantial change in recruitment practices be achieved? Have we focused too long on the meso level with the implementation of gender equality policies and control mechanisms? Shouldn't the recruitment stakeholder have the same gender expertise as the gender equality officers? What are suitable instruments for the change of attitudes and behaviours of the recruitment stakeholders and the organization as a whole?

HELEN PETERSON:

Finding the Right Woman for the Job? A Study of Vice Chancellor Recruitment Policies and Practices in Swedish Higher Education

Sweden stands out as a country with significantly more women Vice Chancellors than other countries in the European Union. In 2010, 43 per cent of the Swedish Vice Chancellors were women compared to the average 10 per cent in the 27 EU countries (European Commission 2012). This current situation is a result of a dramatic increase of women since 1990 when only 14 per cent of the Swedish Vice Chancellors were women (Peterson 2011). Can an analysis of recruitment policies and practices explain this increase of women in Vice

Chancellor position in Swedish higher education? This paper investigates whether the decreasing male-domination is reflected in more gender-neutral recruitment policies.

Documents reporting on 69 different recruitment procedures at 28 Swedish higher education institutions between 1983 and 2013 are examined using a discourse analytical approach. In 27 of these recruitment procedures a woman was appointed to Vice Chancellor. An in-depth comparison is made between these 27 recruitment processes and the 42 that resulted in the appointment of a male Vice Chancellor in order to identify significant differences that can explain the different outcomes.

The analysis reveals that there are notable divergences in some of the profiles that were used to recruit women as they emphasize communication, cooperation, change and renewal, diversity and equality. These profiles seem to construct the “ideal” Vice Chancellor using formal competence criteria and skills that women stereotypically are assumed to possess to a greater extent than men, something that might favor women candidates. The findings also suggest that the next Vice Chancellor is molded by the image of the previous one, as several women Vice Chancellors have been superseded by another woman. Finally, the paper illustrates the influence of the Swedish Higher Education Ordinance that obliges university boards to consider gender equality in the recruitment process.

The analysis situates the recruitment practices and policies in the context of fundamental and global educational transformation. As in other European countries Swedish higher education has undergone several reforms the last 30 years (Haake 2009). Ranking factors, performance-monitoring measures, quality indicators and systems to evaluate effectiveness have been introduced (Ek et al. 2011). The paper thus also addresses the research question: What impact has the introduction of new managerialism policies had on (the gendering of) recruitment practices and policies?

The paper concludes by discussing several different factors that can explain the increase of women being recruited to the Vice Chancellor position in Swedish higher education.

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Room: **Marilda Azulay**

WED9: Academics without borders? (Workshop)

ÅSA-KARIN ENGSTRAND

STINA BACKMAN

Academic mobility and internationalization are among key buzzword when research career development is concerned, Inspired by the presentation by Kathrin Zippel at the last European Conference in Bergen 2012, we embarked on a project aiming at critically exploring the concept of the mobile academic. During 2013 we designed and carried out a web-based survey among faculty at our large multi-faculty university in Sweden, aiming at mapping out possible gender differences in possibilities of fulfilling the ideal of being international and mobile.

In April 2014 Forum for Gender Studies and Equality will arrange a conference presenting the results from the survey and topical research on the subject such as scholar mobility in relation to politics, gender differences in international career trajectories, and experiences of teaching abroad.

At the conference in Vienna, we propose a session shedding light on diverse implications of internationalization and mobility as an academic norm. Drawing upon results from the survey and experiences from participating teachers as well as researchers at Linköping University this session will problematize the gender-neutrality of meritocracy and make room for reflexive dialogues. The session provides an opportunity to exchange experiences and knowledge on the challenges and impact of international mobility on academic careers in different disciplinary and country contexts.

Room: **Inés Novella**

WED10: Creating Gender Equal Workplaces in Academia – Different Approaches for a Common Goal. Examples from 4 European Projects

SARAH BARNARD, BARBARA BAGILHOLE, ANDREW DAINTY, TAREK HASSAN:

The gendered experience and impact of academic culture in the UK, reporting from the GenderTIME project

Despite many years of advances in women's academic achievement in higher education, women are still under represented and under achieving in academia – particularly when we look higher in the hierarchy – in Professor positions and senior university management. This is exacerbated by an underrepresentation of women in particular disciplines in higher education, especially within the STEM subject areas. This paper will discuss the dominant academic culture in the UK using existing literature and results from action research in a case study institution. It is argued that there is a problem with academic culture as it aligns closely with masculine ideals of working, despite potentials for the autonomous academic

worker to manage work and life commitments, it seems work may be given precedence by the 'always working' academic. This work-culture is argued to be particularly problematic for women who wish to have families. Using the results of a staff survey and also on-going action research in an engineering school at a UK university, we will describe how the norm of academic-work is experienced by male and female academics and research staff and reflect upon actions taken in the case study institution and how these may reinforce/undermine traditional notions of male and female working identities. It is also discussed how the competitive and individualistic career structure in academia may undermine the potential for challenges to norms around academic working.

ANNE PÉPIN, EILEEN DREW, VIRGINIJA ŠIDLAKSIEN, ANKE LIPINSKY:

Fostering Gender Equality in Research Institutions through Transformational-Gender Action Plans (INTEGER project)

This paper draws upon baseline evidence compiled for the FP7 Project INstitutional Transformation for Effecting Gender Equality in Research (INTEGER) in three research performing organisations. Despite institutional commitments towards gender equality, there is an under-representation of women at full professorship (Grade A) and equivalent. Furthermore women and men are unequally represented on key committees and other decision-making bodies. INTEGER's task is to address these and other imbalances through the adoption of Transformational Gender Action Plans (T-GAPs). These T-GAPs involve: increasing the visibility and leadership potential of women academics/researchers; monitoring and gender proofing of recruitment/retention and promotion policies and practices; ensuring gender balance on decision-making bodies/committees; providing mentoring programmes and training in gender awareness to overcome unconscious bias at all levels of the institution; setting targets for high level appointments; and promoting gender equality as a core value contributing to research excellence. The T-GAP process is informed by international good practice through peer mentoring with research institutions in the UK/EU and USA and alignment with the Athena SWAN Charter and equivalent award holders. In addition, an external evaluation team assesses progress and impacts of the T-GAPs in each organisation. The paper presents different approaches of designing institutional transformation, strategies for building alliances in the institution for effective implementation of the T-GAPs and how the processes can be evaluated.

ANDREA WOLFFRAM:

Gender Implications of Perceptions of Excellence at European Universities: Experiences from the FESTA-Project

The FP7-Project "Female Empowerment in Science and Technology Academia" (FESTA, <http://www.festa-europa.eu/>) is concerned with creating change in organizations towards enhanced gender equality. This change is seen as essential in order to enable women's participation and career advancement in the male dominated SET subjects. FESTA focuses

especially on the daily working environment of academic researchers: formal and informal decision making processes, meeting cultures, PhD supervision, perceptions of excellence in hiring processes and in the working environment, and finally on resistance to gender equality measures.

This paper is concerned with conceptions of academic excellence and its gendered implications (van Den Brink & Benshop 2012) that are translated into departmental practices in the everyday life of researchers doing science, the processes of individual career advancement, and in the hiring practices at universities. The emergence of the concept of excellence and its increase of importance can be seen in the context of the processes towards entrepreneurial universities (Clark 1998). Not only from a gender perspective those elite constructions are seen as problematic (Münch 2007), but in this context it is stressed that they are shaped in the male-dominated and homosocial environments of research governance (Collinson & Hearn 2005). But the processes of this organizational turn with excellence as its guiding buzz word do not only contain negative implications, but it seems that in some cases it involves also chances for the career advancement of female researchers – as the comparison among the participating universities illustrates.

The paper presents findings on how specific excellence concepts that are formed by national conditions influence women's career advancement in universities – both on the lower level of scientific careers and on the level where the leap is made to leading positions, especially onto professorships. In interviews with female and male researchers on different levels of a scientific career and with members of hiring committees at five European Universities and one Research Foundation we have explored their perceptions of excellence. We have asked them what they think what excellence research is and who an excellent researcher is. We wanted to know how excellence is judged in the daily practices of doing science in the working environment as well as in hiring processes. Finally, our analyses of the interviews were guided by the question how the perceptions of excellence have influence on gender inequality and contribute to barriers for career advancement of women in science.

The paper will be part of the panel “Creating Gender Equal Workplaces in Academia – Different Approaches for a Common Goal. Examples from 4 European Projects“

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UDUAK ARCHIBONG, NAZIRA KARODIA:

GENOVATE – Transforming Organisational Culture for Gender Equality in Research and Innovation

Numerous reports and projects in recent years (Expert Group on Structural Change, 2011; Holzinger and Schmidmayer/GENDERA, 2010; genSET, 2010) have recognised the gap that continues to exist between principle, policy and practice: despite a gender equality agenda, gender inequality persists in selection, experience and outcome across disciplines, levels and countries.

Explanations of gender inequalities have evolved over time, but have centred on the role of three key elements: individual factors, organisational structures and institutional cultures. There is increased recognition of the complex interplay of individual and organisational factors that influence different outcomes and that, most importantly, produce and reproduce structures and systems that cumulatively disadvantage women throughout the process. This shift in focus from outcomes to the importance of structural and cultural gendering processes in the workplace and throughout the career is more recently being concentrated even further on the very nature of academia and the research enterprise themselves.

GENOVATE is an action-research project, which aims to transform organizational structures to promote more gender-competent management to further the achievement of robust, substantial and sustainable gender equality research systems, such that the gaps between policies and outcomes can be effectively reduced. The project is based on the implementation of Gender Equality Action Plans (GEAPs) in six European universities with on-going evaluation provided by one other partner European university, and brings together a consortium with diverse experience in gender mainstreaming approaches. All of the universities come from different disciplinary backgrounds and have different national contexts. However, each of the institutions share common gender mainstreaming challenges in research and all have identified three common areas for intervention: recruitment, progression and research support; working environment, work-life balance and institutional culture; and standards and diversity in research excellence and innovation.

Each partner university is addressing these areas through their individually tailored Gender Equality Action Plans that builds on existing structures and policies where relevant, or develops new systems and practices where appropriate.

This paper will show how GENOVATE is unique in its institutional and cross-disciplinary focus because it addresses gender inequalities in research and innovation across all academic disciplines in each institution using a social model of gender equality implementation underpinned by the Change Academy Model [Jackson, 2004]. It recognises the different challenges faced by Science, Technology, Engineering and Mathematics (STEM), social sciences/humanities, medicine/health and other disciplines, while also acknowledging the role of institution-wide factors. We will share our experiences/findings from the first year of the project, which has informed the implementation of each institution's Gender Equality Action Plans.

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Room: **Brigitte Nieße**

WED11: Early Career

NADINE KEGEN:

Cohesive subgroups in academic networks: Unveiling clique integration of female and male top-level researchers

Social networks are said to have a positive impact on scientific development. Conventionally, it is argued that female and male researchers differ in access to and participation in networks and hence experience unequal career opportunities. Underrepresentation of female academics in top positions is explained by an inhomogeneous distribution of social capital among the sexes. The German Excellence Initiative which targets at strengthening the country's position as a locus of science and scholarship required applicant universities to demonstrate how they intended to promote gender equality.

Excellence institutions represent social spaces for focused activity, thus putting researchers in contact with one another. Due to limited capacities of time and resources as well as homophilous tendencies, top level scientists may structure their contacts to reduce problems of complexity and uncertainty. The outcomes of the structuring can be cohesive subgroups within networks of relation. Membership in "cliquish" groups – demarcated social entities of densely interconnected scientists – is regarded as one of the strongest forms of embeddedness.

Women in science may suffer exclusion from cliques because of being "dissimilar" in the arena. This would (re)produce gender inequality and also foster discriminatory practices, since female researchers ought to adequately access network resources to establish themselves at the top. However, empirical literature has not revealed systematic evidence on unfavorable integration in social and professional net structures of women in scientific top positions yet. In particular, knowledge on gendered clique involvement is still deficient.

The present paper aims at bringing together the different streams of research by exploring integration in and composition of scientific cliques. I conduct a three-step analysis. Firstly, cliques are identified. Secondly, overlap structures are examined. Thirdly, group compositions in terms of personal attributes of the researchers are viewed. Building on network data of principal investigators from cutting edge research institutions that partook in the Excellence Initiative, I apply a comparative case study design.

I show by contrasting a Cluster of Excellence with a Graduate School that "collaboration cliques" are more frequently composed of at least one woman than "social acquaintance cliques". The School holds higher percentages of cliques with female participation. Both institutions have only a few cliques that are significantly circumscribed. Most cliques overlap strongly. The advantages of being linked in close subgroups lapse towards the benefits of belonging to an "inner circle" whose researchers possess high social capital. Three of the four networks exhibit such a circle in which not less than two-thirds of the females are involved.

In this sample, the general hypothesis that women are disadvantageously embedded in scientific network structures cannot be supported. Like men, female academics may access career relevant net resources. The analysis is limited to the question whether women are in top positions because of having been integrated before or if they are adequately involved due to being a principal investigator. A main challenge for equality policies would be to break open gender homophilous cliques by using appropriate control mechanisms. To manage this, knowledge about the actual relationship structures is needed.

ANJA ZWINGENBERGER:

Admission Test for the First Year: Empirical Evidence from a European Business School

The selection of the best students for admission to limited university spaces is a key moment in our society's notion of achievement. Selection processes differ depending on university system, but all involve multiple criteria and instruments. Swiss universities allow students with a recognized diploma to pursue studies (except medical subjects) without a separate admission process. The exception is the University of St. Gallen, which requires all foreigners to pass an admission test. University statutes stipulate that foreign students not exceed 25 percent. The admission test is designed to measure aptitude, cognitive abilities and skills considered relevant to studies.

Investigated in this paper is the extent to which gender-specific differences may be observed and interpreted in the results of individual test sections.

In the United States, gender-specific effects have been studied in extensive empirical analysis of the standardized Scholastic Aptitude Test (SAT), but focus often lies in validity in predicting academic success. This is not directly comparable to the present study. Few empirical studies have been performed in German-speaking areas, and those mostly look at medical admission, but their findings demonstrate a partial match with the present study.

The admission test consists of five sections: text analysis, quantitative problem solving, pattern recognition, language systems and diagram interpretation.

The present study analyses the results of all admission tests (3131 units of analysis) in 2009-2013.

The sexes and point distributions of the overall score as well as individual sections are first presented descriptively.

During the study period, females on average fared much worse than males, who achieved higher average score in all years in text analysis, problem solving, patterns and diagrams. The difference was particularly evident in diagrams and problem solving. Females performed better on language systems but remained unable to overcome the overall deficit.

To statistically verify the relationship between gender and achieved score, ordinary least squares regression analysis was performed. Total score was the dependent variable and gender the independent (dummy) variable. Regression coefficients indicate a significant correlation between score and gender. The coefficient for the variable female remained negative throughout the study period and significant at 1%.

The probit method was then used to model the probability of a binary target variable occurring, in this case passing the admission test. The results for 2009-2013 show that gender has a significant influence on the probability of success. Females had a much lower probability of success in all studied years than males.

In summary, it can be stated that females performed significantly worse than males on the University of St. Gallen admission test from 2009-2013. This raises questions: Are female participants really worse? Are there moderating factors? Is the test unfair? What can be said about academic success? This requires further research. The lower probability of success for females creates a higher barrier to admission than for male test-takers. This can only lead the already-low proportion of women registering for the test (about 30%) to sink further when it comes admission. This makes it highly likely that talented individuals will remain undiscovered.

SARAH OBERKROME:

Gender Inequality during the Doctoral Phase – The Influence of Bourdieu's Capital Forms

Gender inequality during the doctoral phase is still a taboo topic. This paper analyses one of the reasons for continuing gender inequality in the field of higher education and puts a spotlight on a not so meritocratic system: Inequality due to different utilization of capital forms. Bourdieu distinguishes between three capital forms (cf. Bourdieu, 1983): Economic, social and cultural capital. These capital forms are either brought into the doctoral phase or can be acquired during the doctoral phase. In both cases, its influence on the promotion's progress should not be underestimated. Kahlert (2013) subsumes networks and supervisors during the doctoral phase as parts of the concept of Gatekeeping. It can determine success and access to a career. Blocked gates, i.e. lacking academic integration and supervision during the doctoral phase, can contribute greatly to higher drop-out rates in the higher education

system. Therefore our questions are: Which gender differences exist pertaining to existing and gained forms of capital during the doctoral phase? Are there gender differences pertaining to promotion access, progress and objectives? Can capital block and open gates, and if so, how? To answer above questions, we work with data acquired from our annual nationwide graduate survey „Kooperation- sprojekt Absolventenstudien“ (KOAB), 2009, in which a representative sample of postdocs had been surveyed 1.5 years after their graduation. On the basis of our data, in this paper we contrast two distinctive groups in matters of their gender-specific capital use during the doctoral phase: engineering sciences and cultural sciences & linguistics. We operationalize the three capital forms as follows: Economic capital is composed by the method of financing and financial support structures. Cultural capital comprises the parent's educational level, personal values und objective. Social capital is composed of the social background, networks, institutional contact and supervision. Our analysis of the KOAB-survey data shows gender-specific differences, both interdisciplinary and disciplinary, starting right from the beginning of the doctoral phase. By trend, men use networks more often to gain access to a supervisor. Women, in contrast, tend to find a supervisor by themselves. Male Ph.D. candidates are more often employed during their promotional phase and therefore institutionally integrated. Female Ph.D. candidates however are more likely to finance themselves through stipends or are privately funded. Therefore, it is not surprising, that more women than men contemplate the thought of breaking off their Ph.D. studies due to personal problems in the student-supervisor relationship or due to lacking supervision. Furthermore, female career paths tend to be less academically oriented (see: Jaksztat et al, 2012). Even though the discipline is as important as gender in influencing and shaping career paths, the contrasting of two rather different disciplines allows us to show, that disciplinary differences do not override the influence of gender and social background. Furthermore, even though one can gain capital, such as academic habitus, during the doctoral phase, it's always an advantage to already possess capital to begin with. Identifying the prevailing unseen forces behind gender inequality in higher education presents ways on how to minimize their effects.

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ILONA HORWATH, NICOLE KRONBERGER:

Impact of social discomfort and academic self-doubt at high performance levels

In this contribution we present results of a recent study (Kronberger, N.; Horwath, I. 2013; Horwath, Kronberger & Appel 2014) addressing the relationship between intellectual performance and persistence for men and women in an environment in which women represent a numerical minority and where they are confronted with a stereotype of inferior competence. It is well documented that such threatening environments can impact intellectual performance via „stereotype threat“ (Steele 1997), but little is known on how performance relates to persistence in such environments. Repeated poor performance will be a frustrating experience, increasing a student’s tendency to escape the field. What happens, however, if a woman excels in a male dominated field? Surely, one might argue, threat is overcome and she will be as likely to persist in the domain as a man. But, is this the case?

Using administrative data, an analysis of the trajectories of 2,397 individuals who began majors in engineering shows a gender gap in graduation rates for those with high and average GPAs but not at low levels of performance. Analyses of survey data (N = 455) furthermore highlight that good grades, while reducing academic self-doubt, ironically accentuate female students’ social discomfort in the domain, and that after dropout, significantly more female than male dropouts indicate behavioural and psychological disidentification, which means that they took up a job and/or course of studies unrelated to engineering or to the natural sciences after dropout. This can be interpreted as a self-protective response to being stereotyped. They tend to discount the importance of the domain and to leave the field for good, while male dropouts tend to remain more identified with the domain.

Finally, we discuss implications of our findings for policies in threatening environments, e.g. explicitly welcoming diversity to make women feel accepted and valued in engineering or provision of female experts and role-models. For women who have been in the domain for a while and who have shown that they can excel, this may not be enough to mitigate their sense of social discomfort. Other strategies may be needed such as, for example, putting them in charge of prestigious tasks that demonstrate appreciation of their talents and contributions. In order to be helpful, programs need to convey that abilities and belonging are assumed rather than doubted.

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Room: Alison Brooks

WED12: Gender Didactics

ANGELIKA SCHMIDT, REGINE BENDL, MONIKA HEINRICH:

Constructivist didactics, gender and diversity and complexity management: What gender and diversity oriented didactics do we need to increase the employability and qualifications of business studies’ bachelor graduates in Austria?

In the last decade the study programs at Austrian universities had to undergo a transition to Bologna study architecture. Thus, also new study programs were launched or existing curricula were redesigned for economics and business studies. Recent surveys on the acceptance of social and economic sciences’ bachelors at the labour market report that most of Austrian firms’ recruiters are not familiar with the qualifications and competencies of these new graduates on the one hand and that the bachelor graduates lack knowledge transfer, critical reflection and considering problems and problem solving in larger contexts (derstandard 2013). These deficits are critical indicators that complexity management (Burnes 2005) represents a blind spot in didactics of these new study programs. While in this Bologna transformation process some universities intensified their activities within quality and program management focusing on assessment, graduate placement or skill profile monitoring (all activities stressing on formal, visible and quantifiable procedures for university evaluation), a procedural understanding of competence development and corresponding didactic issues seem to have been missed out for sustainable knowledge transfer of bachelor graduates. A broader focus on constructivist didactics with regard to gender and diversity issues may close this transfer gap of knowledge, critical reflexion and problem solving.

In order to face contemporary business challenges (e.g. continuing change processes, handling of crises in shrinking markets, sustainability, customer relationship management and, last but not least, diversity issues), self-organization and personal independence as pillars of constructivist didactics (Fischer 2004) – a qualification model which builds upon postmodern notions – supports the connectivity of students to the theoretical-conceptual knowledge of their studies and, thus, knowledge transfer from university to practice. Constructivist didactics starts from the needs of the learners and offers appropriate learning environment for their free involvement in learning, their creativity, and their knowledge of how to be. In other words, constructivist didactics makes it possible to address comprehensively complexity and order generating rules in complex systems (Burnes 2005) from individual, group and organizational perspectives in general and to focus on different diversity dimensions in particular (e.g. gender, sexual orientation, age, ethnicity, religion/belief, disability, etc.). Constructivist didactics applies collaborative and interactive methods to encourage students to challenge and consider different perspectives (Woldab 2013), which enables students to bring personal experience and theoretical concepts together in order to enlarge their problem solving capacity as well as empathy.

Therefore, the aim of this paper is to examine the contribution of constructivist didactics to deal with gender and diversity aspects and to indicate those possibilities which constructivist didactics offers to remedy the university-practice gap based on the lack of complexity management competencies of bachelor graduates. Our hypothesis is that a professional and inclusion-oriented handling of gender and diversity issues increases the competencies of graduates for dealing with complexity issues in general and, thus, in organizations.

In order to answer the research question, firstly this paper will provide an overview on constructivist didactics approaches in a nutshell. Then, we describe the competencies necessary to deal with complexity and gender and diversity issues. Next, we examine the contribution of constructivist didactics (e.g. Brooks/Brooks 1993; Tobin 1993; Giordan 1995; Steff/Galle 1995; Siebert 1999; Reich 2002) for the development of complexity management competencies by intersecting gender and diversity issues and complexity. Finally, implications for curricula for social and economic business studies at the bachelor level will be presented.

MARIO CONCI:

Exploring genderization of math as a way to reduce gender stereotypes

Gender gap in the scientific careers and female underrepresentation in the sciences have been investigated and reported for many years. The reasons that lead to such conditions can be found in the socialization phases, family load, career choice, evaluation practices and employment conditions, structures of the professional and private network to list a few (Bennett, 2011; Kegen, 2013). Some studies point out also the genderization of the scientific disciplines and, specifically, the attribution of a certain degree of masculinity to math (as representative of the scientific domain) (Brandell, Leder, Nyström 2007; Forgasz, Leder, Kloosterman 2004). Also, the negative reputation of women in mathematics and its consequences on their self-perceptions have been extensively demonstrated (Martinot, Désert, 2007).

Our study has developed within the framework of an European research project (FP7) namely FESTA (Female Empowerment in Science and Technology Academia). Data on students' perceptions toward mathematics are collected through a survey proposed as an online structured questionnaire, self-administered by a sample of students of two secondary schools located in Northern Italy. We had a total of 57 valid answers out of 83 possible respondents, with a return rate of 68,7%. The main part of the questionnaire is composed by the Who and Mathematics scale (Leder & Forgasz, 2002), an instrument used to measure the extent to which students stereotype mathematics as a gendered domain.

Data analysis, via descriptive statistics, presents two main outcomes. The first one refers to the "gendered" direction of the answers: the surveyed students retain that boys more than girls enjoy math, are good at it and, moreover, need it to increase their career opportunities; not surprisingly, respondents believe that girls have less interest towards this discipline and consider it difficult and hostile. The second one regards the comparison between girls' and boys' per-

ceptions. T-tests (independent sample) show that differences mainly refer to the "strength" of the perceptions more than their "direction" (towards masculine or feminine). For example, both boys and girls think that math is more important for men; nonetheless, girls believe it stronger than boys do. In a similar way, more than boys, girls retain that men need math for their job positions. Moreover, the comparison between attitudes and factual data highlights both some relevant discrepancies and the role of gender stereotype in influencing perceptions: marks in math show that girls are better at math than boys are.

In conclusion, we consider our work as an action in itself aimed at raising awareness of gender differences in math perceptions and of their possible effects on the choice of a career in the scientific area. The identification of students' perceptions and attitudes towards math can indeed be used to design interventions within the school context (e.g. curricula contents, didactic strategies, etc.) oriented at building and spreading gender awareness among students and teachers and at reducing some constraining stereotypes.

ELISABETH ANNA GÜNTHER:

Subtle modes of exclusion. Lecturers' image of the ideal STEM student

Science, technology, engineering, and mathematic (STEM) are male dominated fields. Not only is the vast majority of students and faculty male, but also working places and research conducted are influenced by gender (Schiebinger 2011). The stereotypical image pictures scientists as masculine, disembodied worker (Acker 2008; Knights and Richards 2003). Those disembodied scientists live for their work and are freed of other necessities and responsibilities (e.g. reproductive labor). In other words, the stereotypical image of scientists blanks out a vast variety of lived realities.

This paper sheds light on how lecturers – as part of the faculty – reproduce an existing inequality regime (Acker 2006) at an Austrian University of Technology (AUT). Lecturers are gatekeepers, who explicitly are in charge for passing on knowledge to students and judging students' skills. Hence, lecturers ensure performance standards. They do so using their incorporated and somatized norms and values (cf. Bourdieu 1998). Lecturers therefore not only pass on formalized, explicit knowledge, but also internalized, implicit habitus. By passing on the unspoken rules on how to behave, lecturers unconsciously reproduce the academic culture they represent. Unwittingly – at least most of the time – they hereby also reproduce discriminatory excluding mechanisms. These excluding mechanisms then again result in skilled (minority and/or female) students opting out STEM fields.

To unveil lecturers incorporated and discriminatory norms two group discussions of mathematics lecturers are analyzed. Lecturers, who taught mathematics in the fresh(wo)man year in different STEM disciplines, were asked to speak about their main challenges in teaching. Also students' necessary skills and competencies were discussed. Group discussion as a method is used to examine shared norms and values of participants. Therefore inferences on the academic culture can be drawn from these discussions. In the

group discussions participants reproduced a system of privilege and disadvantages. At the same time they declined responsibility for exclusion mechanism at work and passed on the “hot potato” (Wächter, 2009) to other institutions.

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Room: **Theresia Oedl-Wieser**

WED13: Integrating mentoring into academic HR management / staff development: potential and pitfalls for gender equality

MARTINA SCHMOHR:

One Step Further – Mentoring as Integral Part of Academic Staff Development

Mentoring programs for female doctoral and postdoctoral researchers have become ‘established’ instruments in the last decade for fostering women’s early careers at German Universities (Kurmeier 2012; Stöger et al. 2009; Barzantny 2008; Kaiser-Belz 2008; Franzke/Goetzmann 2006). Today the number of programs is still increasing and most of the programs follow the idea from an equal opportunity point of view. Yet there is also a tendency at German Universities to make use of the ‘mentoring’ format to implement (next to the goal equal opportunities for women and men) different institutional strategies like diversity management, academic career development (in general) and the preparation of young researchers for different career paths. Thus women-only mentoring programs have been supplemented by other mentoring programs open to male researchers, women (and men) who are not aiming for an academic career but a career in the public sector or the field of ‘science management’ and to persons with a different biographical background (migra-

tion, handicaps, parents etc.).

On the one hand, this development has helped – and still helps – to implement the concept ‘mentoring’ as a permanent measure for (female) staff development at many German Universities. On the other hand, it is important to keep the ‘women’s only’ idea especially for mentoring programs. Since this instrument offers the opportunity to raise people’s awareness of structural conditions (like unequal conditions and barriers for women in their careers) in a unique way (de Vries 2010), it is very important to target people who are affected by structural disadvantages like gendered organizational structures (Acker 2006; 1992). Using the example of mentoring programs at the Göttingen University, it will be shown that by a close collaboration of actors and offices in the different fields of (academic) staff development and equal opportunities different formats and targets of mentoring programs can be used to implement different institutional strategies of the University, in particular the idea concerning equal opportunities. Furthermore the contribution will discuss how mentoring programs and the experience gained by mentors and coordinators in those programs can be used in the future – much more than now – by Universities to promote organizational change in areas of gender equalities, career prospects and institutional culture (de Vries 2010; Schlüter 2011; Grenz et al 2008).

PHILIPP DUBACH:

Career development of former mentees at Swiss universities – implications for mentoring programs and gender equality policies at universities

The Swiss federal programme entitled «Equal opportunities for men and women at Swiss universities» has been offering mentoring schemes for up-and-coming scientists since 2000. A comprehensive online survey of all participants from 2004 to 2007 was carried out in 2013 in order to find out more about participants’ careers and the longer-term effects of the mentoring schemes. The survey was conducted at a critical juncture in the federal programme, which as of 2013 no longer finances central measures, but individual university action plans instead. The aim is to sustainably embed structures promoting equal opportunities for men and women by 2016 and to incorporate them into the universities’ regular budgets.

Some 200 former mentees took part in the survey (a response rate of 51%). Between five and nine years after the end of the mentoring schemes, the situation is as follows:

- 13% achieved their goal of an unrestricted professorship or a permanent post with a research contract. This means that they have made a direct contribution to the federal programme’s overarching objective of raising the proportion of women professors to a quarter of the total number.
- 36% are still involved in science and are aiming for an academic career.
- 25% are – to various degrees – still active in academia, but have doubts about an academic career or say that this is not (or no longer) an issue for them.
- 26% are no longer active in academia.

The mentoring schemes were heterogeneous and aimed at different target groups, ranging from students to post-docs. The «chances of continuing» vary greatly with academic rank. Students were often uncertain of their academic prospects at the beginning of the schemes, and only about half of them have continued as academics. However, among young academics who were already post-docs when they started the scheme, the «continuation rate» reaches 80%. The degree to which former mentees were able to build up additional networks alongside their formal mentoring relationship plays a crucial role in their being able to continue in academia.

Overall, just under half of respondents judged that the mentoring scheme had been a «big» or «very big» help for their further career. However, one fifth of respondents said that their participation had been of hardly any use. The reasons for this cannot be attributed to general characteristics of the projects and participants (e.g. the academic level of the mentees, subject background or sex of the mentor and mentee). At the same time, it becomes clear from the respondents' comments that mentoring reaches its limits at the point where structural factors hinder women – and sometimes men – in their academic careers. This will be a crucial issue for the future of the equal opportunities policy at Swiss universities. Along with important individual measures, this policy must not lose sight of the need to promote and secure equal opportunities for men and women through structural reforms.

ELLA GOSH:

AUDREY MOUTON, REBEKKA STEINER:

Evaluation of a mentoring program: The example of Starting Doc.

Mentoring has been shown to have a number of positive effects in the academic domain (Eby et al., 2007). Both formal and informal mentoring can be an important support for an academic career (Johnson, 2007; Schlosser & Gelson, 2001; Allen et al. 2004). However, scientific evaluations of mentoring programs have so far been limited to studies using self-report measures. Only a very small number of

studies have used a longitudinal approach following a given cohort (Jacquin, 1991). Yet, self-report measures are often subjective, and there is only limited evidence about their validity and reliability (Campbell & Campbell, 1997).

The current research uses a multiple-methods approach for evaluating the impact of the formal mentoring program «Starting Doc» that exists since 2008 and in which all Universities in French-speaking Switzerland take part. The goal of this program is to promote young women in their academic careers by supporting them especially during the crucial moments at the beginning of their doctoral studies. 232 doctoral students have already benefitted from the program. A new cohort of students will enter the program in 2014, and take part in the program during one year and a half. After the program has been running for a number of years now, a systematic evaluation identifying the strengths and the weaknesses of the program seems necessary, and should allow to appreciate specificities of the mentoring scheme in a context of an increased offer of structured doctoral programs. We conduct the evaluation by measuring both the perceived impact of the program in the opinion of program graduates (retrospective evaluation), but also by following the current cohort of doctoral students in the program in a longitudinal fashion from the beginning of their doctoral studies until the end of the mentoring program, and after that in their further academic career.

We aim at identifying the true impact of the Starting Doc mentoring program on its participants. Specifically, we will compare the academic careers and personal outcomes of young women taking part in the program, with two control groups, allowing us to control for possible effects of motivation and personality. Female doctoral students at the beginning of their studies that do not take part in the program, and male doctoral students that do not yet have access to this kind of program, will thus figure as control groups for this purpose.

Combined with the complementary survey-study, we will obtain a full picture of the effects of the Starting Doc program that will help to identify strengths and weaknesses of this program. Taken together, our studies should provide valuable insights for the design of successful mentoring programs in current academic contexts.

Presentation and Discussion WED 14

Room: **Marilda Azulay**

WED14: Projects

INÉS NOVELLA:

genderSTE – introduction to a European network of policy makers and experts

In this presentation the COST action genderSTE will be presented. genderSTE is a network of policy makers and experts committed to promoting a fairer representation

of women and better integration of gender analysis in research and innovation. We disseminate state of the art know-how on structural change of institutions and on methods for gendered analysis in research. We aim at advancing the state of knowledge in the specific fields of: cities, transport, energy, climate and industrial innovation. Our members represent government bodies, research organizations, universities, non-profits, and private companies from 40 countries, in Europe and beyond, as well as international organizations.

Poster Sessions WED 15 – 16

Room: Inés Novella

WED15: Institutions

MARJAN VAN AERSCHOT:

Gender action plan KU Leuven: towards a cultural shift through integrated gender policy

For KU Leuven the main goal of gender policy is to ensure that every individual is free to develop their personal abilities and explore options without the limitations imposed by strict gender roles. Furthermore, any difference in behaviour, aspirations and needs of women and men should be taken into consideration and be valued.

In this paper we would like to present recent figures on the situation of men and women at KU Leuven and the KU Leuven gender action plan. There is a lack of female recruitment in the different grades of academia; too few women have full membership of evaluation and selection committees and women are underrepresented in important boards and committees. To overcome this underrepresentation of women, an integrated gender action plan was launched in January 2014.

The main goal of the gender action plan is to initiate a cultural shift through integrated gender policy. These are the most important actions we would elaborate on in the paper for the conference:

1. KU Leuven sets out target figures for men and women in boards and committees, for the evaluation and selection committees and for recruitment in academic positions.
2. In every faculty a gender vanguard will be appointed. The vanguard will be a full professor of the highest rank who can, as a peer, instruct colleagues in the appointment and selection committee on gender friendly procedures and approaches. The gender vanguard will be a watchdog to ensure gender equality in selection and appointment procedures. A training for gender vanguards is provided.
3. At the personnel office a gender desk will be installed in the career centre. This desk has several functions: information and contact point; career counselling and coaching; development of expertise regarding gender and personnel; gender policy input.
4. KU Leuven will stimulate the use of search committees to actively trace excellent candidates from under-represented groups for academic positions.
5. KU Leuven will use the 'effective research time' to calculate the annual average number of publications for researchers. Now the number of years in research are taken into account in the calculation, without taking notice of periods of labour inactivity. Effective research time takes these periods of inactivity, for example mother leave, into account.
6. A range of measures to support the combination of work and family life are developed. Among these are childcare up to 3 years old, family friendly meeting hours, telework, ...
7. A structurally embedded range of career counselling and training on gender themes is being installed, including training for the gender vanguards. Furthermore, mentoring projects are being extended.
8. Monitoring provides an objective basis for policy development. Monitoring on gender themes will be extended.
9. KU Leuven wants to establish a solidarity fund to compensate research groups for extra costs regarding (prolonged) labour inactivity, as is the case for mother leave.
10. Knowledge on gender issues is important to develop adequate gender policies. Therefore KU Leuven wants to reinforce gender research at the university. A gender research group will be set up, embedded in existing structures.

BARBARA EHRENSTORFER, SILKE PREYMAN, REGINA AICHINGER, STEFANIE STERRER:

Women in Academia at the University of Applied Sciences Upper Austria: Impressions, Developments and Perspectives

This article deals with the current situation and conditions referring to women in (academic) leadership positions at the University of Applied Sciences Upper Austria (UAS). As reflected in various higher education institutions all over Europe, it seems that UAS Upper Austria paints a pretty similar picture: Senior executive positions are dominantly held by men, regardless of the subject area. In general, according to the gender report issued by the universities management in 2012 the number of employed women working as faculty members is 37% and in research and development it is 30%. Thus, our university finds itself in the statistical average in relation to the European-wide "She-Figures-Comparison" of 2012. In particular, senior leadership positions such as deans or heads of studies are predominantly occupied by men.

The paper sets out to provide an overview of the legislative background and recent developments concerning gender and equality at the UAS, such as the relevant legislative basis for gender and equality strategy, the constitution and certain concepts and strategies employed.

Further, as the spirit of new public management (NPM) and its relating concepts and methods have significant impact on academia, thus leading to new challenges for equality policies, emphasis will be placed on the effects of NPM perceived by women at the UAS. Here, it is noteworthy to point out that the UAS Upper Austria, in contrast to regular universities in Austria, has been guided by NPM since its formation as a limited liability company. It will be highlighted, which influence this fact has in respect to gender equality practices at the UAS Upper Austria, by paying particular attention

to quantitative data. In addition, an empirical investigation into the current experiences made by women in academic leadership positions should shed further light on the issue at stake. To gain in-depth insights into the specific situation of women in academic leadership positions the grounded theory approach seems most appropriate as it provides the opportunity to dive into the women's professional worlds. Thus, the methodology explores an open approach so as to avoid bias of this highly sensitive topic.

As such, the principal aim of this research is to learn more about the subjective perception of women working at C-level positions of the UAS at hand and to reflect on their experiences regarding female leadership and the effects of new public management instruments (formalisation of processes, quantitative indicators, professionalization etc.). Beyond that, the setting will be an integral part of analysis in order to capture the academic culture and thus provide a comprehensive overview of the scene.

This article will mainly draw on findings of qualitative focus groups with women in academic leadership positions (namely deans, heads of study programmes, faculty and project coordinators) and as such represent the first step within the grounded theory approach.

In this sense, the women are asked to describe their current work situations, academic careers and career prospects. In addition, they are guided to place emphasis on promoting and challenging factors in fulfilling their leadership role and academic responsibilities. At the same time, they are encouraged to reflect upon academia as a work place for women from a more general point of view, and changes occurring over the past years – especially on the fact that UAS Upper Austria implemented a "Diversity Policy" with emphasis on gender equality aspects in 2010. In particular, both principles and the realised leadership and human resource development concepts of new public management in UAS Upper Austria will be examined.

In identifying the perceptions of female leaders this research seeks to raise awareness and sensitisation towards gender equality at the UAS Upper Austria at stake in particular and the higher education sector in general.

MEIKE HILGEMANN:

**Gender Equality in the Gendered Institution of the German University:
Female and Male Experiences, Oppositions and Contradictions on the Road to a Professorship**

The Gender Report 2013 analyses 37 universities in Germany (North Rhine Westphalia) with regard to current developments in male and female academic careers and the degree of equality of opportunities on the level of the individual and the organisation (Kortendiek/Hilgemann/Niegel/Hendrix 2013).

Although the career opportunities for women in academia have improved over the last years, they are still representing a minority in a male domain, in particular at the highest stage of the qualification scales in universities. Whereas gender equality has been nearly met at the level of students,

only 20 percent of all professorships are held by women, e.g. the female percentage of students in the discipline of medicine lies at 64 percent, while it is only 17 percent at the level of professors. The same holds true for leading positions in universities, where women are worryingly absent.

In order to develop alternative working cultures and to promote gender equality in the organisational structures of German universities, an equal treatment law has been implemented which introduces the instrument of the quota. However, the professors in North Rhine Westphalia assess, accept and use these new legal requirements and institutional practices quite differently. While the institution of the university incrementally undergoes a gender sensitisation, it simultaneously experiences a new form of gender competition. A representative online interview of the Gender-Report 2013 with 1700 female and male professors shows that distributional conflicts between women and men currently increase at the university. Surprisingly, this development not only unfolds between the two sexes but also quite controversially within the gender groups. We observe quite diverse reactions towards an active promotion of women within universities: There are female academics who oppose the promotion of women just as male scholars who support such activities.

One particularly critical juncture for female careers in academia is the final step towards a professorship, the procedure of professorial appointment. Professorial appointments are multi-level selection processes in which different actors with divergent levels of power and influence participate to formally find the best-qualified person for the advertised position. Although the members of higher education insist on the meritocratic practice of selecting the best candidate, performance is a social assignment process defined by the scientific community. The Gender Report 2013 confirms scientific studies which have shown that the characteristic of being female still functions as a "downgrading modus" for women (Krais 2009), which unconsciously causes a gender bias. The results thus prove a gender selection on the road towards a professorship. To exemplify, three quarters of the male professors felt valued and appreciated during the procedure of the professorial appointment whereas only half of the female professors shared this experience. Furthermore, female professors significantly more often have been discriminated against during a professorial appointment. Inappropriate questions on partnership and family life were posed to women three times more often than to male candidates. Officially, rules and provisions regulate the organisational proceedings but informally, these are being circumvented. Informal networks and homosocial cooperation processes possess the distinctive power to put selected people into certain positions and to prevent gender justice in German universities.

The objective of the paper is to present the crucial findings of the Gender Report 2013. We summarise the difficulties and obstacles women report in their academic careers and issue tangible recommendations for organisations and multipliers of higher education.

ALEXANDRA KRÜNER:

Evolution of guidelines for successful and sustainable female employees retention by gender management in companies of the German steel industry

Demographic change and skills shortages in technical professions mean enormous challenges to the companies, as discussed at the Steel Institute VDEh since the year 2000 [1-12]. However this discussion is focussed on health management, personnel development and internal communication as well as young talent recruiting (children, youngsters, students). Conversely, women as target group of personnel recruitment were not addressed explicitly by the presentations of German steel producers. Solely representatives of voestAlpine Stahl in Linz/Austria gave an introduction to their personnel management concept LIFE which integrates Gender Mainstreaming [13]. On the other hand the better educated women begin too seldom technical studies [14]. How this discrepancy can be reduced, especially in industries with a traditionally low share of women is elaborated on the example of female academics in the German steel industry.

Objectives:

Identify measures for a sustainable recruitment of female academics for activities in the steel industry including guidelines for the companies.

Methods:

Analysis of company related data (webpages, questionnaire concerning share of women, gender mainstreaming)

Analysis of statistics (Mikrozensus)

22 interviews with female academics active in the German steel industry (2009-2011)

6 interviews with female academics who left the German steel industry (2009-2011)

Results:

Companies show restraint to act on the topics gender mainstreaming, rising the share of women and sustainable female employees retention. This Aspect cannot be evaluated due to a lack of return.

No German steel producer is member of Genderdax, the ranking of the two DAX members at the WoB-index is very low.

Language and photos at companies' webpages are not used gender equitably.

Female academics in the German steel industry feel a very strong loyalty to their companies which helps them to overcome hard times and obstacles. They act very pro-actively to improve their personal surroundings. This behaviour is inconsistent with the common literature which propagates the reasons for a drop-out due to a lack of identification with the male dominated working environment [15].

Consciousness conflicts and/or insufficient reconciliation of family and professional life are not the main obstacles to get forward or are not mentioned like this. This also contradicts the common literature which identifies these two aspects as the main reasons for drop-out [16-19].

NICOLE SAGMEISTER:

Strategies for achieving acceptance of gender mainstreaming at the University of Applied Sciences Technikum Wien

Female department heads, lecturers and students constitute small minorities at technical universities. One major challenge in bringing gender mainstreaming forward is to achieve institution-wide acceptance for organizational changes.

In 2011, a group of highly motivated female and male colleagues participated in a think tank for gender mainstreaming at the UAS Technikum Wien. We worked in project groups on seven targets:

1. Implementing Gender Mainstreaming top-down
2. Staff Quota: Gender balance within leadership, administrative and R&D staff
3. Empowerment of female employees
4. Family-friendly working and studying conditions
5. Gender sensitivity in teaching and research
6. Public relations
7. Student quota: Raising the female student numbers

Each group identified specific needs, and developed, presented and implemented strategies for addressing them. After two years of work, more than seventeen measures have been implemented and evaluated, ranging from gender awareness trainings to the inclusion of Gender Mainstreaming as one of the five main targets of UAS Technikum Wien. We can assert success, particularly in institution-wide awareness, and have identified obstacles to be addressed in the next project phase. The project group approach proved very effective; the impact is a milestone for the acceptance and evolution of gender mainstreaming at the UAS Technikum Wien.

MARGARETHE HOCHLEITNER:

How to get gender into Medical Universities

At all Austrian medical universities we offer Gender Medicine as an elective.

But how do we get Gender Medicine into the heads of our researchers? How do we incorporate Gender issues into all our lectures and all our research projects?

At Innsbruck Medical University we introduced Gender Medicine as an elective. We wanted Gender Medicine to be a regular core subject, just like all other medical disciplines. So we included Gender Medicine in the compulsory curriculum twice and also in the compulsory examinations. Moreover, it is compulsory in the clinical PhD program and gender questions are to be included in their PhD thesis. The criteria for *venia docendi* also include a compulsory Gender Medicine course. Here again we try to discuss the inclusion of Gender questions in all subject lectures and all research projects.

We started five years ago. In the beginning it was a controversial subject. Today it feels normal.

So it looks like we were able to integrate Gender Medicine into the curriculum and into the research projects, at least

those of our students. We hope that by including a Gender aspect in the scientific work for their PhD they will continue to do so in future.

MARGARETHE HOCHLEITNER:

How can we support women’s careers in medicine?

Despite affirmative action for women, there is still a lot to do. Three main points require our attention: the fight for positions for women, raising the self-confidence of young female scientists and improving work-family balance.

The legal basis ensures a 40%-quota per job category. Women’s advocates are forced to fight for every position for which a qualified woman applies. To raise the self-confidence of young female scientists a mentoring program with a support network for all mentees has proved very successful. It includes a free seminar program on weekends with high-ranking outside experts. There is a government financial support for mothers and childcare starts at age three years. Our re-entry program at Innsbruck Medical University offers the possibility to work approx. five hours per week while retaining all government benefits and an immediate return to the mother’s former position, even with reduced working hours, whereby child care is organized and paid for by the medical university. We offer an Office of Children’s Affairs and an own kindergarten.

We feel that additional legally anchored affirmative action programs for women are needed. In addition, empowerment and networking offers as well as help in reconciling job and family responsibilities are also needed.

MARION HABERSACK:

Scientific Proficiency in the framework of Medical University Admission Tests

Introduction

Due to the gender gap – registered since the first administration – the admission tests at the Medical Universities in Austria are centers of attention in the public media (1, 2). The purpose of this study was the investigation whether or not the various test parts constitute a suitable construct which might be designated as “Scientific Proficiency” (3-5).

Methods

Observational investigation; analyzing the results (4741 applicants) of the Graz Admission Test. Exploratory principal component factor analyses (PCFA), followed by confirmatory factor analyses (CFA) were employed to investigate the correlation structure of the test parts and to detect potential underlying latent variables governing the behavior of the measured variables.

Results

PCFA showed good clustering of the science test parts, including also text comprehension, and practically no correlation of these test parts with the Situational Judgment test part. A putative latent variable “Scientific Proficiency”, investigated by CFA, was shown indeed to govern the response behavior of the applicants in biology, chemistry, physics, and mathematics as well as text comprehension.

Discussion

The analysis of the correlation structure of the various test parts confirmed that the science test parts together with text comprehension constitute a satisfactory instrument for measuring a latent construct variable “Scientific Proficiency”.

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ALEXANDRA BRAZINOVA:

Gender equality strategy at Trnava University

Trnava University is no different from any other University in its vertical and horizontal gender segregation, resulting in the commonly known analogy, the glass ceiling effect. This is starkly visible in table 1, with regard to the large numbers of assistant professor (the first level/ grade after being hired as academic staff when qualified with a PhD) and the disproportionate numbers of female Professors.

Table 1

	Females		Males		Total
	n	%	n	%	
Professors	368	23	1218	77	1586
Associate professors	888	38	1453	62	2341
Assistant professors	3285	51	3158	49	6443

The goal of the gender equality strategy is to promote gender equality awareness and practices in Trnava University’s Recruitment, Progression, Promotion and Retention Procedures. The Career Development Programme and the Sustainable Staff Progression Policies will be implemented in our institution within the project GENOVATE – Transforming organisational culture for gender equality in research and innovation (FP7-SCIENCE-IN-SOCIETY-2012-1).

Room: **Cristina Alonso**

WED16: Countries

KAROLINA LENDÁK-KABÓK:

The road to success for Hungarian women in the Serbian higher education system

The main goal of this paper is to analyze the position of women members of the Hungarian ethnic minority in the higher education system of Serbia, based on available statistical data, the legal framework and interviews conducted in multiethnic Vojvodina, i.e. the northern province of Serbia. The paper starts with a description of the state of the art. The analysis will focus on women students who study in the Science, Technology, Engineering and Mathematics (STEM) fields in Novi Sad. The legal framework will be also assessed made by the Serbian Constitution, the Law for protection of rights and liberty of ethnic minorities, which guarantee the same rights as for the majority population even avouching positive discrimination in some social aspects. Apart from the theoretical analysis of the legal framework, this paper is based on five semi-structured interviews, as a pilot project, for collecting qualitative data from Hungarian women studying in STEM fields at the University of Novi Sad (UNS). The interviewed students were at different stages of their higher education when the interviews were made. The primary interviewee selection criteria was (1) Hungarian origin (2) they had to have finished their elementary and high school education in the Hungarian language (3) they had to come from a STEM field of study. The interviews focused on five focus points, namely (1) childhood inter-ethnic conflicts, (2) obstacles faced at the university, (3) family and carrier, (4) gender segregation at the university and (5) their opinions about Hungarian women taking on research/teaching and leading positions at the STEM faculties. Based on the qualitative analysis of the data gathered during the interviews, it will be shown that Hungarian women have less self-esteem when entering the academic society in Serbia, partly because of the inter-ethnic conflicts they experienced in their childhood and partly because of their limited knowledge of the majority's language (i.e. Serbian). Due to these limitations, women of Hungarian origin often drop out, go to study abroad and rarely manage to obtain either researcher and/or teaching positions at the UNS. As a possible solution for clearing the obstacles faced by Hungarian women in the Serbian higher education system, the author proposes different measures, the most important being the introduction of university quotas for women enrolling at the UNS, especially at faculties from the STEM fields. Such quotas would be beneficial as they would steer women towards the STEM fields where they are under-represented and which provide more job opportunities after graduation.

DORIS KIENDL-WENDNER, LIGIA PASQUALIN:

Training and Mentoring programmes to enhance gender equality and women empowerment in higher education institutions:

An example of Latin American countries in the EQUALITY project

According to data on educational standards and employment in OECD countries as well as in Latin America and beyond, the number of female high school graduates exceeds the number of male high school graduates; also the number of female graduates on average exceeds the number of male graduates of Bachelor degree programmes. In spite of the fact that women are highly qualified, females are still under-represented in management positions in both, academics and business, as well as in the positions of professors at most universities.

The reasons for this underrepresentation of highly qualified women in top positions are manifold. Traditional gender roles in society, lack of child care facilities, aspirational deficits of many women due to the environment they are living in and lack of career networks for women are some of the relevant circumstances which hinder women in their professional careers. Policies implemented in many countries to reduce segregation have so far proven to be not effective enough.

This paper first analyses the situation of women in the light of existing policies, in particular in Latin America. Secondly the paper discusses one strategy in improving the situation of women by strengthening capacity building and creation of networks through training and mentoring programmes. A project funded by the European Union and coordinated by the Instituto Tecnológico de Costa Rica, the so called EQUALITY project, has led to the implementation and modernization of gender units in 18 Latin American universities which have undertaken training of internal and external academics as well as mentoring for academic staff, master students and junior researchers to improve women leadership skills and to strengthen the female representativeness in key positions inside universities. In addition, through the EQUALITY project a network of 18 Latin American and 4 European partner universities is going to be created for the purpose of research and applied policy making in gender equality and women empowerment topics. The paper finally critically assesses these training and mentoring programmes conducted and implemented in this project in the light of the impact and sustainability of this measure. The paper looks at the stakeholders involved and the future perspectives of gender equality and women empowerment in institutions of higher education.

R. ACENG, D. OFUYURU:

Twelve Years Down the Road (2002 – 2014): How Have the Women Fared Genderwise in Gulu University?

The demand for gender equity at work is a worldwide phenomenon. It is not only about having representative numbers of women and men, but a shift in the balance of the values that traditionally inform and direct the culture of an organisation. In the case of universities, gender inequity is reportedly still deeply entrenched (Sandler, 1999). Gulu Uni-

versity is not an exception. Yet, inequity makes the university waste the talents of women as teachers, as researchers as well as administrators. In addition, gender inequity discourages the women students for whom there are a few role models and mentors, let alone the fact that it also devalues women staff by undervaluing their work (Taskforce on the Status of Women of the University of Virginia, 1999). This means, gender inequity in a university prevents it from functioning to its full capacity. But, how have the women of Gulu University fared, against the men, in terms of their representation in employment, leadership as well as the way women are treated on several parameters at the University, since its inception twelve years ago? In this paper, the authors discuss preliminary findings of an on-going study which has revealed that the imbalances between women and men, which emerged from the on-set twelve years ago, have persisted and in some instances widened despite the efforts by management to minimize gender imbalances. The authors, so far, have concluded that the interventions that the university management has put in place to enhance gender equity are inadequate and hardly tackle the core causes of inequality between men and women at the University. It is, thus, recommended that a deliberate comprehensive action plan be developed by the university management to improve the status of women at the University if its well-deserved vision of “transforming the society” is to be achieved.

SILVANA BADALONI:

Gender Based Segregation in Education: New and Old Behaviors

The research takes into account the presence of women in STEM faculties in Italy and the situation of the University of Padua as a case study. While remaining confirmed that among the different possible curricula in STEM the presence of women is still a significant minority (She figures, 2012) and remaining also confirmed the “leaky pipe” phenomenon i.e the progressive loss of female progressions in scientific careers, this research aims to point out that different behaviors are present in the educational paths at different steps. On one hand, many researches concerning the presence of women in different curricula of STEM faculties show that some improvements are detectable, that is girls who choose STEM faculties tend to break away from the stereotypes established preferring the most interdisciplinary and innovative curricula, and closer to life-science (Badaloni, 2011). On the other hand if we consider some recent studies (Di Campo, 2013) on a huge group of students of 10-13 years of age in the catchment area of UNIPD the evidence is of a very traditional and strongly sclerotic imaginary related to male and female roles in the universe of science. The two year survey involved 810 students showing the existence of very clear and deep-rooted stereotypes that contribute to the perpetration of the phenomenon of “educational segregation”. This result indicates the urgent need to educate students to a great autonomy of thought and toward the capacity of developing critical thinking in order to foster and promote diversity as a cornerstone not only to increase creativity and thus encouraging the advancement of science, but to promote social innovation and to better address the future choices and of young people in the labor market.

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ORSOLYA KERESZTY:

Gender Inequality and Social Science Careers – a snapshot from Hungary

As a member of the European Union since 2004, Hungary has to meet certain expectations regarding gender equality in various areas, including the academia. The Strategy for Equality between Men and Women (2010-2015) states that equality between women and men is a fundamental principle of the EU, because inequality may burden the economy, and may lead to loss of talents.

There is an extensive literature on women and science careers in an international context (Blickenstaff, 2005., Hancock-Baum, 2011., Buber et al., 2011., Ceci-Williams, 2011), but very little research has been carried out on this topic in Hungary. (Schadt, 2011) The main reasons for this are the marginal position of gender-sensitive research in social sciences in general, and the fact that the integration of gender studies as a scientific field in the academia is still at an early stage. In Hungary, women’s career expectations and opportunities do not meet those of men’s, their careers break more often, they could rely on their partners to a lesser extent, and their primary burden is household duty. (Schadt, 2011)

My presentation focuses on how gendered the career path still is in Hungary in the Social Sciences. I am conducting an online survey in Hungarian among researchers working at universities/colleges or research institutes in Hungary. I am particularly interested in the ‘good practices’ researchers follow to overcome gender inequality in private life, their conception of ‘success’ and ‘failure’, as well as their views on how the system should tackle gender inequality. I will argue that women should balance not just their double, but – especially in case of researchers – multiple burdens, one of which is lifelong learning.

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FELIZITAS SAGEBIEL:

Academic Women Leaders in STEM and their Potentials as Change Agents of Segregation

Background of the paper is a German research project, lasting from April 2009 to March 2012, financed by the Ministry of Education and Research and the European Social Fund, combining the expertise of two institutions, the University of Wuppertal and the Wuppertal Institute for Climate, Environment and Energy. Change potentials of organizational culture in technical organizations have been the theme of part of the project of the University of Wuppertal under the leadership of the author.

Organizational cultures as well as networks will be the focus. In this paper the change potential of women in management positions in organizations of higher education focusing on science and technology will be investigated.

A qualitative methodology has been taken for answering research questions. Eight case studies have been done in companies, governmental research organizations, political institutions and universities. Methodological instruments were website analysis, focus discussion groups and guided interviews. In each selected organization three guided expert interviews were done with women in leadership positions and two interviews were done with men in leadership positions. Two further guided interviews were done with key personal from human resources and equal opportunity office. In each investigated organization two gender separated focus discussion groups with women and men in leadership positions were done.

Research questions have been besides others: Which role do structural changes in the research play, especially the observed increased importance of university-industry-government relations and the commercialization of science. What is the impact on leadership styles, power and change potentials of asked female professors in comparison to male professors? What are the differences in comparison to other types of organizations which have been investigated too? Are there any gendered styles? Which role do gender stereo-

types still play for reproduction of gender segregation? How is gender sensibility connected with making decisions, do women focus more on gender mainstreaming?

Getting the right information in the right time at the right place is one of the main issues of being in a leadership position. For women professors in science and technology strategic handling of information is one of the most important prerequisites. So project ideas have to be communicated carefully taking into account cooperation and competition at the same time. On the other hand to change organizational culture transparency is a focus especially of women. Getting and giving of information is connected to networking and being engaged in relevant networks is a prerequisite of a leadership positions. Are there any differences between men and women? What about to overcome the engineering departments as men's domain? How do women leader in the academy use existing men's networks and create their own ones? Which strategies do they use to overcome barriers they are confronted with?

The results will be interpreted with theoretical perspectives taken from gender and organization, feminist technology studies, critical men's studies as well as gender studies.

Sagebiel, Felizitas: Academic women leaders' career and their potentials as gendered organizational change agents. In: Katarina Prpić; Inge van der Weijden; Nadia Asheulova (Eds.): (Re)searching Scientific Careers. IHST/RAS – SSTNET/ESA (Printing).

YVETTE HUET:

Growing Careers for Women and Minority Faculty: Mentoring at Multiple Career Stages.

UNC Charlotte has utilized climate survey-derived information to drive review of University policies and to initiate programming to improve the working environment for women and non-majority faculty at the institution. In this paper, we describe the phases and processes of change and some components of our programming that have been particularly effective. The UNC Charlotte ADVANCE Faculty Affairs and Diversity Office (FADO) was established through an NSF IT Award in 2006. FADO has developed and implemented programming to enhance career development at all stages. The Office was institutionalized at the end of the funding period, and is now supported by the Office of Academic Affairs. It is clear that Institutional awareness has moved forward over the past 8 years. For example, a grant -originated Committee has been formed to review policies and practices at UNC Charlotte that might impede the recruitment, retention, and full professional development of faculty members, particularly women and non-majority faculty. In addition a standing faculty committee has been formed that also reviews faculty wellness issues. Multiple Career Support Programs have been implemented but two we discuss in detail are programs for new faculty that include a mentoring program and a semester long-enhanced orientation, and our Mid-Career portfolio that includes peer-mentoring, interactive forums to discuss pathways to promotion with Deans and the Provost and one day conferences for Associate Professors and their chairpersons where associate professors learn strategies for

career advancement, and administrators gain insights into ways they can help mid-career faculty succeed. We view our model as a useful starting point for dialogue across different institutions of higher learning for developing best practices around developing an inclusive working environment.

INMA PASTOR:

How to manage gender equality in HEI. A case study of 18 universities of Latin America

Different Higher Education Institutions from 18 countries in Latin America are moving towards gender equality in their structure, leadership positions and academic career through the European cooperation project Equality – Strengthening women leadership in Latin American HEIs and society. This poster presents the methodology used to improve the quality, relevance and accessibility of universities in LA by upgrading university management for gender equality in education and employment. In particular, the poster focuses on the improvement of support structures and policies development as well as their impact, by addressing the main three issues on which the basis of the project were laid: 1. doing a diagnosis in each HEI and setting out a system of indicators in order to highlight the situation of women and gender mainstreaming; 2. developing and carrying out a Gender Plan based on the diagnosis results and the engagement of the universities boards; and 3. Creating a Gender Unit aiming to leading the process to put into practice structural changes. The enforcement of the three mentioned issues was preceded by a training for trainers programme, which should be replicated in each HEI member of the consortium. We proffer the initiative as a good practice to be transferred.

ANJA VERVOORTS:

**Precarious Working Conditions:
Does Gender Really matter?**

Increasing precarious working conditions are a common phenomenon among young scientists at universities in Germany. Less than 20% of PhDs are working in a permanent full-time contract and 77% work in fixed-term contracts. During this PostDoc phase the six years specialist training for Physicians for a medical career and habilitation for an academic career take place. These are the key hurdles on the path to leadership positions for women in the field of medicine. We performed a quantitative study on the working conditions for Scientists and Physicians at the Medical Faculty Dusseldorf. The average age of the employees in our study is about 35 years. At that age family formation usually takes place as well as the specialist training and habilitation. We have analyzed the employment contracts over a period of three years and collected data regarding

- contract duration
- weekly working hours
- tariff classification
- age and
- sex.

We will present our data from statistical analyses of the different situations among scientists and Physicians as well as among women and men also regarding the age at the different stages of their career.

GABRIELA OBEXER-RUFF, YVONNE JÄNCHEN:

The two Swiss National Equal Opportunity at Universities and Universities of applied Sciences Programs 2013-2016

In 2000, the Swiss Confederation launched two national equal opportunities programs for universities and universities of applied sciences. From 2017 onwards, equal opportunities issues of all higher education institutions will be managed by one national department as decreed by a new law. The overall goal of the Swiss university conference SUC Program P-4 is to anchor equal opportunity/gender equality into the organisation, teaching, promotion of academics and research as well as to establish the Gender Studies. In the period 2013-2016 the 10 Swiss universities put up their individual gender action plans tailored to their local needs. They cover the following areas: 1) Anchoring gender equality in university structures and procedures; 2) Raising the percentage of female professors and women in academic management and decision-making bodies; 3) Gender-sensitive measures in the promotion of academics; 4) Supportive measures for students, staff and researchers with family/care obligations; 5) Reducing horizontal segregation in disciplines where one gender is particularly underrepresented (e.g. science, technology, engineering, mathematics STEM); 6) Measures in human resources (HR) and organisational development; 7) Integrating gender aspects into teaching, learning and research.

Based on a decade of experiences, all 7 universities of applied sciences (UAS) defined the following four themes of activities: 1.) Institutionalisation of gender policies 2.) HR policies and promotion of early career academics 3.) Recruitment and promotion of students 4.) Gender in teaching and research. These four themes aim to reduce horizontal segregation, mainly in the field of STEM, and vertical segregation, otherwise known as the “glass ceiling effect”. In addition, the Swiss Confederation encourages and also funds applied gender research projects. To realise these activities, the Swiss Confederation allocated CHF 10 m for the UAS and CHF 13.7 m (9.8 m + CHF 3.9 m) for the universities and the Gender Studies.

Parallel Sessions WED 17 – 22

Room: **Margarete Schütte-Lihotzky**

WED17: **Research Funding**

BARBARA HARTUNG:

Evaluation of Gender Research in Lower Saxony

The Ministry of Science and Culture, Lower Saxony, (MWK) has identified gender research as a cross-sectional field which would particularly benefit from the findings and recommendations of a systematic review and whose further development seems promising for the science system in Lower Saxony (LS) as a whole. The ministry therefore asked the Scientific Commission of Lower Saxony (WKN), whose core task is to contribute to improving the quality of research carried out in Lower Saxony through appropriate review and advisory procedures, to initiate a systematic structural analysis on gender research at all higher education institutions in Lower Saxony.

Since the late 1990s, gender research has been supported by specific programmes of MWK, for example the Maria-Goeppert-Mayer Programme for international gender research.

http://www.mwk.niedersachsen.de/portal/live.php?navigation_id=6369&article_id=19046&psmand=19

Since 2001, 9 centers for gender research were founded at the 19 universities in LS.

The recommendations of the expert group, set up by the WKN, were based on self reports of the universities as well as on selective interviews with some centers for gender research in LS. They analysed the specific structures for gender research and its funding. They emphasized the innovative potential of gender as a cross-cutting scientific issue.

Overall, they found a positive development of gender research in LS which should be enhanced by promoting gender research in the natural and technical sciences, but also in law and economics. Especially important the experts deemed the strengthening of supporting and funding structures for gender research.

http://www.wk.niedersachsen.de/portal/live.php?navigation_id=33214&article_id=116311&psmand=155

I propose to talk about the development of the present structures for gender research in LS, the process/methods of this evaluation (which is unique for Germany), to present the recommendations, and line out the subsequent consequences, i.e., a call for proposal regarding gender research networks ("Geschlecht-Macht-Wissen"), the integration of the gender dimension in other calls and the funding of a coordination office for gender researchers in LS.

http://www.mwk.niedersachsen.de/portal/live.php?navigation_id=33676&article_id=118861&psmand=19

INGER JONSSON:

Success rates in research funding – gender and networking? A case study of a Swedish research council

One important aspect of an academic career today is the capacity to attract research funding. The competition for publicly provided research support has intensified and both researchers and higher education institutions are dependent on project based funding. The implication of this development has been discussed as a part of an ongoing transformation of the research systems. One aspect that has been highlighted is how the performance of the individual researcher, measured by funding and bibliometrics, is linked to a prosperous development for the institutions. In gendered organizations these processes are likely to have gendered consequences as shown in case studies of career patterns at departments and universities and in studies of peer reviewing in both publishing and funding. This study connects to that field by looking into the applications for research funding at one of the Swedish publicly funded research councils – Forte Swedish Council for Health, Working Life and Welfare (<http://www.forte.se/en/>). In the yearly reports to the government the Swedish research councils are requested to present figures of, among other things, the success rate for women and men. (Compare the SHE-figures.) These reports and many of the international studies that have been made are focusing on the main applicant or principal investigator – probably because this information is more easily available. In this study, however, the interest is directed to the whole research group behind the application. Beside factors that in other studies have proved to be relevant such as gender, academic position, university, etc, the importance of networking is studied. Networking is here understood in a narrow sense related to the basis for the study (the applications for research funding) as how researchers are co-operating when applying for research funding. An indicator of this is the degree to which researchers are co-applicants on each other's research applications. An interesting study from the Netherlands, although not specifically focusing on gender, discusses the relation between success rates and social capital. (van den Besselaar, P. "Selection committee membership: Service or selfservice" *Journal of Informetrics* 6(2012) 580-585). The question if more developed networks and a higher degree of social capital have a positive influence on the chance to research funding is highly relevant also from a gender perspective. The first step of the present study includes a mapping of the incidence of researchers being co-applicants on each other's applications. The analysis addresses questions like: What characterize these applicants in terms of gender, academic position, university, etc? Is there any correlation between being included in many research groups applying for funding and the success rate? As the study is limited to those researchers who apply for funding it does not explicitly tell us something about what is going on at the organizational level in the higher education institutions. But the results give nevertheless an indication of what factors that are of importance for the capacity to attract research funding and to which degree these factors are gendered.

ANNE PÉPIN:

The “Défi Genre” (Gender Challenge Program) at CNRS

In 2010, with strong support from its Institute of Humanities and Social Sciences (INSHS) and its Mission for the Place of Women (MPDF), the French National Centre for Scientific Research (CNRS) launched a national pluridisciplinary thematic network on gender studies (“RTP Etudes Genre”) exploring the integration of the gender dimension in fields beyond social science and humanities – including biology and medical research, environmental studies, engineering and technology – through a series of workshops opened to international experts.

This successful initiative led to the newly-created Mission for Interdisciplinarity at CNRS (MI) selecting this topic in 2012 as one of its “Défis”, i.e. one of CNRS’s great interdisciplinary research challenges for the coming years.

The CNRS Gender Challenge Programme (“Défi Genre”) aims to develop a gender perspective in different scientific fields by funding targeted and innovative research projects proposed by interdisciplinary teams, involving researchers from both inside and outside the social sciences and humanities.

The programme also aims to foster subsequent applications to national and EC funding (HORIZON 2020, ERC).

The first national call for proposals was launched in 2012 and successfully renewed in 2013. Five projects were supported each year. In 2014, the integration of the gender dimension is extending as a cross-cutting issue in other MI-supported actions. The new “Défi Genre” call launched in January 2014 has a special focus on the scientific topics covered by the other “Défis”, e.g. innovative therapies for mental illness; perceptible deficiencies and personalised assistive technologies; energy transition: resources, society, environment; nuclear energy, environment, waste and society. Training workshops are also being organised in collaboration with the MPDF to help CNRS researchers from different disciplines develop sex and gender analysis.

The paper will be presenting this innovative CNRS initiative and the key research topics it helped develop.

HELENE SCHIFFBÄNKER, PETER VAN DEN BESSELAAR:

Gendered dimensions in ERC grant selection

Excellent research is a core target of European research and innovation policy, the European Research Council (ERC) as the main funder of innovative research activities (frontier research) provides different funding schemes. Researchers applying successfully for an ERC grant have excellent further career perspective. But this prestigious funding has so far not benefit female and male researchers in an equal way: at all different stages of the application process, success rates of male researchers are higher, varying considerable between the different research domains and between the different grants. To be able to reduce this potential gender bias, ERC has commissioned a research project. In spring 2014 we have started gendERC. In this project, we focus on the gendered decision-making about grant applications. We analyse the weaker success of women in ERC funding schemes, namely in the Starting Grants.

The project focuses on the three main aspects of the schemes: the formal requirements and procedures, the composition of the reviewers and panels, and the process of application and evaluation. More specifically the following questions are answered: (i) Does the application process lead to gendered self-selection? (ii) Where in the selection process are (potentially) gender-biased decisions made? (iii) Are the decision criteria gender-biased, and/or are they deployed in a gender-biased manner? (iv) To what extent is this due to the (gender or topical biased) composition of the panels and/or reviewers?

We analyse potential gender biases in formal procedures and criteria as well as the way these are applied (= practices) in the context of the selection of panellists and panel composition, the definition of excellence and the assessment of proposals in peer review. Our main objective in gendERC is thus to identify potential gender discrimination in the institutional processes and practices of ERC funding activities and in ERC grant allocation. Therefore, we measure the size of the difference between male and female success, identify whether and (if so) where gender bias occurs in the larger process, and what factors are responsible for gender bias. Through this, we will (i) contribute to the understanding of gender bias in grant allocation, (ii) show where in the procedures, processes and practices of ERC these gender biases occur, and (iii) come up with concrete guidelines of how to avoid this in the future. Due to the timetable of the project our paper will focus on analysing the formal criteria, rules and procedures of ERC and analyses whether they imply potential gender biases on different levels: (1) application/submission, (2) selection of reviewers (panel chairs, panel members and remote reviewers) and (3) peer review and panel review processes. The definition of scientific excellence in the process of assessing proposals for Starting Grants will be analysed for potential gender bias, using semi-structured interviews to be able to gain access to more informal knowledge while document analysis is the main methods used.

Room: **Marilda Azulay**

WED18: International Perspectives

EMIDIA VAGNONI:

Gender diversity and Governance: an explorative study of Italian Universities

The European Union (EU) committed itself during the 1990s to the ‘mainstreaming’ of gender issues across all policy areas. Nonetheless, sometimes this commitment has not led to consistent and effective implementation in EU institutions (. Regulations have often posed as objective the removal of gender obstacles in the access to the labor market and to the political life; the goal is to remove barriers, which hinder some individuals in the participation to economic, social and political life.

Policies for gender equality have the objective the achievement of conditions of equality between men and women. European approach to gender equality policy is driven by a series of soft laws that preceded any kind of hard laws on

this topic. As a EU member state, Italy incorporated the the equal opportunity principle in its national regulation, even with regard to Universities. The 2010 Reform (Law 240/2010) redesigned the Universities governance and the principle of gender equality was clearly invoked, although measures to achieve the objectives were not defined. The latter was left to the autonomous regulation of each organization.

The literature has been studying the gender diversity phenomenon with regard to different perspectives: employment, salary gaps, the ability to achieve the top positions. Some authors argued that also university culture and academic field are strongly affected by gender differences. The participation of women in academia is increasing, but despite this, they lack in senior positions and suffer in terms of lower wages and fewer job opportunities (Sang, Al-Dajani et al., 2013). Furthermore, in academic careers a strong vertical segregation occurs; Bettio and Verashchagina (2009) refers to this phenomenon as hierarchical segregation or glass ceiling effect.

Based on the analysis of the institutional context and on a literature review, the paper aims at exploring the extent to what Italian universities are routing the gender equality principle in practice. To this end, the governance structure of the universities is considered.

Choosing a quantitative approach, the study is based on a basic descriptive content analysis to classify the information included in Statutes and Regulations of the Universities. The latter were collected through the organizations' official web site. And all the public universities listed by the Ministry of Higher Education were considered in the study.

The findings allow at painting a national context where only 20% of universities regulated an obligation to achieve gender equality results in the university board composition, and only 7% with regard to the academic senate composition. Being female the less represented gender, women in the universities' board are only 24% of the total members; more in depth women in the Board were represented by: 42,8 % of professors; 31% of external members, 9 % of academic admin staff; 17,2% of female students.

Finally, the study concludes that university governance shows a gap related to gender equality. And in spite to the often mentioned equal opportunity principle, the university weakly operationalise it to route the changes in practice.

HILARY WINCHESTER:

Gender equality in academia: a critical reflection

Gender equality in academia has been monitored in Australia for the past three decades so it is timely to reflect on what progress has been made, what works, and challenges for the future. When data was first published on the gender composition of staff in Australian universities in the mid-1980s women comprised 20 per cent of academic staff and held six per cent of senior positions. In 1986 the Australian Government passed the Affirmative Action (Equal Employment Opportunity for Women) Act which had two goals: to remove sex discrimination in the workplace; and to promote

equal employment opportunity for women. Since the early 1990s many Australian universities have had in place policies to remove sex discrimination and initiatives to increase women's representation in academia. Two decades on, women now comprise 43 percent of academic staff and hold 28 per cent of senior positions. How did this happen? What worked? Are there still challenges to be addressed?

Changes to gender equality in academia in Australia can be attributed to a range of influences including social change, government legislation, and committed individuals. Some of these individuals hold senior positions within Australian universities and belong to the Australian Colloquium of Senior University Women in Higher Education. With the goal of exerting influence on the leaders of Australia's universities this group developed the First Action Plan 1999-2003 which was designed to promote the achievement of gender equality in academia. The focus was on awareness raising, strategies based on research, and the collection of data to highlight the size of the gender gap. The Second Action Plan 2006-2010 shifted the basis of the argument from gender equality to workforce productivity and focused on equity initiatives, performance indicators in institutional plans, and dissemination of good practice. The current plan, the Universities Australia Strategy for Women: 2011-2014, is based on productive diversity, encouraging universities to incorporate equity strategies and targets in strategic plans, and leadership by Australia's Vice Chancellors. The Australian Government's Workplace Gender Equality Act 2012 and Workplace Gender Equality Agency have introduced a new framework shifting the reporting focus from workplace programs to gender equality indicators.

Considerable progress has been made towards gender equality in Australian universities but there are still challenges to be addressed including: increasing the recognition of women's contributions to the advancement of Australia's universities; increasing the representation of women at senior levels of management across a diverse range of disciplines and portfolios; and improving the representation of women in higher education to reflect the composition of Australian society. This presentation will provide a critical reflection on what works and the practical impacts on gender in academia in Australia over the past three decades, from monitoring in the 1980s, the introduction of gender equity strategies in the mid 1990's, and the development of national frameworks in the late 1990s, through to challenges for the future.

JULIE CWIKLA:

Building a Critical Mass of Women in Science: Four Gulf Coast Institutions Partner

The National Science Foundation in the United States has supported a program of development over the last decade to support women in science called ADVANCE: Increasing the participation and Advancement of Women in Academic Science and Engineering Careers. In the fall 2013 the Gulf coast ADVANCE program was funded (GulfCoastAdvance.org) to bridge the work and women at four institutions along the Gulf Coast in Alabama and Mississippi; The University of Southern Mississippi, The University of South Alabama, the Dauphin Island Sea Lab, and Bishop State Community

College. Both states involved in our ADVANCE grant have been identified as high need states for scientific supports. Beyond the typical STEM shortage that is well documented nationally, the four participating institutions are also nested within the southern American culture, which has been traditionally male led and dominated and this should not be underweighted. Women scientists in this region experience isolation even more severely than those in other more urban settings and those with a higher concentration of women scientists. There had been some movement at each of these institutions to support their women faculty, but the Gulf Coast ADVANCE has united these programs and is able to provide umbrella events for all four institutions.

Our programmatic goals are threefold. (1) Highlight, promote, and encourage the scientific research and accomplishments of our 100 STEM women faculty members. (2) Curb the isolation women scientists experience in their work by gathering a critical mass of STEM women in the region to serve as a professional support and collaborative network. (3) Transform the cultural and institutional landscapes so that work-life balance issues for women scientists are explicitly addressed in policy and practice, shaping a healthier, more productive environment for all scientists. Gulf Coast ADVANCE is working across institutions, with the guidance of outside national and international experts to carefully and specifically scaffold women's progress toward exceptional academic achievement and accomplishments in the STEM fields. We are using the rich body of literature on gender issues to guide the mentoring and collaborative events, as well as shape administrator training and policy discussions.

To date our findings suggest a positive impact on our women participants through cross institutional collaboration and mentoring. In addition to the 100 direct women participants in our program, dozens of administrators from all four institutions are participating in executive training related to gender issues and the American Psychological Association's Psychologically Healthy Workplace.

Our mission is to help women scientists grow into better faculty members as well as plant the seed and nurture their vision to become academic leaders. Women scientists with families are employed essentially by two "greedy institutions," both demanding full loyalty and commitment (Grant, Kennelly, & Ward, 2000). Our efforts will not only improve the workplace for individual women scientists but create workplaces at all four institutions that promote healthy work-life balance and home-institution partnerships for all. The full paper will detail the first year of our work, events, hurdles, and progress with women scientists in higher education in the southern United States.

Room: Inés Novella

WED19: Gendered careers in managerial universities: Challenges for theory and equality policy

SANDRA BEAUFAY'S:

Leadership and academic merits. How managerial logics foster gender inequality in the German Excellence Initiative

The German Excellence Initiative is a big funding program by federal and state governments. The official aim is to promote top-level research and to improve the quality of German universities. Consequently, it has to combine academic ambitions (doing innovative research) and strategic political and structural goals (making Germany a more attractive research location, making it more internationally competitive). In the multi-tiered review process the referees also have to make sure that the proposals consider suitable concepts to foster the careers of talented young researchers as well as gender inequality. The latter was part of the subject of an accompanying research project at Hamburg University, pursued from 2007-2012, and is the focus of my presentation.

How do strategic and structural goals and their implementation in universities affect the efforts to implement gender equality standards, especially for young researchers? The answer is two-folded and contradictory: implementing new structures and gender equality go hand in hand, but in a second step they interfere in practice.

Analyzing the perspective of women and men in executive boards of "clusters of excellence" and the situation of junior-research-group-leaders, I argue, that the scored standards of gender inequality just steam into the air while people pursue the established rules of academic practice in every day action. This process is even fueled by the managerial logics of the new research institutions in the old institution of the university: Academic merits, actually used as a sign of respectability within scientific communities, now turn into pure capital in a rat race. The social order of executive boards turns out to function in the mode of masculine sociability regimes, and clandestine organizational ratios redefine criteria for scientific achievement. Aside from the fact that these mechanisms will hardly contribute to a fruitful research climate, they definitely disadvantage women scientists.

Showing empirical evidence from a qualitative study, this paper combines the concept of hegemonic masculinities with that of symbolic violence and practice in academic fields. It discusses how the battles fought in the social field of science are deeply interrelated with its masculinity, and how the new managerial logic of "excellence" reinforces this relation.

ELISABETH BERG, JIM BARRY, JOHN CHANDLER:

**Gender and Management in Academe:
'Open highways, Blind alleys and Dangerous bends'**

As might be expected there are differences between Sweden and England not least in their higher education systems; although these differences are not a major issue for this paper. Undoubtedly each country has its specific culture but both countries have embraced new public management reforms in academe (Berg, Barry and Chandler 2012). The new public management initiatives have encouraged the adoption of private sector managerial techniques and ideologies across a variety of dispersed states (Pollitt and Bouchaert 2010; Clarke and Newman, 1997) with a view to increasing efficiencies in public sector organizations, and enhancing accountability and the sensibilities of public officials to their electorates. A growing literature suggests that this has intensified workloads, led to growing levels of distress amongst staff, and has had consequences for the gendered relations of academe. At present, it is argued, we seem to be witnessing a managerial re-configuration of professional autonomy in universities in England and Sweden. This may disturb or preserve gender stereotypes and autonomy at the level of the occupation, but in this the autonomy of even relatively senior academics in middle positions within the academy would seem to be highly constrained. This does not in and of itself prefigure the end of academic autonomy or progress for gender issues, rather a moment in its active re-shaping. It is argued that while some women and men are willing participants in the new regimes, others are antagonistic or ambivalent, finding themselves mired in neo-bureaucratic processes of surveillance and control, often stuck in occupational cul-de-sacs. It is contended that neo-liberalism and new public management are associated with masculinist forms of rationality that elevate individual winners and losers and divert attention from collective issues of gender.

While much of management literature appears gender-blind there are, nonetheless, already some who have acknowledged the relevance of a gender analysis, suggesting a gender perspective is important in debates on managerial change in Universities. This has sometimes involved emphasizing gender difference, following Gilligan (1982); see also Ferguson, (1984), and a valorization of the feminine, as in Rosener's (1990) argument that a transformational approach is more commonly associated with women (see also Goode and Bagilhole, 1998; Lunneborg, 1990). Bass and Riggio (2006), too, suggest that women may even have a 'slight advantage' over men stemming from their assumed superiority in developing some of the attributes associated with the transformational style (such as consideration), even if they also recognize the operation of a glass ceiling and a tendency for women managers to follow stereotypically masculine forms of behaviour (Bass and Riggio, 2006, pp. 112-125). More critical approaches, however, point to the association of transactional, transformational and other approaches with dominant forms of masculinity, resting as they do on 'rationality, measurement, objectivity, control and competitiveness' (Ford, 2005, p. 244; see also Calas and Smircich, 1996). In an ongoing research investigation we have found that academics in middle level positions often see themselves as caught between managerialism and pro-

fessionalism; with those embracing the former constrained in their actions. However, we also find opportunities for compromise, challenge and maneuverability in which the ambiguity and polysemy of both managerialism and professionalism become apparent leading us to discern open highways, blind alleys and dangerous bends' for those who find themselves taking managerial positions.

ILSE COSTAS, CÉLINE CAMUS, STEPHANIE MICHALCZYK:

**Gender Effects of New Public Management on
Subjectification: A Qualitative Analysis of German and
French Academics**

The implementation of New Public Management (NPM) in academia in France and Germany brings about new managerial control mechanisms based on quantitative performance indicators. In our research project we analyze the effects of these new governance forms on female and male academics and in particular their careers. NPM in academia denotes all reforms and instruments seeking to raise efficiency and intensify competition in science. (Jansen 2007; Boer, Enders, Schimank 2007)

In Germany new mechanisms of public budgeting and governance by objectives were introduced to enhance competition not only among universities but also on a micro level, namely among the producers of knowledge – the researchers. In France there has been a reorganization of the higher education system, involving the establishment of the National Research Agency (ANR) that introduces the need to compete for research funds, the Evaluation Agency for Research and Higher Education (AERES) and the Law on Freedom and Responsibilities of Universities (LRU). All these changes go hand in hand with the rise of quantitative performance indicators in line with the logic of NPM (Gillet and Gillet 2013) – something that serves to intensify competition, control and self-control. In France and Germany these developments have resulted in a deterioration of work contracts and work conditions. Our research shows that female researchers in particular have become more disadvantaged in terms of temporary work, part time contracts, attribution of performance and financial awards.

Adopting a Foucauldian feminist framework, we draw on the concept of subjectification in order to study the specific ways in which these changes affect the researcher's self. Following Foucault (1982, 1995, 2009), the notion of subjectification refers to social and historical transformations and power structures on the basis of which the subject is constituted. Subjectification is the effect of discourses and social practices, which reflect dominant power relations. Specifically the poststructuralist theorist Judith Butler has transferred Foucault's theory of the subject to feminist theory. She postulates that the meaning and constitution of gender are not given by nature, but are a result of subjectification in a society with a masculine and heterosexual normative hegemony (Butler 1990, 1993, 1997). Moreover, Bröckling has applied these insights concerning the subjectification processes to the realm of work and careers, which is also our focus here. Bröckling (2007) shows that the new highly competitive work conditions (for example the expansion of short-time contracts) bring about new forms of

entrepreneurial subjectification. Drawing on this, we seek to examine the concept of the homo oeconomicus through a gender lens.

This research is based on a mixed methods approach entailing document analyses, secondary data analysis and expert interviews. To explore the construction of the new entrepreneurial form of subjectification in the context of academia through a gender perspective, semi-structured interviews with female and male academics of French and German universities and research institutions have been conducted in 2013/2014. The interviews focused on questions concerning personal experience of the academic career, work conditions, production of knowledge, relations to colleagues, level of competition and the role of performance indicators. A first round of data analysis has led to the following results: The NPM driven reforms in academia constitute entrepreneurial subjectification processes. These processes have a relevant influence on gender constructions (concerning the self and others). Many authors have already shown how the typical “manager” or “entrepreneur” in academia is related to male attributes (Thomas and Davies 2002, Leeman 2009, Riegraf et al. 2010). As in light of the introduction of NPM in academia this “model” or stereotype also becomes increasingly dominant for the construction of “successful” academics, the gender bias, that is inequality, in research careers seems to increase. Drawing on the qualitative interviews, we show empirically how subjectification processes constitute female and male academics in different positions. In this way, we aim to develop a better understanding of the effects of NPM and its implications for gender discriminations, more specifically.

JOHANNA HOFBAUER, KATHARINA KREISSL,
BIRGIT SAUER, ANGELIKA STRIEDINGER:

Institutional complexity and careers. Gender challenges in Austrian universities

With an incisive reform in 2002, Austrian universities have undergone radical structural change. The formerly stagnant Austrian university landscape became a model student for university managerialism in Europe. Mechanisms for defining targets, measuring performance and evaluating success have become increasingly important for the career advancement of academics. These processes led to a performance-focused ‘managerialization’ of career models, which is illustrated by the introduction of a tenure track career model in 2007: For the first time in the Austrian university landscape, career advancement is dependent on reaching explicitly defined performance targets within a specific time frame. The aim of our paper is to scrutinize the gendered impacts of these processes.

We assume that these developments might challenge gender equality in academia for several reasons. On the one hand, they provoke hopes that a more formalised system limits the space for inequality based on gender stereotypes: Decisions are based on quantifiable academic performance, not the gender of the academic. The importance of gender equality is furthermore explicitly defined in legal and managerial documents. Heintz (2008) proposes that the gender difference is being “de-institutionalized”, that the phenom-

enon of gender inequality is becoming potentially instable, and dependent on the specific context. Research shows that increased formalisation does not necessarily lead to gender justice, as most prominently analysed by Wennerås and Wold (2000, also Matthies/Matthäus 2010). Gender differentiating mechanisms continue to be relevant for career advancement in academia; they are, however, no longer part of the ‘official’ processes, but rather hidden behind silent understanding or subtle language. These findings show that for equality work, managerialism is a double-edged sword: On the one hand, it offers higher transparency, documentation and data, and provides a basis for complaint in the face of obvious and persistent gender imbalances; on the other hand, quantified assessment processes could serve as a ‘fig leaf’ to justify exactly these imbalances, since the responsibility for gender inequalities can be referred to places outside these quantified – and therefore ‘gender-neutral’ – processes.

In order to investigate the persistent gendering of career structures, we focus on organizational arrangements of personnel management. A core perspective for our understanding of universities is the notion of “institutional complexity” (Greenwood et al 2011), stressing the co-existence of competing belief systems or organizing principles of action (“institutional logics”: Thornton et al 2012, Lounsbury 2008, Reay / Hinings 2009). Following Mintzberg (1991), we distinguish between the logic of the academic profession and the logic of the managerial organization, arguing that the former is deeply grounded in gender belief systems. University reforms in Austria, the paper argues, have shifted the balance between the logic of the profession and the logic of the managerial organization in favour of the latter. However, gendered career models persist as decision-makers skilfully shift between the more informal professional standards and formal procedures according to managerial logics. Hence, the paper tries to understand how Austrian universities re-design the balance between the professional and the managerial logics in the context of organizational power structures (Burns 1961/62), and which conditions this creates for de- or re-institutionalizing gender differences in academic careers.

The paper will approach these questions with a case-study research design, focusing on systems of personnel management in four Austrian universities. We analyse the responsibilities and decision-making power of individuals and (newly created) organizational units, both university administrators, academics and equality agents, who are involved in recruitment, appointment and promotion procedures, as well as their frames of reference and vocabulary used. Interviews and document analysis will be complemented by data analysis on gender (im-)balances along the academic career path.

Room: **Brigitte Nieße**

WED20: Early Career

MARTINA SCHRAUDNER, ANGELIKA TRÜBSWETTER:

How scenarios and role models can foster scientific careers – a cross-national perspective

The authors aim is to report on the experience and the lessons learnt from four pilot implementations in three different institutions (Fraunhofer, ETH Zurich, Tel Aviv University) of an innovative career support development tool, which targets women scientists at early career stages, mainly PhD-students, and is intended for use by scientific and research institutions. This support is necessary as gender bias favoring men still influences assessment and selection process starting with the first phase of a science career, at PhD (Moss-Racusin et al., 2012).

The developed method is based on the scenario workshop approach, because scenarios are “the most powerful vehicles (...) for challenging our “mental models” about the world” (Schwartz, 1991). The three key components (see figure 1) of the scenario workshop approach are: 1) Reflection and knowledge: Learning is promoted from different experts (supervisor, HR, Programme manager etc.) about careers and the scientific landscape (academia, industry, admin, consultancy) in which a career in science can develop. 2) Enabling Spaces: This knowledge is supplemented with learning through interactions with a variety of role models (variety of women in more senior positions, and/or those listed on Academia.Net), to gain insights what kind of career paths are possible. 3) Scenarios: ‘Confronting’ existing career assumptions and preconceptions by being acquainted with career related research evidence, and through interactions with other participants (e.g. when they work in pairs), which helps establish which career opportunities are realistic, and if the perceived obstacles are genuine. Furthermore the workshop participants have to make use of the new understanding and knowledge to create a future CV, which is the practical output from the workshop. The future CV consists of an imagined but, nevertheless, realistic collection of possible career objectives and paths situated within the available science landscape, and accommodates career-life balancing options. The ‘reality check’ of the future CV is ensured because the CV is constructed with the help of factual information and knowledge acquired during the workshop, some of which comes from the background information provided and other from the discussions with the panel of ‘experts’, who may include: research supervisor, HR manager, research Programme administrator, expert peer-review evaluator.

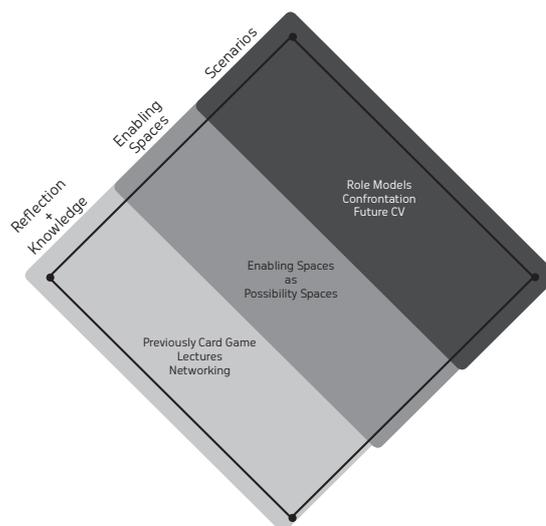


Figure 1: The three-stage Creating Futures in Science approach. Source: Authors

It became clear in all four workshops that the event is enjoyable, energizing, and for some women even transformative, and results in positive experience for all participants, the young women, the experts, and the role models. The purpose of the presentation at the Conference is to gain feedback from the audience regarding issues that need to be addressed when transferring the scenario workshop to other ‘landscapes’.

References:

Moss-Racusin, C.A., Dovidio, J.F.; Brescoll, V.L.; Graham, M.J. and Handelsman, J. (2012), Science faculty’s subtle gender biases favor male students, *Psychological and Cognitive Sciences*, Vol. 109 No. 41, pp.16474-16479.

Schwartz, Peter (1991): *The Art of the Long View: Planning for the Future in an Uncertain World*. New York: Doubleday.

BRIGITTE BÖNISCH-BREDNICH:

Gendered Mobility: the twists and turns of academic migration

Mobility is part and parcel of an interesting academic curriculum vitae. One has to be connected, able and willing to move. Scholars have always been good at networking and conferencing but the actual figures of academic migration have risen considerably during the last two decades. Recent research shows clearly that female academics are disadvantaged by the demands of an academic mobile life. Mobility as a career marker, it seems, has developed to a silent boundary marker, scholarly mobility is a gendered phenomenon. This paper will present findings from a research project following academic migrants in four different countries over a period of six years. It discusses the hidden trajectories of gendered mobility but also develops suggestions how this can be made visible and how the expectations put on academic mobility should be made transparent and re-organised to achieve equity in career development

PETRA WEJWAR, ANGELICA GRABHER:

Gendered study paths. Perspectives on the selectivity of higher education aspirations

Women nowadays represent the majority among Bachelor students and graduates in most European countries (Morley 2013, Orr et al. 2011). Though empirical evidence is still rare to find, Wejwar et al. 2013, Gärtner, Himpele 2010; Unger, Dünser 2010 found that a smaller share of female than of male graduates enrol in consecutive studies. Among Austrian students, these differences are most prominent regarding the transition to doctoral programmes.

The present paper is orientated along Bourdieu's idea of socially determined practices and preferences (Bourdieu, 1984). It examines students' plans of attaining a consecutive PhD study after their Masters considering their motivational background under the assumption that these motivations differ between men and women and are a result of gendered aspirations of career paths. These aspirations are not interpreted as rational choices but as results of a complex socio-cultural background pattern. Tavares and Cardoso (2013) follow a rational-choice approach in order to describe access to higher education in general. However, albeit the decision for entering higher education seems to be more rationally driven, they also found that preferences for HE institutions and field of study highly correlate with the socialisation background. The authors conclude that students' decisions are not solely a result of rational considerations but linked to their socio-cultural context.

The analysis presented in this paper is based on a representative student survey conducted among university students in Austria in 2013 (n=3.500). The data provides information on students' further enrolment plans and their respective reasons for their decisions. The combined examination of the self-assessed reasons for and against a PhD-enrolment indicates that men and women do not only differ regarding their educational choices but also in their career aspirations (cf. Correll, 2004). While male students' motivations focus more on labour market orientation and career advantages, female students have more intrinsic reasons to continue their higher education pathway – even if field of study is controlled for. We argue that this gender specific behaviour results from a reproductive process in which gender specific attributes determine men's and women's careers (see also Burke 2006, Ostrove et al. 2011). These choices later result in unequal opportunities for men and women on the labour market, due to a gender biased (self-) perception of opportunities.

Room: Alison Brooks

WED21 : Challenging the leaky pipeline in faculties of medicine and Life sciences – action plans and strategies in Swiss universities

This panel will focus the problem of underrepresentation of women in leading academic positions in clinical medicine and life sciences. We will present and discuss strategies developed within Swiss faculties of medicine and biology

(clinics and fundamental research) in order to tackle the specific nature of gendered organization and cultures in those fields. The goal is to exchange good practices between panel presenters and participants.

The academic sectors of medicine and biology seem to be particularly resistant to gender equality and to suffer from a dramatic female “drop-out”. On the one hand, we have evidence of the “feminization” of medicine and biology in Europe. In the last ten years, women became a majority among the students and obtain nowadays more than 50% of the diplomas. But unlike similarly “feminized” disciplines (humanities and social sciences) we have seen no progress at the upper academic level, the proportion of women professors in medicine and biology is still one of the lowest.

Academic careers in medicine are specifically challenging in terms of time investment (clinical responsibility combined with research and teaching) and of gendered representations of the profession (male doctors/female nurses). Those fields have also a particular lack of reconciliation culture and family friendly organization (heavy workload, working hours around the clock, lab situations) and suffer often from a very rough “male” climate, combined with an important role of male mentorship in career advancing. Women therefore seemingly prefer to develop their professional careers outside the academic track.

Four professors of faculties of medicine and life sciences of the universities of Basel, Geneva, Lausanne and Zurich will present responses of their institutions to these challenges. Their action plans are part of the “Swiss federal Equal Opportunity at Universities program 2013 – 2016”, a program that provides funding for gender equality actions in Swiss universities on the basis of gender equality action plans (<http://www.crus.ch/information-programme/programme-cus-p-4-equal-opportunity-gender-studies.html?L=2>). The goal of the federal program is to contribute to substantial structural change and to implement equality in terms of “Gender Mainstreaming” at all levels of the institution, by taking in account specific situations (faculties, disciplines, departments). The advancement of women in the fields of medicine and biology is crucial for the success of this program that has set an ambitious target for Swiss universities: 25% of women professors and 40% of assistant professors in 2016.

FRAUKE MÜLLER:

Promoting the academic career of female researchers and clinicians at the University of Geneva Medical Faculty

BEATRICE BECK-SCHIMMER:

Can we fill the gap?

WINSHIP HERR:

How to set gender equity on a faculty's agenda: the action plan AGIR pour l'égalité at the Lausanne faculty of biology and medicine

17:00 – 18:30

Parallel Sessions WED 17 – 22

Wednesday, Sept. 3

SIBIL TSCHUDIN:

Which is the most efficient strategy? Experiences with mentoring and part-time work during the last decade at the Basel faculty of medicine

Room: **Theresia Oedl-Wieser**

WED22: Gender equality management in higher education in Germany: Results of the Research Project EQUISTU- Equality Implementation Standards for Universities

INGRID SCHACHERL:

Innovations on equal Treatment in Controlling Systems – Types of Gender Equality Management Systems

The ongoing reform in Higher Education in Germany enabled structural change for the gender equality management in German higher education institutions. This development can be seen as a result of the gender equality policies for the last two decades. Since the universities – and some years later the universities of applied sciences – started to deploy equal opportunity commissioners in the beginning of the 1990, there can be observed several extensions in gender equality policies. EQUISTU focused on the possibilities for change in higher education management and controlling systems.

The results presented in this paper will show different types of gender equality management systems that are already implemented in higher education. The gender equality management types are based on case studies at 13 universities. The findings show different ways how universities are implementing equal treatment in controlling systems that enable change in working culture. This development can be seen as an ongoing process depending on several crucial conditions that will be discussed. One is to assure the gender expertise for all stakeholders that are involved in the gender equality management. Another is to ensure the independence for the equal opportunity commissioners. A third one is to implement the gender equality as a standard of the management system and to ensure the financial support.

MELANIE ROSKI:

The modernization of Universities – Effects on the Work of Equal Opportunities Commissioners in German Universities

There are several processes that led to a changing perspective on equality work within universities in Germany, for example:

- a) a growing impact of Gender Mainstreaming processes (legal requirement)
- b) the enduring drop-out of (female) scientists and a higher gender awareness in some scientific fields
- c) external incentives for more gender equality, e.g. performance-oriented allocation of financing, guidelines of

research funding organizations which include gender issues etc.

At the same time the modernization of higher education institutions (HEI) in Germany offers the opportunity for a better integration of gender issues. At some universities gender equality becomes a strategic aim and an important resource in the competition with other universities. The reorganization of structures and the implementation of management instruments that include gender aspects strengthen the need for gender expertise in different organizational units and promote the organizational and individual professionalism of gender work.

Referring to the empirical results of a qualitative study at 13 universities in Germany this contribution will demonstrate the changing role of gender equality commissioners, which is leading to new requirements and tasks and a kind of professionalization of gender work within HEI in Germany. By analyzing the new role of gender equality commissioners in the universities, different competence areas and types of expertise can be identified. Additionally, the need of gender competencies for managers, employees in specific organizational units like controlling, quality management, financing etc. are reflected as well.

BIRGIT ERBE:

Gender Mainstreaming in Public Financing of Universities: Central Findings for Germany

Since about the 1980s, an increasing trend towards an economisation of universities can be noticed on an international level. Business thinking and management concepts thus found their way into the framework that governs the relationship between the state and the university and universities' management throughout Europe. Keywords like internationalisation, competition and performance orientation reflect the increasing international competition in science today, the general economisation of public services and higher education policy. These developments are accompanied by expectations of greater efficiency, which have become essential for managing and financing universities.

A central aspect of the German university reform was an increase of universities' autonomy linked to new modes of control by the state: The state reserved itself the basic right to control universities by fixing the framework conditions while passing matters of detail on to the universities. This led to the introduction of specific criteria such as quality, result-orientation and effectiveness into the distribution systems of finances. In the context of this restructuring, gender equality has been integrated to some extent in the reform.

Evaluating the state of the art of the implementation of gender mainstreaming within German universities' governance, one of EQUISTU's focus lay on the public financing of universities and the redistribution of funds within universities. Two key tools of funding, namely agreements on objectives and performance and performance-orientated allocation of funds, have been established and are often used to foster gender equality.

The presentation will critically reflect the basic functioning of these tools which are closely connected to the idea of New Public Management. In order for these tools to be effective in promoting gender equality, basic institutional and structural requirements should be in place. Furthermore, they need a specific design and mode of implementation. These gender criteria will be presented and used for the analysis of the implementation within 13 case studies of EQUISTU. Central questions are: How do the German states set financial incentives for gender equality at universities? Has their strategy been successful? To which extent and how do German universities use competition and incentives for gender equality within their organisation? How do stakeholders evaluate the effects and which best practice models can be identified?

ANNEMARIE MLAKAR:

The Effects of Gender Equality Management in Higher Education Institutions (HEI) – The Implementation of a Gender&Diversity Controlling at Goethe University Frankfurt am Main

Goethe University seeks to establish high equality-oriented standards throughout the university by applying methods of quality management and controlling to the field of gender equality. The implementation of a regular planning and reporting cycle for faculties is set up as a dialogical process combining top-down and bottom-up approaches.

Drawing upon the increasing competitiveness in the higher education system, Gender Monitoring and Reporting at GU continuously publishes the university's performance in national gender equality rankings and award schemes. As a result gender equality is more and more perceived as an indicator for high performance.

17:00 – 18:30

Parallel Sessions WED 17 – 22

Wednesday, Sept. 3

THURSDAY, SEPTEMBER 4, 2014

09:00 – 10:30

Parallel Sessions THU 23 – 28

Room: **Margarete Schütte-Lihotzky**

THU23: **International Perspectives**

RACHELLE HELLER:

The Status of Slovenian Women in Science

Our study, *The Status of Women in Science in Slovenia*, seeks to establish a baseline of data pertaining to the numbers, salaries, positions and environments for women scientists in Slovenia. The survey was modeled on the Massachusetts Institute of Technology (MIT) and Coache (Collaborative on Academic Careers in Higher Education) surveys. It was tested for clarity with a group of 8 young scientists and the resultant study was sent to more than 11,000 registered scientists from around Slovenia using their email addresses. Overall, a greater percentage of women than men reported dissatisfaction with resources, space, and salary. The data here indicate women earn on average 78% of what their male counterparts earn. Women report roughly 10% smaller offices and nearly 47% smaller labs than their male counterparts. Women reported a lack of fairness in evaluations, limited access to awards, advancement, and recognition and leadership positions.

The challenges for the advancement of the status of women in STEM in Slovenia lie in the 'softer' aspects of the inequalities noted in the survey, the access to mentors, the awarding of awards and the general attitude of the society. With fewer of women in most science disciplines, especially physics and engineering, the challenge remains to find ways to support the women who are there so that they can advance in their career. Such supports include structural changes to the organizations to review the pay and resources provided women to insure equality, to provide more flexible work hours, to encourage mentoring and to actively nominate women for prestigious awards. In the field of mentoring, women seem to be more comfortable with outside mentors and this should be encouraged and strengthened. The more women are known outside of their institute, the more it will be possible for them to serve as role models for others, to be visible for nominations for awards and more they will be able to influence the status of women.

Dealing with societal attitudes toward women in science is not easy and it is doubtful that a single effort will encourage change. Every opportunity should be seized by women themselves to promote other women in science, to "Lean In" to seek advancement and challenge as Sheryl Sandberg notes and to join other women in science events in schools and community groups.

While the status of women in Slovenia is still challenged, the future is bright as science as a whole is valued by the society. The country is still a young democracy and it under-

stands that the full representation of women is part of the economic engine.

NÚRIA SERRET:

Usefulness, difficulties and risks in gender plans of European and Latin American Higher Education Institutions

This paper addresses the main initiatives for the gender equality in Higher Education Institutions not also in Europe but in Latin America, too, by means of gender plans. Based on the need to move towards gender Equality in Latin America, 18 universities in the region have been working on the development and implementation of gender plans. Through the training provided by the cooperation project Equality between the European Union and Latin America, the universities have learnt from experiences of different European universities and the goals achieved by the European Union in gender issues. We present a comparative study on gender plans firstly developed in Spain and later in Latin America through Equality project. The usefulness of the gender plans, the obstacles in their execution and the results of their approval and implementation are analyzed in this paper. We provide as well strategies to address the difficulties encountered during the development process, as they have been created and tested by Equality project in order to reach equity in the institutional structures, in the academic career and leadership positions. Finally, we point out the impact of gender plans in the universities of Equality Network.

ELEANOR RAMSAY, JUDY MCGREGOR, DI MCCARTHY:

New Zealand's experiment: closing the gender gap in higher education leadership through cumulative cultural change

New Zealand is proud of its record as a crucible for gender equality. In 1877 it was the first country in the British Empire to award a Bachelor of Arts degree to a woman – albeit one who enrolled without revealing that she was a woman – and a few years later, in 1893, New Zealand became the first nation state in the world to grant women the right to vote. In our own times, the World Economic Forum ranks New Zealand seventh out of 136 countries in its latest Gender Gap Index (*The Global Gender Gap Report 2013*, World Economic Forum, p. 297, downloaded 07/02/14 at <http://reports.weforum.org/global-gender-gap-report-2013/>), and it shares first place with 25 other countries in virtually eliminating gender gaps in educational attainment (ibid, pp.12-13). Despite such breakthroughs in progressing women's rights, especially in the political and educational spheres, and the fact that the academic gender gap has been diminishing for decades (Baker, M., 2012, *Academic Careers and the*

Gender Gap, University of British Columbia Press), the status of academic women in New Zealand universities has been regularly raised as a concern by the Committee for United Nations Convention on the Elimination of Discrimination Against Women (Committee on the Elimination of Discrimination against Women (2003) 29th session, *Consideration of Reports of State parties, New Zealand's fifth periodic report*. CEDAW/C/2003/11/CRP/.3/add.6/Rev/ Accessed 06/02/2014). In the context of a highly competitive tertiary environment, this paper analyses the factors that led to a collaborative, sectoral-wide response to the persistent gender gap in academic careers. It examines the theoretical underpinnings, the design principles, and the objectives of a radical, nationwide experiment in New Zealand. Now entering its eighth year, this intervention is operationalised through a national leadership program for university women – New Zealand Women in Leadership (NZ WiL) – which aims to increase the numbers and hence proportions of female leaders in academic and allied staff positions. While similar in this respect to other women's leadership interventions, other characteristics of this program are distinctive in terms of its intentions and its methodology. With respect to the latter, NZ WiL brings to bear a range of dimensions beyond the usual core elements of leadership training per se, with their cogency accumulating over time as well as geographically across the country. In terms of its fundamental objectives, these additional features have been specifically designed to leverage fundamental and long lasting change to the gender power relations embedded in and reproduced by the culture of higher education. Informed by theoretical notions of collective impact and cumulative cultural change, the already identifiable impacts of this transformative experiment stretch beyond the career-enhancing impacts for individual participants. The paper concludes by examining the outcomes of this intervention to date in relation to its ongoing impact on the gendered culture of individual institutions and of the higher education sector nationally, as well as other positive changes such as to gendered patterns of work and to women's status and representation in New Zealand universities. Finally the paper identifies implications for future research, theoretical analysis, and policy development at the institutional, national and international levels.

Room: **Marilda Azulay**

THU24: Deconstructivist understandings of gender in STEM: research-led approaches to critical literacy

SIGRID SCHMITZ:

Breaking up Nature/Culture Dichotomies: Chances and Challenges of the Epigenetic Case

Epigenetics is a growing branch of molecular biology that studies the interaction between genes and environment in plants, humans and animals. In many ways, this field is currently refiguring biological approaches to the question, if and how the social and the biological are intertwined and hence our understanding of the relationship between *nature* and *culture*. 2012 I organized a symposium on "Epigenetics,

Society, and Gender" at the University of Vienna together with colleagues from Science Technology Studies and Life Sciences. This symposium was intended to be the opening event of a series of workshops that will bring together scholar from the natural sciences, the social sciences and the humanities to discuss emergent questions at the interface of nature and culture under gender perspectives. The broader aim of this series is to collaboratively work with topics of mutual interest, e.g. those areas where science and bio-medical disciplines themselves discuss the transgression of nature/culture dichotomies.

With expert scholars, students, graduates and post-graduates, we discussed the impacts of epigenetic research on society and culture, and tried to sensitize towards burgeoning social, ethical and gender questions connected to this research, its theoretical framing, methods and data interpretation. I present the fruits of dialogue, but also the challenges and the still existing barriers, in particular when it comes to questioning knowledge production in Science and Technology.

CORINNA BATH:

Gender studies for engineering students: Disciplinary cultures and institutional settings

What are epistemic conditions and barriers for teaching gender studies in an engineering department or school? Which courses and pedagogies work in the sense that students gain a deeper understanding of gender studies knowledge and do like the course although they assume in the first place that their subject of study is completely gender-free? Are there specific gateways, arguments or institutional settings that facilitate establishing gender studies as a topic or subfield of study in a certain field of engineering?

My contribution draws on teaching experiences in computer science and mechanical engineering located in different institutional settings. In all these settings it was important to discuss prominent case studies demonstrating evidence that gender studies is relevant in the student's subject of study. However, there are still many fields in engineering, in which such case studies do not exist, are rather historical (and thus need context knowledge) or need interdisciplinary translation skills, since they are written in a language and logic that engineering students are not used to. And even if there are case studies, it is still a question of which (e.g., gender studies) quality the materials are. Hence, a convincing case study approach to teaching gender studies in engineering is not always easy to realize.

When facing the problem of lacking good teaching materials, it can be productive to either guide students in criticizing and – to a certain extent – improving existing examples or enabling them to conduct case studies on their own. I will discuss experiences with such strategies in terms of disciplinary and epistemic cultures as well as institutional settings.

09:00 – 10:30

Parallel Sessions THU 23 – 28

Thursday, Sept. 4

WALTRAUD ERNST:

Shifting Norms of Gender in Higher Education in Science and Engineering

Since the late twentieth century, feminist analysis of science and technology has been criticizing not only the absence of women as epistemic subjects and objects, but also their rather problematic presence as stereotyped and devalued other. Studies show how prevalent gender norms impede people to develop technologies accessible and profitable for all. Studies also show how people find new ways to negotiate gender identities within the materialized cultural space of normative assumptions about women and men co-defined by scientific theories; and how people express gender in information and communication technologies beyond those norms. In scientific research and technological development some (e.g. heuristic) norms are often understood as the result of historic epistemic negotiation processes whereas other (e.g. gender) norms are taken for granted. The thesis of this paper is that Gender Studies in STEM fields have to strive for an understanding that normative assumptions about women and men are the result of the same historic epistemic negotiation processes, underlying always again major epistemic shifts. By focusing on the possibility of epistemic shifts in gender norms, the paper wants to contribute to a way of studying and teaching gender in technoscientific research and development informed by a theory of gender that does not presuppose gender as a given binary or dichotomy. In other words, it is through the deconstruction of gender norms in STEM that we can provoke shifts in normative assumptions about sex, gender and sexuality.

PETRA LUCHT:

Inquiry-based study projects on gender in STEM

In this talk it will be presented how the integration of gender studies perspectives into science and technology fields is being realized by students through carrying out reflective and inquiry-based study projects. These study projects are part of an innovative study program on gender studies in STEM fields at the Technical University Berlin (GENDER PRO MINT). This study program has been developed by Bärbel Mauss who presents its concept in this panel. Through carrying out study projects students learn how to integrate approaches of gender studies analyses into qualifying study and research projects that have been assigned to them in STEM fields (Class projects as well as Bachelor, Master or Ph.D. theses). The related teaching concept for these study projects might be traced back to both (1) deconstructivist understandings of gender in education and research in STEM fields (Bath 2008, Götschel 2011) and (2) inquiry-based constructivist traditions in science education (Cavicchi et al. 2001). The process of carrying out a study project can be distinguished into three overlapping phases: Firstly, an in depth understanding of the assigned task needs to be acquired concerning its concepts, theories, methodology and prospected results. Secondly, acquired gender studies competencies in GENDER PRO MINT allow students to analyze how the assigned task at hand is 'gendered' with regard to its concepts, prospected results, applications and uses. During this second phase of carrying out the study project a range

of approaches in gender studies in science and technology are being discussed and explored. Thirdly, perspectives of gender as well as diversity studies in science and technology are being integrated into the project. Through re-shaping the initial task assigned in a STEM field the participating students learn how to develop deconstructivist understandings and analyses of 'gender' in STEM. In order to illustrate this inquiry-based teaching concept in GENDER PRO MINT examples of study projects in physics, urban planning, medical engineering and computer sciences will be given.

BÄRBEL MAUSS:

Gender Studies for STEM students – GENDER PRO MINT at TU Berlin

GENDER PRO MINT at Technical University of Berlin is a target specific program to train students in gender competencies* in science, technology, engineering and mathematics (*Field-specific gendercompetencies, reflexive and creative gender competencies). Gender skills include here knowledge of gender theories, gender approaches in the field and STS (Science and Technology Studies), and the ability to transfer this informations into practical projects to implement gender perspectives in science and engineering. All courses are based on research results in gender and science studies. The objective is to train students in it, from multiple perspectives – that is gender and diversity needs – to develop technology to develop planning processes and knowledge convey.

KERSTIN PALM:

The role of science history for changing the self-image of science

One of the central problems of teaching gender issues in science is the self-image of science as a field of objectivity and impartiality. In my paper I want to show how a special kind of teaching history of science can led to a more reflexive perspective on science. The history of science shows how and why the belief in a historically specific set of facts changes with internal and external conditions of the scientific research. It gives insights in the dynamics of the development of meanings and label scientific research as a kind of cultural activity which is dependent on time-specific power relations and the gender order.

Room: **Inés Novella**

THU25: Cultural change in academia: starting points, challenges and success factors

HEIKE KAHLERT:

The Attractiveness of an Academic Curriculum Vitae or: Gatekeepers as Agents of Stability and/or Change in the Organisational Culture of Academia

One of the characteristics of an academic career lies in the fact that such a career is organised by cooptation. One does

not reach the next step on the career ladder when one has fulfilled special requirements and/or qualifications; these requirements and qualifications are merely necessary pre-conditions for the chance to be coopted. The cooptation process may be described as jumping from one career stage to the next and depends on already established academics. They are the ones who select the academics that are considered to be qualified or fit for the career stage concerned. According to Harriet Zuckerman and Robert K. Merton (1973: 522), these established academics may be regarded as gatekeepers. Gatekeepers regulate scientific manpower. With regard to the input and distribution of personnel, they evaluate the promise and limitations of aspirants to new positions, thus affecting both the mobility of individual scientists and, in general, the distribution of personnel throughout the system.

In my paper I will argue, that the career promotion of the next generation of academics is part of the gatekeeper role. Gatekeepers influence the career opportunities and the mobility of postgraduates and postdoctoral candidates and by doing so they also regulate the gender proportion of academic personnel. In order to evaluate the role of gatekeepers from a gender perspective, it is important to discuss who selects, who can be and who is selected, what rules shape the selection process and what criteria are taken into account. Liisa Husu (2004) supposes that at least hidden, but maybe also even unreflected, mental models and attitudes of gatekeepers with respect to the sex of the candidates could play a role in the selection process. According to these ideas, one can suppose that also the career promotion of the next generation of academics is influenced by gender.

The concept 'attractiveness of the curriculum vitae' is one part of the gatekeeping process that can be found in mental models and attitudes of gatekeepers who are involved in the supervision and promotion of the next generation of academics. As will be shown in the paper by examples from my empirical research the concept of 'the attractiveness of the curriculum vitae' is at first sight constructed as gender neutral. But at second sight one can see that this concept is implicitly gendered: It is shaped by an underlying gendered substructure of organisational logic that is part of the so-called 'gendered organisation' (Acker 1990). In my paper I will work out how gatekeepers produce and reproduce the gendering of 'the attractiveness of the curriculum vitae' of the next generation of academics and by doing so they take part in the production and reproduction of stability and change in the gendered organisational culture of academia.

JENNIFER DE VRIES:

Chasing our tails:

First mentoring, now sponsorship, what next?

Recent interest in sponsorship (as distinct from mentoring) and the emergence of sponsorship programs in the corporate sector, suggest that a new look at sponsorship within academia would be timely.

Mentoring programs have come under increased scrutiny. Recent findings emerging from corporate research are that 'high potential women are over mentored and under spon-

sored relative to their male peers' resulting in significant discrepancies in advancement (Ibarra et al., 2010). According to Ibarra et al. a sharper distinction needs to be made between mentoring and sponsorship 'where mentors offer psychosocial support, plus career advice and coaching, while sponsors actively advocate for advancement'. Sponsorship, they found, is more likely to be present for men and in informal mentoring relationships. The gap between informal mentoring (more prevalent for men and more likely to include sponsorship) and formal mentoring (unlikely to include sponsorship, a key ingredient of what works for men) has been revealed. This draws into question the efficacy of formal mentoring programs, which is potentially a blow for universities where mentoring programs for women have been popularly adopted in order to assist women's careers.

But what does this mean in a university context? Should universities be following the corporate trend, replacing mentoring programs with sponsorship programs? Or are attempts to replicate informal, often gendered practices, such as mentoring and sponsorship in the workplace with formal mentoring and sponsorship programs always going to result in a shortfall for women? How else might we disrupt gendered mentoring and sponsorship practices in academic careers?

This paper will report on exploratory research examining the role of sponsorship practices within academia, in two Australian research-intensive universities with extensive pre-existing mentoring programs.

The primary aim of this research is to name and describe sponsorship practices, in order to make them visible, open to scrutiny and potentially enhanced and developed. It includes examination of the light and dark sides of sponsorship – the enabling 'creating opportunities' behaviours that are integral to building academic careers and the exclusive and preferential treatment that serves to reproduce the gendered status quo. A secondary aim of the research is to explore the usefulness of existing interventions, such as mentoring and shadowing programs in enhancing the sponsorship practices of the mentor or senior person being shadowed. Practical enhancements of pre-existing programs and new strategies that universities could adopt to create more gender equitable and inclusive workplaces will be considered in the light of the research findings.

ANGELA WROBLEWSKI:

Cultural change – a neglected goal in equality policies in academia?

Recent developments in academia are characterised by a significant increase in female participation. In most European countries women represent more than half of students and graduates; women have also entered other positions in academia – they work as researchers, assistant professors, full professors and in university management. In Austria female participation in all positions in academia increased significantly since the turn of the century, having been previously very low seen from a European perspective, and gender studies advanced in more and more disciplines. This development is at least caused by a coherent and consistent

gender equality policy mix (Wroblewski et al. 2007). However, despite this success story, several problems remain unsolved, even tackled or ignored. Horizontal and vertical segregation persist and the male-dominated ideal of what counts as “good science” or a “good scientist” still shapes selection processes in academia. Or in other words: the culture in academia has hardly changed although female participation has increased.

This is surprising, as equality measures do not only aim at increasing female participation in academia. Some of them do also aim at strengthening gender studies in different disciplines. Most equality measures are implicitly based on the assumption that with increasing female participation the way how decisions are made and how research is conducted will change. It is assumed – following Kanter (1977) – that if women represent a significant share of members of an organisation, the organisation is forced to change its culture. Obviously, this assumption does not hold for academia. The paper focuses on the question why increasing female participation did not initiate cultural change in the Austrian context. We could ask, did the existing policy mix, its implementation and steering instruments strengthened the traditional culture in academia.

With Austrian examples I will demonstrate that on the conceptual level policies aim at multiple goals (e.g. increasing female participation, strengthening gender in research content, cultural change) but with the implementation the focus shifts towards female participation. This is at least partly due to the fact that steering instruments only focus on quantitative indicators. Furthermore, it is often possible to adhere to policies but to stick with traditional practices (Wroblewski 2014). Based on a description of concrete examples of policies at national or university level I will discuss potential consequences for policy development focusing at least on two requirements: (1) A reconceptualization of policies and steering instruments is needed to stress the importance of goals which cannot easily be translated into quantitative indicators (e.g. through the integration of additional indicators in monitoring systems or through a change of evaluation strategies). (2) Existing policies have to be completed by specific measures which aim at challenging the picture of ideal science integrated in selection and assessment practices in academia. Therefore rooms of reflection and reflexivity are needed to put traditional practices into question and to develop alternative practices (Martin 2006; Wroblewski 2014).

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JULIA GRÜNENFELDER:

Work-life balance: Insights from recent scientific findings and their implications for academic gender equality practice

Work-life balance has been a central topic in debates about how to increase women's representation at top levels in organisations, particularly with a focus on work-family conflict. On the one hand, practitioners and scholars have argued that flexible work arrangements are needed to support parents, particularly mothers, in succeeding in their careers (BMBF, 2010). On the other hand, scholars such as Stone (2008) have criticized family-friendly policies for having controversial effects on gender equality in leadership positions. Ely & Padavic (2013) argue that in business contexts, the problem of women's underrepresentation is not work-family conflict, but overwork and its gendered implications. As a consequence, they request to find work solutions to solve work problems. However, work on business contexts does not provide sufficient answers about whether and how overwork is an issue in academic contexts and whether a potential culture of overwork in academia has gendered implications. A failure to understand concepts, notions and practices of overwork could lead to ill-informed gender equality interventions that sustain current gender inequalities in academia rather than challenging them. This paper addresses the issue of work cultures in academia by systematically reviewing literature on workload and work-life balance and analysing its relevance for the academic context, particularly in Switzerland. With its focus, the paper will provide a basis for the development of institutional activities to assess academic work cultures in Switzerland.

Room: **Brigitte Nieße**

THU26: Early Career

ANITA THALER, BIRGIT HOFSTÄTTER:

Promoting women researchers' careers. An evaluation of measures in life sciences and ICT

Science, mathematics, computing, and engineering are the fields where women PhD graduates are still outnumbered by men. This is true for most of the EU-27 countries, and it is still the case in Austria. However in the last decade, the number of female PhD graduates in engineering and computing has increased at a faster pace than the number of male PhD graduates in this field (European Commission, 2013). There is eligible hope that gender equality initiatives on European as well as on national level could have positively influenced this development in higher education.

In our paper we are discussing the next career step in science and research, more precisely in industrial research, which is considered to still a male dominated area (Thaler 2010). Both

vertical and horizontal segregation can be found in industrial research. Female researchers more frequently specialise in pharmaceuticals, so the medical sciences accounted for the highest shares of female researchers in industrial research whereas engineering and technology still have the lowest share (European Commission 2013). Additionally, female researchers still face several obstacles in their careers on their way to the top, not only, but especially in engineering and technology (Thaler 2010).

Liisa Husu and Paula Koskinen argued in their paper on the question of “What does it take to get to the top?” (2010) that “women researchers’ careers may benefit from equal opportunity programs and specific measures to promote women” (p. 310) In 2012 we evaluated such “specific measures” of an Austrian research funding programme to find out whether they really managed to support women’s research careers in technology research. We conducted interviews with 23 women researchers from life sciences and from the field of information and communication technologies (ICT) who were hoped to benefit from these measures. A biographical data sheet allowed a closer look at the development of our interviewees’ individual careers before and after the measures were applied (as well as in some cases before and after taking parental leave), and we compared the two fields of life sciences, where women researchers are working in much higher numbers than in the field of ICT. Our conclusion is that although women still have to deal with obstacles on their career path, specific measures can actually promote women in industrial research. We will present details of our evaluation study, and the framework and limits of such measures intended to promote women’s careers in research. Furthermore, the results will be discussed in view of a more systemic approach to the issue of equal opportunities in research.

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KATERINA CIDLINSKÁ:

Attrition from science – not only free choice, even in Czech Republic

Czech science is on the road to academic capitalism (Slaughter, Rhoades 2004). Consequently, it is starting to face similar problems concerning opportunities of career growth in science as developed countries of the west where these transformations were launched thirty years earlier. On the international (European) level gender aspects of these problems (especially the emphasis on performance and competition and related precarity) have been addressed in policy documents for many years. The recognized relevance of these aspects is demonstrated by the content of EU Framework Programme for Research and Innovation Horizon 2020. However, Czech science policy ignores issues of gender equality in science and research. Responsible stakeholders locate gender inequalities (women represent 1/3 of Czech research population and their representation does not exceed 12% of leadership positions, Tenglerová 2012) outside science itself (in motherhood or social policy), which seemingly exempts research institutions from any efforts aimed for change. The Czech science policy approach can be classified as politics of inactivity (Tenglerová 2011).

Among strongly gendered topics is the attrition of early career researchers from academic science, their employment outside the academic labor market, the im/possibility their return in academic science and the influence of the age and gender structure of the academic population on scientific production. In the Czech Republic we are witnessing the downsizing of the middle research generation, a curriculum of PhD programs is targeted solely at employment in academia and the small domestic labor market does not provide enough jobs in commercial research.

In the paper I will present the outcomes of an online questionnaire survey which is part of my dissertation research which reacts to the situation in the Czech Republic outlined above. The dissertation is dedicated to the attrition of early career researchers from academic science and intersectoral mobility in Czech Republic. On the general level, the project poses the questions: who is leaving, why and where. My analyses focuses on the gendered nature of attrition in the Czech research context, set against the backdrop of the European and North-American context, the models for Czech science policy. The quantitative survey (the results of which are presented the paper) focuses on the characteristics of persons who left science in a postdoctoral phase, their reasons for attrition, subjective evaluation of working conditions in science and outside, considering a return to academia and its circumstances and using acquired scientific knowledge and skills outside academia, in the context of Czech science and family policies which influence the work culture and career opportunities in science for women. The outcomes of the analysis will be embedded in a wider theoretical frame of foreign studies on attrition (Lovitts 2001, Fiske 2001), professional paths (Arthur, Rousseau 1996, Moen 2005) and the gender culture of science (Shapin 2008, Keller 1985). The paper will address the potential for creating equal opportunities for men and women in the Czech academic environment. Implications will be formulated and discussed

for gender equality policies in science in the Czech Republic and other countries where gender equality policies have no tradition.

MARITA HAAS:

Caught between Restrictions and Freedom at a Technical University – The Case of Sonja B.

Post graduate formation aims at generating “original research.” (EUA, 2007) Integrated in the European Bologna process, the related vision is to further develop young researchers’ competencies towards independency and excellence. The formerly existing “apprenticeship-model” (Pechar et al. 2008) based on informal and individual support activities from supervisors to their PhD students has been partly replaced by doctoral programs. They guarantee a stimulating research environment, quality measures and pre-defined career opportunities (Bergen Communiqué 2005). Austrian universities and the ministry of science have additionally developed guidelines about the promotion of young academics (BMWV 2007).

Concerning the relatively new changes in the system, it can be expected that different ideas about the employment of PhD students, their role in teaching and their qualification still exist within universities and university programs. These expectations and role-ascriptions are believed to be gendered (Van den Brink & Benschop 2011, Bagilhole & Goode 2001). In fact, gender segregation is visible throughout doctoral studies: Although more females graduate from Austrian universities the percentage of female PhD graduates is only 42% (Statistik Austria 2013). Considering the PhD phase as a preparation for the scientific career, the low numbers of female senior scientists and female full professors call even more attention: European-wide only 20% of the top research positions are held by women (European Commission, 2013).

My investigation focuses on how young female scientists perceive their professional life, including working conditions, recruiting and assessment policies as well as support throughout their career. The data used derives from a biographical study conducted in Austria between 2010 and 2013, researching biographies of women in a science and technology environment (cf. Haas et al. 2011). Based on narrative interviews (Schütze 1983, Rosenthal 1995) and on behalf of biographical case reconstruction (Schütze 1981, 1983, 1984) single case analysis serves as a basis for presenting organizational conditions and patterns:

Sonja B. seeks an institute to write her master thesis and gets recommended a specific supervisor. Based on informal selection she is asked to start her PhD even before she submits the master thesis. The sequential and formal analysis of her interview reveals the organizational patterns Sonja is exposed to. She faces high dependence on one single person. The prescribed interplay between being let alone and being told not to contact other experts in the field more and more restrict her possibilities to act and react. Finally she sees no way than dropping out from the existing PhD contract. Following Schütze’s (1981) theory of trajectories, the composition of this relationship including first transgression of the supervisor, Sonja’s attempt to fulfill his expect-

tions become as visible as the inevitable collapse of their relationship. Further, gendered role ascriptions and their consequences become visible.

Research shows the necessity for setting up new working cultures in order to promote young scientists pursuing their own scientific record. The final paper will discuss alternatives to single-person strategies and further detail how both – men and women – in gendered organizations can benefit from a better understanding of support in this career stage.

KATE QUINN WINTER:

Exploring the Role of Gender in the Experiences, Perceptions, and Career Intentions of Future Medical Faculty

This paper explores gendered differences in the experiences, expectations, and intentions of 845 physician trainees in the US who are pursuing careers in academic medicine. The purpose of the survey-based study was to ascertain why so few pursue some specialties and careers in medicine and to seek out potential strategies to both increase the number of people pursuing “shortage” careers and achieve gender equity in the highly desired careers/fields. Findings from the project, including this conference paper, are intended to influence programmatic efforts to help reduce the attrition of academic physicians during their training, as well as develop policy recommendations that would go toward making academic medical careers more appealing to diverse future generations of physicians – especially among women.

Retaining talented and diverse academic medical faculty has been a growing and costly problem over the past couple decades and has been explored extensively. Some of the factors attributed to medical faculty attrition include inflexible tenure systems in academic medical centers, desire for work-life balance, and the higher compensation of private practice [1]–[3]. Women are particularly underrepresented among senior faculty at prestigious research universities, leading researchers to explore what about these career levels results in the presence of so few women [1], [4]–[8]. Villablanca et al. [9] determined that increasing the flexibility of academic medical careers and supporting greater work-family balance is necessary if medical schools desire to retain and advance a diverse medical faculty. Even though these factors have been explored extensively at the faculty level, prior to this study, little was known about the extent to which they influence the decisions of future academic medical faculty.

While men and women future physicians did not differ statistically on many work-life circumstance predictions (i.e., planning to have children or predicting eldercare responsibilities), several of their priorities and career goals differed. Because most academic and medical careers in the US remain structured to meet the needs of a predominantly male workforce with an unpaid assistant/caregiver in the home (typically a wife), these gendered differences manifest and compound to especially limit the career opportunities of women in academic medicine. For example, this study found differences in the predictions for level of work commitment (i.e., full-time or part-time) for men and women respondents and that of their part-

ners. Higher percentages of men than women indicated that they predicted that they would work full-time and that their partner would work less than full-time (either part-time or not employed). Further, men and women differed in the relative importance of various factors in selecting a medical career, such as the ability to balance work and personal interests, autonomy, prestige, and more. As the final example in this abstract, men and women differed in many of their experienced and predicted career obstacles, including loan repayment, under-compensation, discrimination (race/ethnicity or gender), sexual harassment, and work/life balance. Multivariate analysis offers insight into how best to recruit, retain, and support future US-trained physician faculty members who are women, within the conceptual framework of feminist organizational theory [10]–[13].

Acknowledgement

We gratefully acknowledge the support of the UIC CCTS, Burroughs Wellcome Fund, and the University of Pennsylvania Trustees' Council of Penn Women for survey results analyses and financial support, and the American Medical Women's Association (AMWA) for assistance with survey incentives and distribution.

Room: **Alison Brooks**

THU27: Gender Didactics

SABINE LUDWIG:

A systematic approach to integrate gender and sexrelated perspectives and dimensions during the planning and implementation phase of an outcome-based medical curriculum

Background

Charité – Universitätsmedizin Berlin started to introduce a new curriculum in 2010, which has been employed to systematically integrate gender issues and concepts in an interdisciplinary, modular and outcome-based curriculum. The aim was to integrate relevant gender aspects into the 4 disease model modules of its 5th semester during the curriculum development process.

Summary of work

Prior module planning, relevant gender issues were selected according to intended medical subjects of the four modules. These are “infection”, “neoplasia”, “interaction of genome, metabolism and immune system” and “pain and mind as disease model”. Corresponding gender-related learning objectives were prepared. The selected gender aspects were then incorporated into the curriculum through active participation in the module planning groups and close counseling of the individual course planners and module group members.

Summary of results

Important gender issues were broadly integrated into the disease model modules of the 5th semester as compulsory gender-related courses, teaching content, learning objectives and students' assessment and feedback. Gender sensitive language was implemented in all of those modules as well.

Conclusions

Implementation of gender aspects into a new curriculum can effectively be achieved by a systematic approach including focused subject selection, formulation of gender learning objectives, active participation in the committees involved in curriculum design as well as close counseling of and cooperation with individual faculty members.

Take-home message.

Our new study program may serve as practice model for integration of gender medicine issues and concepts into an integrated, outcome-based curriculum.

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JOAN SMITH:

Gendered trends in student teachers' career aspirations: implications for teacher education

I report in this presentation on some of the findings from a small-scale exploratory study in which insights were sought into student teachers' perceptions of and aspirations to middle and senior leadership posts in schools.

There is an ongoing shortage of headteachers in the UK and there are increasingly indications of an awareness in the secondary education sector of the need to grow and retain new leadership talent (see, for example, Rhodes & Brundrett, 2012). In order to encourage future aspirants to senior leadership positions, initial teacher education (ITE) providers need to understand what factors impact on and influence novice teachers' career aspirations, to be proactive in ensuring student teachers are aware of what school leadership entails and to develop strategies to enable students to see their own potential and develop their leadership skills during their teaching careers.

This study asked questions about how student teachers view their future professional selves. As a part of this, the study sought to ascertain whether there were gendered trends in patterns of aspiration at this early career stage. This is an important question because, although women constitute more than half of the secondary teaching workforce in the UK, they continue to be under-represented at headship level.

Start and end of year questionnaires were administered to a full cohort of secondary student teachers in a UK institution. In addition, interviews were carried out at the start and end of the year with 5 male and 5 female students. Questionnaire and interview data indicated that there were certain gendered trends in student teachers' aspirations. Subject and classroom-teaching-focused positions were equally attractive to male and female students. The post of Advanced Skills Teacher (AST), a role in which the focus is on working collaboratively with other teachers to develop classroom practice, also attracted comparable proportions of men and women. Far more women than men aspired to the post of Special Educational Needs Co-ordinator (SENCo), a role that was largely shunned by the males in the sample. This example apart, it is at the level of the top three senior leadership positions that the gender divide in aspiration becomes most apparent. By the end of the year, a ratio of 2.2 males:1 female aspired to assistant headship, 2.7:1 to deputy headship and 5.4:1 to headship. Thus the proportion of male:female aspirants increases the more senior the post. I argue that teacher educators might usefully seek to improve novice teachers' understanding of leadership, thereby encouraging more aspirants and ensuring a more equitable distribution of men and women in the most senior posts, especially headship.

ANINA MISCHAU, BETTINA LANGFELDT:

Gender Competence in Mathematics Teacher Training: Course Concept and Experiences

In accordance with results of previous surveys PISA 2012 reconfirms: In Germany, statistically significant gender differences in favour of boys occur regarding mathematical achievement and self-concept, which are even stronger than in other countries and compared to the OECD average. Thus, in Germany, mathematics can still be regarded as a typical "boys' subject" or "male domain", where gender differences in mathematics already become apparent at the end of primary school, aggravate in the course of secondary school education and later on become manifest in a gender-based choice of fields of study and fields of occupation.

Since many years results of empirical research and results of gender studies show that gender-stereotypical attributions play an important and problematic role in the processes of teaching and learning mathematics at school, as they reproduce gendered images of mathematics and gendered school subjects. In order to break the "vicious circle" thus created, researchers within gender oriented didactics and educational science have emphasized that besides the implementation of gender-sensitive didactics at school it is also necessary to make mathematics teachers aware of their impact on creating and reproducing gender stereotypes and gendered school subjects. Together with other elements, the teachers' gender stereotypes about the learning of mathematics, mathematical skills and achievement, as well as their potential lack of gender competence, can be identified as fundamental reasons for gender biases in the development of young people's interests and competences with regard to school subjects. Therefore, (prospective) teachers need to acquire gender competence with regard to didactics and subject specific contents in order to change

this gendered image of mathematics, to overcome gender-specific biases within school subjects and to increase equal opportunities for pupils beyond gender-stereotyped knowledge and interest domains.

However, a gender perspective is hardly found in Germany's "mainstream debates" within the process of professionalization of academic teacher training, which is currently taking place, and consequently gender competence is hardly ever included in the appropriate curricula at universities. Within the framework of the interdisciplinary research project "GenderMathematics" – funded by the German Federal Ministry of Education and Research – in which the authors were involved, a first step towards the integration of gender competence within the teacher training in Germany by developing an exemplary course for mathematics teacher training has been taken.

In this paper, we are first going to present the underlying definition of gender competence and give an overview of the course, which could be transferable to other universities or countries. To date, the course has successfully been taught several times at different German universities. Therefore we also will present some teaching experiences which thus far have shown that students who take part in the gender competence course profit in several respects regarding their future professional life. Finally, we reflect chances but also difficulties for the systematic and sustainable integration of gender competence into the teacher training in mathematics at German universities

ESZTER ZSÓFIA TÓTH:

"My work, my family, my car" – using individual life experiences of women during the socialist period

As a historian and teacher I started to combine social historian methodology with gender theory and practice ten years ago at ELTE University. My courses are about "Introduction to oral history", "Comparative east european social history". I teach gender included in these courses. I let the students vote in each semester, about the topics and they are interested in studying gender topics.

In my paper I will show theoretical and practical examples from my teaching experiences about women's everyday life during the socialist period using oral history methodology. Which type of materials I use (newspaper articles, visualisation, oral history interviews, groups of interviewpartners on facebook)?

Let me cite one gendered example: one of my interview-partner, Teréz was woman worker in Hungarian Hosiery Factory during the socialist period.

For example, Teréz defined herself as a "Trabant owner." Her Trabant decisively shaped her life under state socialism. When asked by the factory's journalist what the three most important things in her life were, she answered: "My work, my family, and my car." In many ways these three things were interlinked: her achievements as a worker allowed her to buy a car, which in turn allowed her to drive to her parent's house and tend to her ill father, to make excursions to the countryside and visit relatives, and to take trips with family

and friends. Teréz's close connection to her Trabant was further reinforced in an article that appeared in the factory newspaper, which not only acknowledged her abilities as an "outstanding woman worker" and her role in promoting social harmony but also emphasized that she was "the only woman who comes to work in her Trabant every day." Thus, the Trabant was inextricably linked to Teréz's identity as a successful worker and emancipated woman. Although Teréz transgressed gender norms by being the first woman in the factory to own a car, because she used the car in part to look after her ailing father, she retained the traditionally feminine identity of caregiver. I will summarize my suggestions about this type of gendered education of history.

MARY ANN DANOWITZ:

Becoming a Gender Scholar: A Case of an Innovative PhD Program

Purpose

The purpose of this paper is to understand the structures and process influencing PhD students' development in an innovative PhD program of gender studies. Existing literature suggests that doctoral students learning and experiences are influenced by their relationships and the predominant organizational norms and structures that create gender inequality and discourage or prevent alternative behaviours (Elg and Jonnergård, 2003). Fox (2001) looking at science as a social process found that gender and the social networks of graduate education constrained women so they had fewer experiences with faculty and collaborative arrangements than their male colleagues. Studies like these have been helpful to expose institutionalized gendered relationships. Missing, however, is information about what happens in a program comprised mainly of feminist faculty and students. This paper attempts to begin to fill that gap by examining a female dominated innovative structured doctoral program with a focus on the intersections of knowledge and power.

Design/methodology/approach

An in-depth case study was conducted at a leading university in German speaking Europe. The primary sources of information were background questionnaires and semi-structured interviews with 10 of the 12 students in the program during the last year of their three-year program. Interviews addressed students' perceptions of their experiences and how they formed networks, which they relied on for information, advice, influence, and research collaboration. These topics were derived from the literature on doctoral education. The study applied a theoretical orientation of gender in organization—that is, gender is an inevitable aspect of the social order and has often produced, but is not necessarily linked to, inequality (Britton, 2000; Gherardi, 1995; Wilz, 2001). Interviews were transcribed and imported into MAXQDA.

Findings and Implications

Dominant themes about the PhD experience included: (a) the contestation of power and the resistance to authority and hierarchy, (b) a major preoccupation of discovering what was to be done, and when and how to do it to be successful, and (c) the doing of gender adversely affecting student mothers.

PhD structured programs emphasizing gender create a heightened student awareness of institutionalized gender relations. Consequently, the adaptation of conventional academic structures and student-faculty relationships may be insufficient to reduce gender inequalities in the PhD experience. Greater theoretical and practical attention should be directed to the relationships between faculty members and students and designated student roles as means of integrating students into the norms of academe.

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Room: **Theresia Oedl-Wieser**

THU28 : STEM

LAURA RAVAZZINI:

Impact of Gender Politics on Female Labour Force Participation and Sex Segregation in STEM Professions

Based on longitudinal data sets, this paper examines the effects of Swiss gender policies on female labour force participation in STEM and academic professions from 1991 to 2012. The focus is set on childcare policies and on measures supporting labour force participation and occupational careers of women, both at the federal and at the cantonal level. A descriptive time-series analysis of sex segregation, monitored through the Association Index of Charles and Grusky (1995), the Index of Dissimilarity of Duncan (Duncan & Duncan, 1955) and the standardized Dissimilarity Index of Gibbs (Gibbs, 1965), is provided distinguishing between vertical and horizontal effects. The distinctive feature of this research is the peculiar case of gendered trajectories studied in a period of important institutional innovation (regarding gender politics) and recurrent economic crises. As a matter of fact, different laws and political measures concerning equal opportunity of women and men have been formally established in Switzerland with the LPar (Federal Law on gender Parity) only from 1995 onwards. Among these measures, the impact of the 2000 Federal Equal Opportunity Programme for Swiss universities is of particular relevance for STEM and academic professions. Another key factor affecting the female choice of these professions is the availability of childcare services. This paper thus tries to create a link between the institutional policy context and the incentives for women to work and to pursue profes-

sional careers. As STEM positions usually attract women of migrant origins in Switzerland, the proposed paper will also attempt to clarify the relationship between female migrant inflows and the dynamics of sex segregation. The empirical analysis is based on three large longitudinal data sets: the Swiss Labour Force Survey (1991-2012), the Swiss Household Panel Study (1999-2011) and the Swiss Graduate Survey (2003-2011). This last data set is of particular importance as it focuses on the employment situation of graduates, following their career paths for the first five years after graduation. Moreover, since both male and female graduates are included in the survey, some macro effects can be effectively ruled out from the analysis when comparing the two groups. First results at an aggregated level suggest that the public sector corrects vertical segregation, but increases horizontal segregation. This evidence advocates that horizontal segregation is more resilient to changes and highly rooted in the Swiss society. Furthermore, the probability for women to work is found to be dependent on the quantity and quality of childcare services in the whole analysed period. Since the labour incentives might radically change, results are also presented distinguishing between full-time and part-time female labour force participation.

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LISA SCHEER:

Balancing the imbalance – can sport sciences learn from STEM?

The underrepresentation of women in STEM has been a topic of interest for quite some time now, leading to different kinds of strategies to overcome segregation. Only recently, sport sciences have begun addressing this issue after statistics have indicated a steady unequal relation of female and male students in sport sciences in Germany and Austria. Results of these first approaches to find reasons for the underrepresentation in sport sciences in Graz and Köln are presented.

In many ways, STEM and sport sciences – and in a broader approach the fields of STEM and sports – are similar: they are both characterized by a hierarchical gender order and strongly linked to masculinity. Therefore, the question arises if an interdisciplinary nexus could generally be a fruitful endeavor for both fields or at least for the question of gender equality in higher education. Much points in that direction, for example a shared interest in practical theories which could be a good basis for theoretical discussion as well as empirical research. After pointing out some similarities between STEM and sports on the basis of current research and statistics, the paper focusses on the main question of how useful existing policies and measures in

STEM could be for sport sciences. Are measures and policies from STEM applicable to sport sciences and the goal of increasing the portion of female students? Additionally, the connection to practice theories is central: How can practice theories be used as a theoretical base of possible measures?

JENNIFER NIEGEL:

Reducing Vertical and Horizontal Segregation in Higher Education – Academic Career Paths Experiences of STEM Professors in Germany

Reducing vertical and horizontal segregation is still a major equality challenge in higher education. There are only a few women working in top positions for example leading a university or a faculty. There is a lack of female professors even though there are a lot of successful female scientists. The statistics show that the more women and men qualify themselves along their academic careers aiming for a professorship, more women compared to men ‘disappear’ while ‘climbing’ the career ladder, what eventually results in men being overrepresented in top positions. Women seem to face unseen barriers known as the “glass ceiling” in the academic world which hinder them to reach the next level of their career. Another dimension refers to the tendency of women and men to choose different careers which often has its origin in the choice for a field of study. Different concepts and theories for instance neoclassical and institutional theories have been offering explanations for vertical and horizontal gender segregation, yet this knowledge, resulting conclusions and possible solutions need to be put into practice.

In this paper the main results of the Gender-Report 2013 (Kortendiek, Hilgemann, Niegel, Hendrix, 2013) will be presented. One part analyzes the horizontal and vertical segregation based on statistical data and the other part provides a mixed-method study about academic career paths and professorial appointments in Germany. The study includes focus interviews, expert interviews and an online survey with over 1700 female and male professors in North-Rhine Westphalia, Germany.

The first part of the paper gives an overview of the situation in Germany in form of statistical findings of vertical and horizontal segregation in higher education. It also contains the research of leading positions (such as the deans) and governing bodies (such as the rectorates) for 37 universities in North-Rhine Westphalia, Germany.

The second part deals with the study about academic career paths in higher education and professorial appointments focusing on the results of the online survey with male and female professors. For this paper only the experiences of professors working in the field of STEM (science, technology, engineering and mathematics) are included. The results of the study shed light into reasons why women and men were able to become a professor and which problems they had to overcome. Those experiences subdivided by subjects reveal individual challenges for people aiming a career in higher education especially in STEM. With theoretical approaches as a frame the paper focuses on the following questions: What are beneficial and hindering factors for sci-

entists aiming for a professorship? What kind of challenges are women and men facing in professorial appointments? And what can those positive and negative experiences teach us on how to reduce horizontal and vertical segregation in higher education? The paper concludes by offering some recommendations on how to increase the number of female professors – especially in the STEM field.

References:

Kortendiek, Beate/Hilgemann, Meike/Niegel, Jennifer/Hendrix, Ulla 2013: Gender-Report 2013 Geschlechter(un)gerechtigkeit an nordrhein-westfälischen Hochschulen. Hochschulentwicklungen, Gleichstellungspraktiken, Wissenschaftskarrieren. Essen.

15:30 – 17:00

Poster Sessions THU 29 – 30

Room: **Inés Novella**

THU29: Content

IDOIA MUÑOZ:

**Communication Strategy in International R&D
Projects: Integrating Gender Dimensions**

a) Research objectives

The research objectives of this paper are to:

- Identify the key elements for the definition and implementation of a communication strategy to ensure appropriate dissemination of the results through R & D projects at regional, national and international level.
- Investigate past communication practices made in R & D.
- Carry out a comparison between the methodologies of communication made in the past years vs current practices to determine its evolution.
- Suggest a communication methodology for R & D projects to ensure adequate impact of the results of the key players through an adequate integration of gender dimensions.

b) State of the art

“Communication” as an integral part of the development of R & D is a key concept in the growth of the European economy. The creation of new jobs depends on innovation in products, services and business models. The dissemination of the results through projects should aim to demonstrate how research supported by institutions contributes to innovation, provided the basis for identifying the target audience to whom should we direct our message.

In addition, there is a huge difference between communication strategically planned with these goals in mind and simply develop a communication plan in order to meet a contractual requirement.

c) Hypothesis

Communication strategies implemented for the dissemination of R & D projects usually focus on “the media” rather than the “message”. The purpose, audience, gender and message group are not clearly defined before deciding on ways and means of communication. Considering always the quantitative value (number of attendees, number of

media appearances, number of hits on a website, etc) versus qualitative value (number of men and women attending, age, education level, professional profiles, patterns of behavior of web users, etc) which leads to the fact that dissemination of research results does not generate the necessary impact on society.

d) Results

Communication strategies in R & D projects are evolving and beginning to focus on a path to the excellence of the message, materials and actions: standard web designs to web pages and focused positioning strategies for each market, with measurable objectives; from brochures to creative catalogs, comics, etc.

The strategy today must take into account the target audience as the core of our message, taking into account cultural aspects and avoiding gender stereotypes, analyzing the impact of our research in each of our potential user groups and encouraging inclusion.

e) Conclusions

The way we communicate evolves at the same rhythm as society does, and on a similar way the efficiency of our actions. Quantitative data lose importance versus qualitative data, translated primarily by the impact on the market and taking into account all the variables involved.

EVA ÁLVAREZ:

**Building the gap between gender knowledge
production and gender knowledge use:
‘Learning to Tweet’ experience**

0. MAIN IDEA

Many persons –students, teachers or researchers- do not think GENDER topics have the credibility of academic institutions because they do not know about gender research or gender best practices. Even more, many of them think they are alone in their research aims linked to daily life or gender topics.

1. THE NEED OF AN ONLINE PLATFORM

One of the most important goals of academic research is the knowledge transfer to Society. This transmission needs the adequate interfaces to reach to the widest scope of possible users most directly. In other words, design is able to mediate research diffusion successfully.

No one can deny academic and professional research on gender issues clearly lacks of convenient diffusion (to know what has been done) and social relevance (to know why it is useful and desirable). The work done and the experiences you can get from that work lack general arrival to stake holders and promoters, so as to general academic levels and to general public.

Open access for specialized journals is a debated option but even in this case, it would remain in an elite level. Gender studies -due to its importance- need to be delivered to a wider audience to be debated and to get feedback; of course, to be implemented and incorporated to local policies.

On the other hand, people are increasingly used to work with electronic devices (smart phones, tablets and computers) and with different kinds of applications (apps, programmes, blogs and social webs). We also feel our personal skills are augmented by the use of these devices (one is able to do more things in a more efficient way). However, though the information you can get and spread is huge, it is also disconnected and in some sense, amorphous.

2. INTERACTIVE PLATFORM

'Learning to Tweet' is a prototype of an interactive online platform where different kinds of users can find GENDER research information according to their needs AND can upload their information or requests on these issues. It is a kind of interactive data base organized and verified by the students working on this project but which- when launched- will run by means of users' feedback.

The platform introduces three levels of information:

a) Living maps where people upload information on their city on agreed issues. It will work on Google maps, using predetermined and predesigned icons. At the moment, main topics to give feedback are on available open spaces, accessibility and safety.

b) Database on articles, books and best practices to let people know what it is about. At the moment, students are fulfilling the main ones but it is expected people could upload more information. It is foreseen a group of trained students or volunteers to verify and classify this information but the gross resource of information should come from public.

c) School pedagogical model to use as docent material on gender at schools and kinder gardens. This material has to be produced and verified to make it available. This is the slower part of the platform, though it also aims to be interactive.

MIRIAM DAMROW:

Perceptions of Gender Equality from the inside

Although topics in a broad range of gender and diversity are dealt with by many universities in Germany, up to now only a few universities in Germany provide a BA in Gender and Diversity. These topics cover issues of Education, Pedagogy, Sociology and Social Work, however, most of them

are embedded into a regular study course of a BA in corresponding fields, e.g. Social Work. Within these issues gender equality and gender mainstreaming often play a major role in terms of workforce, conditions of labour market, professional development of social professions. These issues are mostly discussed from the outside perspective within the corresponding study course.

This paper deals with the views on Gender, Diversity, Inclusion and Gender Equality from the inside. Students discussed in an interview issues on how they perceive gender equality within their study course (BA Gender and Diversity) as well as their perception of gender equality within their university. Selected interviews are analysed and results show that they still mostly feel underesteemed by their fellow students within the university. Some lack feelings of support by the respective university representatives while holding a position as being a member of the students' parliament or similar positions. At the same time they state gender equality within the university's academic staff although 2 of 2 deans of their faculty are males (where in fact all deans of all faculties are males), probably due to the fact that there is a female university president. Interestingly, none of the interviewees mentioned their foreign counterparts although they all study an English-speaking course within a German-speaking environment. Of the foreign students most are male (and from Asia and/or Africa). Within this course, 2/3 of the students are female and none of the interviewees mentioned that either while at the same time stating that most female students at this university would study economics.

In terms of policy and gender equality most German students stated that studying gender would not support a career while most foreign students confirmed that they've chosen this German university and this study course as a career booster.

Most of the interviewees missed a firm university policy concerning gender equality. They repeatedly stated feelings of being underrepresented and called repeatedly for actions to be taken by the university's representatives, i.e. gender equality policy.

One of the students confirmed after the interview her wish of becoming the first European Minister for Gender Equality.

ELKE SZALAI:

Intellectual Capital Report a tool to support gender issues in teachers training on the PH Burgenland

Knowledge Management is important in all fields of research, collaboration work and so also in the development of curricula for teachers. In Austria gender- and diversity aspects are now included in all curricula for students. The responsibility for implementation do have educational colleges.

The research shows the successes and difficulties in implementing gender aspects in the training of teachers. The method intellectual capital report is a quiet good tool, to show that a lot of factors can be barriers or supporters – not only the budget. Also resources to share knowledge, time resources for the development of new content and the organization of cooperation between all levels of the

hierarchy, can support a change management process or slow down the implementation process. To now about this is important for the successful implementation of gender aspects in the curricula of teachers students.

The Intellectual Capital Report includes the results of the balance sheet as well as suggestions for the development of measures to improve the inhibitory factors.

The poster will show the method, the research process and also the concrete results for the case „PH Burgenland“.

STEFANIE LEINFELLNER:

Dual career families searching for keys to balance life and academic work – A case study at German universities

The poster will shed light on the so far not solved dilemma of balancing career and family and the strategies of dual-career families within social transformations in gender relations. On the basis of empirical data, the author investigates the extent to which the interviewed dual-career families have to face contexts of benefits and barriers combining two academic careers at German universities with partnership and family. The interfaces and contexts that relate the dual-career discourse are recapitulated. And through interviews with dual-career couples, the author analyses the gendered conditions for combining reproduction, the everyday life as a family and work along the academic career track.

ROSARIO LÓPEZ GIMÉNEZ:

Integrating of Gender in Medical Education. A proposal from School of Medicine of Autonomus University of Madrid

Knowledge and skills in gender studies are a promising way to improve medical science. However the approach to health and disease from a gender perspective is a work still very underdeveloped and also there is strong opposition to the issue.

Since academic years 2010-11 UAM School of Medicine has started a new medical curriculum giving the opportunity to introduce new subjects. It has introduced an optional discipline entitled “Health and Gender” that is being made by a significant number of students. The course is organized as a participatory formative and discussion seminar with the intervention of teachers and students, where different topics are developed to present gender inequalities involved in the state of health and serve to awareness of the need for this approach in all processes of analysis and research in health sciences. As known often not take into account these differences in diagnoses and treatments of diseases.

In a period of educational innovation and quality research as necessary actions, we need to show that gender inequalities involved in the health and become aware of the need for a different approach to the orientation of the health-disease process. Here the content and methodology of teaching of this discipline will be presented.

MARIO CONCI:

“The FESTA project at school”: a pilot study on students’ perception about gender and mathematics

The framework in which our study has developed is an ongoing European research project called FESTA – Female Empowerment in Science and Technology Academia, which is focused on promoting changes in the organizational environment to foster the valorization of competences of all employees. FESTA Project aims also at developing policies aimed at encouraging female researchers to stay and make a career in science and technology academia. FESTA undertakes activities aimed at increasing awareness about gender issues related to technology and science. In this perspective, we ran a study in a high-school planned to explore which gender is attributed to mathematics by the students. Following other studies (Brandell et al, 2007) we chose mathematics as example for scientific discipline. Data were collected by means of the Who and Mathematics scale (Leder & Forgasz, 2002), which is traditionally used to measure the extent to which students stereotype mathematics as a gendered domain. Not surprisingly, results confirmed the stereotype related to gender and mathematics. More interesting considerations can instead be discussed about the whole process. We can argue that such activities could contribute to the design interventions at school aimed at raising awareness and to encourage female students to undertake scientific studies after the high-school.

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ILENIA PICARDI:

Transforming academic culture for gender equality in research and innovation: the UNINA’s case study

The University of Naples Federico II (UNINA) is involved into the FP7 European Project GENOVATE based on the implementation of Gender Equality Action Plans (GEAPs) in six universities. The main goal of the UNINA GEAP is to transform the academic culture for what concerns gender equality in research and innovation. The objectives are: increasing the number of women in senior academic staff and at high-level positions in research, raising awareness about gender issues, introducing the gender dimension in research and innovation representations and contents. Coherently with these objectives UNINA is promoting a national debate aimed to rethink the evaluation criteria for research in a gender perspective. During the last couple of years, in fact, a programme for the evaluation of research has been implemented in Italy and UNINA is stressing that gender dimension could be strengthened as one of the evaluation criteria. UNINA is the most important university in Southern Italy (more than 7000 people in staff personnel and very high average age of the managerial boards). Applying and rethinking the Change Academy Model (CAM) developed by

the GENOVATE Project Coordinator, University of Bradford, in this complex context is the big challenge for the UNINA team.

STEFANIE LEINFELLNER:

Dual career families searching for keys to balance life and academic work – A case study at German universities

The poster will shed light on the so far not solved dilemma of balancing career and family and the strategies of dual-career families within social transformations in gender relations. On the basis of empirical data, the author investigates the extent to which the interviewed dual-career families have to face contexts of benefits and barriers combining two academic careers at German universities with partnership and family. The interfaces and contexts that relate the dual-career discourse are recapitulated. And through interviews with dual-career couples, the author analyses the gendered conditions for combining reproduction, the everyday life as a family and work along the academic career track.

YUWEI LIN, MANUELA SCHMIDT:

A Gender-Informed Curriculum for Teaching Volunteered Geographic Information

Room: **Cristina Alonso**

THU30: Projects

MARION HABERSACK:

Gender Gap in Medical University Admission Test

The results of the medical college admission tests in Austria demonstrate the slightly worse performance of women. As explanatory models for a gender gap are cited: the type of the selected test format, the design of the test items, the scientific orientation in the school of origin, the stereotyping of “hard” natural sciences as male domain, a basic science knowledge gap and the factor of time. In the context of the factor time, theory approaches point e.g. to the short answering period available in connection with a multiple choice test or point to the factor of time in the framework of the entire course of medical studies (1-4). Until now, the factor time has rarely been discussed in context of the question, whether the point of time of taking the Medical College Admission Test could imply a decrease of the basic-science knowledge gap.

Methods

Observational investigation of the results of the admission test for the study of human medicine and dentistry at the Medical University of Graz, 3405 applicants (over three years) were included in the

study. Statistical analyses were performed by routine methods (Chi-square test, Student’s t test) using STATA 11 software (StataCorp. LP, College Station, TX, USA).

Results

- A clear trend to increasing gender gap according to the order (1) Biology, (2) Chemistry, (3) Mathematics, (4) Physics is noticeable: Austrian women perform particularly worse in physics.
- Men as well as women improved their results when they passed the admission test one year after completing their secondary education. The improvement of performance in women was so pronounced that the gender gap (significant in the group who took the admission test during the year they were completing their secondary education) could not be substantiated in this group.

Conclusions

Incorporating the above mentioned discussion points regarding fairness, the universities should consider:

- what would have to be changed on the university side so that high-stakes examination accurately reflects the qualification of the candidates being able to study medicine and practice it and
- which affirmative actions in order to minimize the gender gap in the results are meaningful at college level, can be offered and carried out, and are, ultimately, affordable

At the political level the fact has to be addressed that the “retreat” to the principle of formal justice is not appropriate when it has explicitly been proven:

- that a basic knowledge gap exists in the entire educational and school track,
- that this gap can under no circumstance be attributed to biological gender,
- that this gap has to be interpreted as a substantial reason for further exclusion mechanisms before or during secondary education,
- that, through this gap, especially women are limited in the selection of their course of study / in the successful application for a certain course of study.

Expressed in a provocative manner, the observed basic science knowledge gap (gender gap) – as Lassnig et al. (2007) called it – is not a “temporary abnormality”, but rather an institutionalized reproduction of social injustice (5).

CLAUDIA VON DER LINDEN:

Change Management - From Affirmative Action to Cultural Change

This presentation describes a current measure that supports cultural change and gender equality at Austrian universities. This measure is related to the gender equality efforts of the Austrian Federal Ministry of Science and Research (BMWF) in higher education institutions.

For many years the BMWF has based its gender equality policy on a policy mix of different strategies, instruments and measures. This includes strategies like gender mainstreaming or diversity management, legal provisions like quotas, instruments like gender monitoring and measures like training, awareness raising and networking. This presentation provides one example of this policy mix and also reflects

critically on the efforts of this strategy.

The contribution focuses on the second key aspect of structural change in scientific and research organizations in order to promote gender equality.

In 2011 the BMWF worked with the Equal Opportunities Working Parties of the universities and Permion Consulting GmbH to develop a training measure for committee members at universities. The main aim was to support universities in implementing the legally binding 40% female target quota on university committees as well as to help raise awareness among relevant stakeholders. This training measure was carried out between 2012 and 2013. In total 60 places were available for this training measure, and 17 Austrian universities participated successfully.

A continuation of this training measure including the Austrian Universities of Applied Sciences is now being prepared. The sustainable aims of this training measure are:

- to get more female researcher in decision-making positions at Austrian universities and Universities of Applied Sciences,
- to motivate more young female scientists to work in university committees,
- to target both women and men in raising awareness of gender blindness in recruitment proceedings,
- to implement the 40% female target quota in university committees as well as the 45% female target quota at Universities for Applied Sciences.

Networking is a major feature of the training measure. This is realized through regular meetings of the participants at university locations in Austria. This resulted in the interdisciplinary network “club scientifica”, which was established in

2012. This network provides interested female scientist at higher education institutions the opportunity to get together with different stakeholders of higher education institutions. This informal exchange of views includes lectures by experts on a wide range of content related areas and allows interested scientists and decision makers to share ideas.

The aim is to establish the “club scientifica” throughout Austria.

This BMWF training measure is an initiative at national level that supports the creation of gender equality in the European Research Area.

ANNE PÉPIN:

GENDER-NET: Promoting gender equality in research institutions and the integration of the gender dimension in research

Despite increasing numbers of solid indicators, extensive research, policy initiatives and wide awareness-raising on the issues linked to gender and science, the European Research Area (ERA) still faces structural obstacles within its research institutions which prevent it from reaching its objectives of the full participation of women in research and innovation at all levels (more than 50% of PhD graduates are women,

but less than 20% of women are in Grade A positions). The current very limited integration of sex and gender analysis in research is also affecting the quality of research itself and limiting Europe’s potential for innovation, in addition to not addressing the social needs of the whole population.

This paper presents a new flagship initiative funded through the FP7 Science-in-Society Programme and coordinated by the French National Centre for Scientific Research (CNRS). Project GENDER-NET, launched in October 2013 for a 3-year duration, is the first European Research Area Network (ERA-NET) to be dedicated to the promotion of gender equality in research institutions and to the integration of the gender dimension in research contents. This pilot transnational research policy initiative is seeking to coordinate national/regional policies and programmes on these issues and brings together national ministries and research programme owners and managers from 12 countries (France, Norway, Spain, UK, Switzerland, Ireland, Belgium, Slovenia, Cyprus and Germany as well as Canada and the USA) with synergistic expertise in gender and science issues. Partners are joining forces for the implementation of strategic transnational activities, building on a systematic exchange of information, innovative assessment and knowledge-transfer methods, as well as the definition of common indicators. This major collaborative effort will thus bring a global vision of the best practices and conditions for success, as well as allow for the development of joint initiatives on key priorities.

The paper will focus more specifically on the first stage of the project, i.e. the mapping and analysing of existing national/regional, and in some cases institutional, programmes and initiatives aimed at: a) promoting gender equality in research and higher education institutions through structural change, b) gendering research contents and programmes.

KATERINA CIDLINSKA:

Mentoring program for secondary school female students with an interest in technical and natural sciences

To break barriers women face in science and research it is important to focus not only on the tertiary and PhD levels as the immediate pre-phases for research work but also on the high school level. Secondary education is crucial for directing study paths and developing educational and professional ambitions. To this end, the National Contact Centre for Women in Science at the Institute of Sociology of the Academy of Sciences established, in 2009, a mentoring program for secondary school female students with the aim to motivate girls to university studies of gender nontraditional disciplines – the technical and selected natural sciences. Through exchanges with women university students (mentors) the program develops career imagination of girls (mentees), supports their self-confidence and eliminates stereotypical perceptions of the technical sciences as typically masculine fields. From a short-term perspective the program reduces the horizontal segregation at universities, from a long-term perspective it contributes to reducing vertical segregation in science because mentors are usually PhD students with the ambition to succeed in research. The poster will introduce a theoretical background of the

program, its concrete design and development in relation to the monitored needs of the target groups, its effects and potential for future growth.

References:

The website of the program:

- Czech full version: <http://www.zenyaveda.cz/mentoring/o-mentoringu/>

- English version: <http://en.zenyaveda.cz/mentoring/>

JÖRG MÜLLER:

GenPORT – An Internet Portal for sharing knowledge and inspiring collaborate action on gender and science

GenPORT – a FP7 Coordination and Support action running from 2013 to 2017 – is a developing online community of practitioners, served by an internet portal and made up of organisations and individuals working across the globe for gender equality and excellence in science, technology or innovation.

GenPORT offers an arena for organisations and individuals to showcase and access the world's best research resources, practical materials, policy briefings, experiences, and much more. Many organisations have made sustained efforts to advance gender equality in science – through research, practical action and policy development. A wealth of gender and science resources has been produced in the process. However, despite the enormous potential for knowledge sharing, these resources are scattered in various locations, with varying degrees of visibility and usability. GenPORT will provide a single open entry-point to high-quality research, policy and practical materials on gender, science, technology and innovation (STI) in order to enhance the potential for their more effective exploitation.

The Poster will introduce the scope, objectives and process of the project, specifically taking into account the potential benefits of GenPORT for the higher education sector in terms of tackling gendered organisations.

MARGARETHE HOCHLEITNER:

Women doctors at Innsbruck Medical University, Austria. Does affirmative action for women help to break the glass ceiling?

The Austrian University Law dictates affirmative action for women. A lot of anti-discrimination activities are mandatory at the Austrian universities. So, do these activities help to break the glass ceiling?

In 2002 and 2012 our female physicians were surveyed using a standardised anonymous questionnaire.

2002, 352(35.8%) of all physicians employed were female, 2012, 530(44.1%). 2002, 66(24.4%) permanent position, 2012, 71(49.0%). 2002 and 2012, 2 university clinics headed by women (40 male clinic heads). 2002, 243(89.7%) full-time employment, 2012, 109(75.2%), 2002, only 128(47.2%) desired a full-time employment, in 2012, just 59(47.6%). 2002, 158(58.3%) lived alone, 2012, 77(53.1%). 2002, 102(37.6%), 2012, 68(46.9%) lived with children. 2002,

121(44.6%) reported obstacles in their profession as a woman, 2012, 72(49.7%). 2002, 72(26.6%) sexual harassment on their job, 2012, 44(33.3%).

In conclusion, all these legal activities have helped to increase the number of female physicians and also the number of permanent positions held by women. The “compatibility of work and family”-law worked in regard of part-time positions and the number of children. But women have not been able to enter the high prestige and high income jobs of university clinic heads. Furthermore, the experienced obstacles in the job as a woman and even sexual harassment increased.

MARION HABERSACK:

Situational Judgment Test as an additional tool in a medical admission test

Introduction

The Medical University of Graz has amended its admission process by including a written Situational Judgment Test (SJT) in the year 2010. Despite some concerns regarding SJTs expressed in the literature, particularly the possibility of the minimization of the gender gap and the possibility to confront future students with the importance of the bio-psycho-social model were decisive for this extension (1-4).

Methods

Observational investigation focusing on the results of the Situational Judgment Test; 4741 applicants were included in the study.

Results

There are consistently more women than men among applicants. Among successful candidates, men consistently outweigh women. The least discriminatory test part was the SJT. Men perform better in physics and mathematics. Women perform better in the SJT part.

Discussion

In the SJT, female applicants obtain slightly better results than male applicants. Whetzel et al. (5) arrive at the same finding as well, and describe the female advantage in SJT performance as minute ($d = .11$). However, the greater the personality loading of the SJT (notably agreeableness and conscientiousness) was, the greater was the advantage for women (5, 6). The cognitive loading of the performed SJTs points to the low correlation between the SJTs and cognitive abilities.

References:

1. Siu E, Reiter Hl. *Overview: What's Worked and What Hasn't as a Guide towards Predictive Admissions Tool Development. Advances in Health Sciences Education. 2009;14(5):759-75.*
2. Sinha R, Oswald F, Imus A, Schmitt N. *Criterion-Focused Approach to Reducing Adverse Impact in College Admissions. Applied Measurement in Education. 2011;24(2):137-61.*
3. Rothmüller B. *Chancen verteilen. Ansprüche und Praxis universitärer Zulassungsverfahren. Czejkowska A, editor. Vienna: akademie der bildenden künste wien; 2011. 187 p.*

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5. Whetzel DL, McDaniel MA, Nguyen NT. Subgroup differences in situational judgment test performance: A meta-analysis. *Human Performance*. 2008;21(3):291-309.
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ANGELIKA HOFFER-POBER:

Mentoring in Higher Education: Medical Career Development as part of a gender-equal human resources development International Conference Mentoring in the Medical Sciences – a working group of Forum Mentoring e.V.

As a part of a gender-equitable, scientific based human resource and organizational development approach, mentoring plays an important role in achieving a balanced proportion of men and women in leadership positions in the field of academic medicine.

As a working group of the Federation Forum Mentoring e.V. the “International Conference Mentoring in Medicine” is a competence network of mentoring coordinators of university medicine in German-speaking European countries

The aim is to ensure the best quality and sustainable impact of mentoring based on the acquired specific knowledge of the program coordinators in the medical field.

Mentoring:

Mentoring has established itself as a proven instrument for promoting young scientists in their careers. Positive role models and supportive relationships are hereby of great importance. The focus is on making the structural framework of a scientific career in medical sciences more transparent.

Program Title:

Frauen netz.werk Medizin (MedUni Wien), Helene Wastl. Medizin-Mentoring (MedUni Innsbruck), MENTORING med (Med. Fak. Würzburg), EIRA (Freiburg), Medizin-Mentoring (TU München), SelmaMeyerMentoring und A² (Med. Fak. Düsseldorf), MentHaProf (Med. Fak. Leipzig), Greifswalder Mentoring-Programm (Greifswald), Mentoring-Programm UMG (Universitätsmedizin Göttingen), FamSurg (UKSH Lübeck), Mentoring (Mediz. Fak. Basel), Edith-Heischkel-Mentoring (Universitätsmedizin Mainz), Mentoring UK Eppendorf (Hamburg), Ina-Pichlmayr-Mentoring (MH Hannover), MediMent (Med. Fak. Duisburg-Essen), mQuadrat (Med. Fak. Bochum), TANDEMplusMED (Aachen), ARIADNEmed (Med. Fak. Erlangen-Nürnberg)

Target Groups:

Students, Docs, Postdocs, Post Habil

Targets:

Promoting the careers and developing the potential of female scientists, Encouraging equal opportunities for female sci-

entists in medicine and the natural sciences, Encouraging Compatibility of career and private life (work-life balance), Creating enduring / sustainable interdisciplinary networks, Establishing social networks, Operative knowledge of structures, processes and rules in academic activities, Introducing into the scientific community, Attaining key qualifications and management strategies, Knowing role models, Developing knowledge about university policies and informal knowledge

Settings & Runtime:

Peer Mentoring, Group Mentoring, One to One Mentoring, Mixed Forms

1-3 semesters

Elements: (basic modules mentoring – training – networking)

Mentoring relationship, peer group, trainings to strengthen career-relevant competence (management skills, academic soft skills, scientific skills), coaching, networking

ANNE PÉPIN:

Project INTEGER: Driving Research Excellence through Transformational Gender Action Plans

Funded through the European Commission's FP7 Science in Society 2010 Work Programme, Project INTEGER (for INstitutional Transformation for Effecting Gender Equality in Research) brings together a focused and balanced partnership of European research and higher education organisations that share a top level commitment to the implementation of sustainable institutional transformation, thereby creating environments in which women and men researchers can perform equally.

Tailored Transformational Gender Action Plans (T-GAPs) have been developed within each of the three implementing organisations – National Center for Scientific Research (CNRS, France), Trinity College Dublin (TCD, Ireland) and Siauliai University (SU, Lithuania), following a detailed baseline data assessment. These action plans cover four key themes: Engagement of decision makers; Organisational structure; Career progression, development and support; and Work-life balance. Implementation of the T-GAPs is being assessed by GESIS – the Leibniz Institute for Social Sciences, Germany, through an adaptive evaluation tool. Experience, tools and learning outcomes will be shared through guidelines and case studies, disseminated towards the end of the project (June 2015).

The poster will showcase key actions implemented within each organisation.

INÉS NOVELLA:

genderSTE – Gender in Science, Technology, Environment

15:30 – 17:00

Poster Sessions THU 29 – 30

Thursday, Sept. 4

Parallel Sessions THU 31 – 36

Room: **Margarete Schütte-Lihotzky**

THU31: Working Conditions

ANDREA LÖTHER:

Gender aspects of precarious working conditions in German universities

In the course of the transformation of universities and the shift to entrepreneurial universities, working conditions of scientists have become more precarious: In Germany, the percentage of scientists in part-time positions doubled from 1992 to 2010 reaching 36%; the percentage of temporary contracts augmented in the same period from 44% to nearly 70%. These changes are mainly due to the augmentation of third party funding whereas the basic funding of universities decreased.

In recent years, there is a debate about these working conditions. Not only trade unions complain about temporary contracts and part-time work as precarious but also research organizations and politicians ask for reliable career paths in science.

Up to now, gender aspects of these working conditions have not been taken into account. Thus, the paper will examine gender aspects of precarious working conditions in German universities and research institutions. Are women and men affected in different ways by temporary and part-time contracts? If this is the case, what are the reasons for this situation?

Knowledge about gendered working conditions is important because, on the one hand, the participation of female scientists augmented significantly in the same period when working conditions have fallen off in quality. A European study about female professors describes the paradoxical situation of female scientists as “winners among losers” (Zimmer). On the other hand, precarious working conditions are one reason to drop out of a research career. Thus, if women are more affected than men, working conditions may be a reason of the underrepresentation of women in top positions in science and research.

Data and methodology

The paper is based on official German and international statistics of universities and research institutions, supplemented by a secondary analysis of a survey of German scientists (2008).

The shift to entrepreneurial universities serves as a frame for the empirical analysis. Furthermore, we have to discuss in which way the concept “precarious working conditions” is applicable to the specific labor market of science and research: In science, highly qualified persons work on part-time and temporary contracts during a qualification period.

First results

A first glance on the data reveals that female scientists work more often than men on temporary and part-time contracts.

Two third of the male and nearly 80% of the female scientists in German universities don't hold a permanent position. Less than one third of men and almost half of the female scientists work on a part-time position.

To understand the reasons for this gender imbalance, the paper will present a differentiated analysis of the data by qualification, position, age, discipline and parenthood. To understand whether we may speak of “precarious working conditions” we will contrast agreed with actual working hours and analyze the amount of working hours and the duration of contracts.

Finally, to describe the specificity of science and research in Germany, we will compare working conditions in universities and research institutions with those of university graduates in other sectors and with international data.

DANIELA ZANINI-FREITAG:

„Science“ as a profession – a diverse field study, shedding more light on working and career perspectives of third party funded researchers vs. university positions

At many science career networking days at Austrian universities mostly idealized “straight” career paths of scientists seem to be considered as a latent role model for young researchers. Starting from an Austrian research institutions case study I will discuss important conditions for science careers at two levels: within a research organization and outside through university policies, national/international funding schemes, mobility grants, recruitment and promotion policies, etc.

Learning from best-practice examples of support mechanism to increase and retain more (women) researchers within selected institutions in the current FP7-project “GenderTime”, funded by the European Commission, this paper mainly relies on an understanding of scientific career paths as something heterogeneous, rather than something “straight”. Accordingly, there are not only major differences in science as profession between European countries, as there are already diverse scientific working conditions and career paths within Austrian institutions. My talk will be about the diversity of scientific careers in contrast to the stereotypical image occasionally promoted.

KAREN STOUT:

Understanding (Under) Representation in a University Shared Governance System: Building the Future of an Equitable Institution

Faculty often joke that “20% do 80% of the work,” but is this accurate? This paper will examine the representation of women, racial/ethnic minorities, and faculty who identify as LGBTQ within the shared governance system at a mid-sized public university in the United States. In US universities, faculty are expected to participate on committees, but com-

mittee service has lower status than research and teaching. Thus, if service is distributed inequitably, it may have a pronounced effect on who gets tenured and promoted.

Our research aligns with conference goals concerning gender equality. First, we hope to understand and provide suggestions for reducing vertical and horizontal segregation. Secondly, we hope to “tackle the gendered organization” by revealing if and how faculty identities are represented in committee participation and leadership. Finally, we intend to propose solutions that might promote equality within the university.

The paper would rely on the triangulation of three data sets: (1) publicly available information about committee memberships analyzed primarily by self-identified sex and academic/department affiliation, which will be compared to overall data obtained from the university’s Equal Employment Opportunity Office; (2) survey data from faculty in the university’s shared governance system and their perceptions of teaching, service, research workloads, as well as their responsibilities outside the university, including familial responsibilities; and (3) interview data with faculty regarding their choices about university service, workload, and caregiving responsibilities.

Specifically, we ask the following research questions:

- How is service distributed by sex, academic field, and rank?
- What are faculty’s perceptions of service demands? Do they differ by sex, race/ethnicity, sexual orientation, field, and rank?
- How do these demands relate to their perceptions of teaching and research expectations?
- Has there been a shift in perceptions of service load?

Preliminary analysis of committee memberships reveals that men are, in general, slightly over-represented in university governance than women in comparison to their employment at the institution (53% male to 46% female faculty, yet 57.3% male to 42.7% female in governance). When examined at the specific committee level, under-representation of women is at times quite pronounced, such as on the Executive Council for the Senate (40% female), the committee charged with university resource allocation (33.34% female), the committee charged with policy for technology (11.1% female), the governance of university programs (0% female), and two committees addressing international programs and curriculum (28.6% female; 33.34% female). Although the College of Humanities and Social Sciences has slightly more women (53.2%) than men (46.8%), the curricular committee is 62.5% male. Conversely, some curricular committees have higher female representation than the overall populations of those colleges might suggest, including the colleges of Science and Technology and for the Fine and Performing Arts.

If service is distributed unequally, certain people are doing more work than others, compromising their teaching and research productivity. If leadership roles are inequitably distributed by gender, governance of the university remains determined by male faculty. To understand how committee

service and leadership is distributed, therefore, is to understand the broader power structure in the university.

Room: **Marilda Azulay**

THU32: A Swedish Smorgasbord of Gender Equality Projects in Higher Education: a Review of a Major Governmental Initiative (Workshop)

This workshop reviews and assesses one of the largest public resource allocations for gender equality promotion in higher education in Sweden during recent years. The Swedish Government set up a Committee for Gender Equality in Higher Education (Delegationen för jämställdhet i högskolan) for 2009-2010, which, among other things, announced 48 million Swedish Crowns (c. 5.4 million Euros) to develop a large-scale initiative for research and action projects promoting gender equality in the higher education field. All in all, 37 projects were funded by this initiative across Swedish universities and higher education stakeholders, focusing on a variety of topics, including university pedagogy, doctoral supervision, recruitment, career development, leadership and management, and developing new tools and instruments for gender equality promotion. The projects were to report to the Swedish Council for Higher Education, which, with the help of an external reviewer group with Swedish and Nordic experts, was given by the Government the task to summarize and follow up the initiative. The workshop gives an overview of this initiative, and assesses the results produced, as well as critically reviews the benefits and pitfalls of the approach used, including interrogating the underlying understanding of gender equality in the initiative and its limitations and consequences. Issues and areas where gender awareness and actions to promote gender equality are more or less advanced in the Swedish context will be highlighted, and neglected questions identified. The workshop speakers have been involved in the assessment of the initiative as internal and external experts.

STINA BACKMAN

FREDRIK BONDESTAM

LIISA HUSU

ALEXANDRA SJÖSTRAND

Room: Inés Novella

THU33 : Strategies for Institutional Change: A Dialogue Across Universities, National Contexts, and Sites of Intervention

DIRK SCHULZ:

Demanding and In Demand: A Centre for Gender and Queer Studies and Its Consequences

In 2012 the University of Cologne launched a centre for gender and queer studies despite facing some daunting obstacles. First was the sheer size of the university itself with six faculties and nearly 50000 students. Furthermore we had to confront the heretofore clear-cut separation of gender studies and gender equality concerns and measures. Finally, there was the disproportionate implementation of – and sometimes even resistance to – gender studies in the respective faculties and departments. But we succeeded for several interconnected reasons. One was a growing awareness of an internationally demanded sensitivity to “diversity” at universities, which resulted in a thorough restructuring/ replacement of the governing and managing boards at the university and a new interest in consulting gender studies experts. Rather than seeing gender studies – or the centre – as a separate segment of research and teaching at the university, it was newly valued as a locality for intersecting institutional and intellectual work.

It is early days and a lot of what the centre can achieve still depends on the activism of individuals – including the university administration. Because of the far-reaching support for and consultation leading to the creation of the centre, however, an overall growing “gender sensitivity” along with a critical revision of the university’s long established premises regarding gender differences and (in-)equalities is already evident. In effect, the process of change creates the conditions for further change.

This balancing act continues as GeStiK brings together the various and sometimes controversial perspectives of all faculties (and other colleges of the city) to point out the complexity of gender as a category of difference informing and being informed by all sciences and disciplines. Indeed, a lot of research and teaching at the university now focusses on the question of gendered and / or (un-)gendering knowledge and how to revise and not reproduce inequalities regarding accesses, premises and approaches to knowledge development and education. Certainly there is a growing awareness of the need to integrate the concerns of gender and queer theories into the teaching curricula of educational programmes and courses. At the same time, the controversy over whether or not categories of sex, gender and sexuality provide essential (and natural) means of orientation and identity or are means of maintaining inequality and heteronormativity undeniably produces a barrier for such revisions. In this respect the inauguration of GeStiK testifies to the university’s willingness to face up to this controversy, not in order to solve these questions, but to continuously ask them.

BRITT DAHMEN:

The Power of Gender Equality Players in Times of Changing Universities

Since 2011, we have made significant changes in institutional policies at the U of Cologne; this paper explores some of the background to those changes.

Current equality policies at the U of Cologne are highly influenced by external frame conditions such as the German Excellence Initiative and the implementation of Gender Equality Standards of the German Research Foundation. These have pushed changes in terms of a) an increase of individual and institutional players in the field of gender equality, b) the need for expert knowledge and professional skills in managing equality policies, and c) the development of new fields of action such as diversity management and inclusion.

On the other hand, the assertiveness of gender policies and the development of structures and cultural change is highly dependent on internal constellations of stakeholders. From a micropolitical perspective (Crozier / Friedberg, 1979) I explore the extent to which the above named changes also depend upon internal arrangements of power, influence and impact. This paper questions:

a) Who claims the power of defining ‘good’ gender policies and in what way does this lead to a higher impact of gender politics on cultural change? E.g. what role does the university administration and the rectorate play and which key positions are claimed by staff and faculty persons with a high affinity to equality policies?

b) Who claims the power of realizing gender politics and how does this lead to a collective responsibility for changing cultures within the university? E.g. in what way do we create decentralized structures in order to involve people from all hierarchies and all fields of administration? Which coalitions, co-operations and networks are necessary? How might equality policies relate to existing frames of reference in research and teaching?

These questions will be discussed in light of the remarkable changes of individual and institutional players in the field of gender equality at U Cologne within the past three years. New responsibility for equality policies is borne by an elected gender commissioner as well as by the rectorate. Faculties are obliged to fulfill gender-specific target agreements. The university administration has also integrated gender measures into various departments (personnel development, research administration, dual career & family support). I suggest that a key success criterion in these efforts is an active network where all hierarchies and working areas are inter-connected.

Crozier, Michel/ Friedberg, Erhard (1979). Power and Organization.

DONALD HALL:

**Creating Change:
Administrative Strategies in the American University
Context**

This paper shifts the discussion from the German to the American university context. The presenter has led change processes at three universities, resulting in a dramatic increase in the hiring and retention of under-represented groups into change-resistant academic units. He has authored several books on higher education change processes (*The Academic Community* [Ohio State UP, 2007] and *The Academic Self* [Ohio State UP, 2002], among others), drawing often on the Foucaultian notion of the “specific intellectual” (see “Truth and Power” in *Power: Essential Writings of Foucault 1954-1984*, ed. Faubion, New Press, 2000) to urge individuals to use their institutional position, whatever it is, to do the cultural critical work necessary to bring about larger social and cultural change. In the American university context, deans and department chairs, in particular, have powerful points of leverage for effecting changes in gender climate through playing key roles in the hiring process. Deans and department chairs, working with a sympathetic central administration, can shape job advertisements to diversity pools, can mandate that diverse pools of candidates are interviewed, and finally approve or veto specific hiring recommendations coming from faculty committees. That gate-keeping power provides the “specific” point of intervention using the Foucaultian model. Key here will be examining how communities evolve over time through education and critical mass. Hiring members of under-represented groups into otherwise change-resistant communities is perilous if such hires are done singly and without proper groundwork. Individuals, even those well-supported through the mentoring structures that will be discussed in paper four on this panel, often feel isolated and threatened in their home departments. However, cohorts of faculty, either hired simultaneously or in quick succession, have an inherent support structure that leads to better prospects for retention and successful promotion. Equally important is to create the conditions necessary for new hires to be actively welcomed into departments and programs. This entails a long process of appropriate policy generation and dissemination, as well education of faculty whose knowledge of gender climate issues may be very limited, but whose overall intellectual and socio-political commitments can be harnessed in the service of institutional change. Transparency in agenda and clarity in goals are both crucial if administrators wish to avoid heightened resistance or charges of authoritarianism. Top-down pressure is important but dictatorial administration is ultimately disastrous. The paper will conclude with a set of concrete suggestions, inspired by Foucault and his feminist interpreters, for administrators embarking on the necessary and important work of gender climate change.

DIANE HYLAND:

**Interdisciplinary Mentoring to Build Community
beyond Academic Departments and Retain Women
STEM Faculty**

While women STEM faculty are under represented in most universities, the challenges facing women in STEM can be exacerbated in smaller and mid-sized universities due to the relatively small size of departments and likelihood that there will be few, if any, women colleagues in the department. Establishing interdisciplinary (ID) connections with women colleagues in other departments has been posited as a potential solution to the isolation that these women may experience.

With the support of a National Science Foundation ADVANCE Institutional Transformation award, Lehigh University surveyed STEM faculty at 10 mid-sized research universities in the USA and found that women have more concerns about how ID contributions will be evaluated and they perceive greater institutional barriers to ID work. However, among women STEM faculty who had both department and ID program affiliations, women held more positive feelings about the culture in their ID program than their academic department. These findings suggests that mentoring programs and organizational structures that promote ID affiliations have the potential to facilitate retention of women in academic STEM but there must also be gender-equitable evaluation and promotion criteria.

Based on the survey results, Lehigh has launched a number of mentoring initiatives to facilitate the retention and advancement of women STEM faculty. This presentation will describe three of these initiatives. *LU WISE*: This is a campus-wide network of women in STEM who meet once or twice a month for informal social gatherings to reduce isolation and for formal professional development workshops. *Interdisciplinary Mentoring Committees*: To achieve individual professional goals, particularly related to ID teaching and research, each woman in STEM is given the opportunity to receive personalized mentoring from a team of 2-3 senior faculty drawn from multiple departments. *Individualized Leadership Development*: To increase retention of associate professors and support their promotion to full professor, newly tenured women in STEM participate in a 2-year program that includes mentor guidance from full professors and funding to develop professional networks outside the institution. Women STEM faculty have positively evaluated each of these initiatives.

Institutional transformation efforts at Lehigh indicate that mentoring programs aimed at building connections beyond the academic department have the potential to retain more women in academic STEM settings. However, gender-neutral, ID-sensitive evaluation and promotion criteria should be in place prior to encouraging women STEM faculty to pursue ID activities beyond their academic department.

17:00 – 18:30

Parallel Sessions THU 31 – 36

Thursday, Sept. 4

Room: **Brigitte Nieße**

THU34: Realizing Gender Equality in fields of Sustainability Science needs Gender sensitive Competencies and Organisations and the ethical frame “Self-in-Relation” (Workshop)

In Germany only few women take top positions in organisations dealing with issues of sustainability science. Women proportion in sustainability study courses is increasing since years) and female junior scientists feel obviously attracted by research for sustainability funding programmes of the German Federal Ministry for Education and Research (BMBF). So the “glas ceiling” effect seems to be valid also in fields of sustainability science. This is surprising because the concept of sustainable development as an outcome of the UNCED conference in Rio 1992 enforces gender justice and gender mainstreaming was introduced in lots of institutions in the sustainability realms. The reasons for the difficulties and barriers for women in achieving top positions are still debated in feminist and gender studies.

Our starting point is that education in and orientation to sustainability implies a specific value-, impact assessment- and process-orientation, integrative knowledge on systemic contexts and a focus on cooperation and negotiation – all with a specific gendercoding. It results in gendered sustainability competencies, gendered concepts of career and understanding of work, of life quality and occupational matters.

Presently it is not clarified, how far these factors are compatible with the (gendered) organisation culture and structure of institutions involved in sustainability practices. Furthermore the competencies and skills of men compared to women in junior scientist and leadership positions in professional fields of sustainability science as well as the factors responsible for gaining leadership positions are unknown. Thus it is necessary to examine how organisational cultures and structures are involved (facilitating and hampering) in specific competencies being effective and how this is influencing the selection of gender specific careers. The research project “Sustainability Competencies and Gender” targets at bridging this gap as a requirement of promoting gender equality and develop appropriate measures in fields of higher education, promotion of young academics in organisations and gender sensitive organisation structures and cultures in realms of sustainability science.

In our panel we will:

First present analysis outcome assessment concerning (gendered) sustainability competencies of men and women at top positions in institutions dealing with issues of sustainability science and of students and junior scientists/ or junior staff being qualified or further trained in interdisciplinary cross-sectional fields of sustainability science,

Second present qualitative data on the gendered understanding of career, occupational/ life quality concepts and values of the above-named target groups,

Third present analysis results on organisational aspects (structure, culture, processes) and their gender codes being found in institutions in realms of sustainability science and

the referring impact concerning suitable and hampering factors affecting careers of the aforementioned target group

Fourth frame and combine the aforesaid aspects with Val Plumwoods ethical approach of “Self-in-Relation” and discuss its potential and pitfalls by applying it to organisational (structural, procedural) and competence (individual, personal) related issues in professional fields of sustainability science

In our **following discussion** we will relate the presented results concerning (gendered) sustainability competencies, underlying concepts of career, working relations, values, organisational aspects and ethical considerations to each other and figure out matches, ambivalences and incompatibilities, suitable and hampering factors and discuss their relevance as well as appropriate measures to promote gender equality in fields of sustainability science.

KATHARINA MOTHS:

Realizing Gender Equality in fields of Sustainability Science needs Gender sensitive Competencies and Organisations and the ethical frame “Self-in-Relation”

ANJA THIEM

KATHARINA BERNDT

CHRISTINE KATZ

Room: **Alison Brooks**

THU35: Gender Content in Disciplines

HEIDI SILLER:

Gender in Research:

An Example drawn from Research on Posttraumatic Stress Disorder

We will focus on the inclusion of gender in research on posttraumatic stress disorder (PTSD) and trauma with consideration of three approaches. The first approach tackles gender as analysis of differences between men and women. In this regard gender in research mainly covers the comparison between men and women, mostly with only an implicit consideration of gender as a social construct. In this case, comparison between men and women can elucidate similarities and differences, but gives only limited or no information about the sources of differences and similarities. Taking PTSD as one example, differences between men and women regarding the development of PTSD are well researched, showing that women are two to three times more likely to develop PTSD (e.g. Kessler et al., 1995; Tolin & Foa, 2006). The second approach to gender in research includes gender as a social construct; however, empirical studies on this matter are done to a limited extent. Gender as a social construct can be understood as dynamic, re-creating process of what is seen as feminine and masculine in a given society or

culture (West & Zimmermann, 1987) and also includes the ascription of gender-stereotypical traits to men and women. For example, Olff and colleagues (2007) assume that femininity may be influential in the development of PTSD. This indicates that feminine traits are related to trauma symptoms, hence, explaining the higher vulnerability of women regarding PTSD. The third approach is an intersectional approach that considers gender as interwoven with other constructs (e.g. class, ethnicity) instead of a stand-alone variable. Intersectionality (e.g. McCall, 2005) views gender as one dimension among others to detect mechanisms of discrimination. Intersectionality contributes to the explanation of differences between men and women regarding the development of PTSD. It was found that examining individual perspectives of trauma contributes to an understanding of gender differences in PTSD (e.g. Seng et al., 2012). It is assumed that men and women react to specific aspects of a traumatic event causing different patterns of distress in men and women, even though they are exposed to the same event.

Research on psychotraumatology, more specifically on PTSD, can be taken as one example to show how the integration of gender in research facilitates the understanding of a complex phenomenon. The mere comparison of men and women has brought limited understanding of differences between men and women regarding PTSD. When gender as a social construct is taken into account the meaning of gender-stereotypical traits are brought forward. Applying an intersectional approach hence including additional dimensions (e.g. ethnicity, class, age) into research on PTSD enables the development of a gender-sensitive model to explain gender differences in psychotraumatology, more specifically in PTSD. Integrating gender into research should not only aim at enhancing knowledge on gender differences, but should also tackle the understanding of gender differences through development of gender-sensitive models on a specific topic.

ELVIRA SCHEICH:

Diversity in the Cultures of Physics – A European Summer School Project for Women Physicists

Combining gender equality initiatives with teaching feminist science studies can mean both, a chance for the establishment of gender studies and a challenge in interdisciplinary communication. On one hand policy-driven gender equality policy can be used to facilitate the integration of gender studies curricula in diverse scientific fields through combining initiatives which aim at promoting women's careers in science and technology with feminist approaches to science studies. On the other hand, teaching feminist science studies as part of the program of gender equality initiatives might not meet the expectations and interests of the initiative's participants and can cause irritations or insecurities.

In the paper a case study of the Berlin/Uppsala summer school "Diversity in the cultures of physics" for women physicists will be presented and discussed. The summer school was financed through a special university budget for gender equality measures and aimed at promoting the careers of female physicists in the passage from the master thesis to PhD studies. Part of the program was a seminar that aimed at, firstly, introducing feminist accounts to the sociology,

history and philosophy of physics, summed up as feminist science studies. Secondly the participants should get acquainted with science studies and gender studies as academic disciplines in their own right.

In the paper this concept, its outcome, its challenge and chances will be reflected and discussed.

ANA-MARIA SIMIONOVICI:

On a century of the invisible

Simone de Beauvoir alludes to the anatomic visibility and invisibility of men's and women's sexual organs respectively, and connects these thoughts with socially produced differences between men and women. Women's private parts are inside and 'invisible', whereas the male penis is not only visible but immediately graspable and almost soliciting active attention. Just like their bodily pudenda (private parts), women in arts and architecture are therefore often passive and the subject of the work of art rather than the author thereof, for example.

By initially taking a look at fin-de-siècle Vienna and the world of art and architecture surrounding Adolf Loos, this contribution discusses the changes regarding the way women are perceived in the architectural and artistic discourse during the past 100 years. It critically debates women as the subjects in arts and architecture, but also whether the requirements these have to satisfy in order to even enter the discourse have changed over the past century. When Adolf Loos published the photograph of the bedroom for his child-woman wife Lina, which he had designed shortly after they married, he publicly exposed a certain, rather passive (fictional) image of her. After their breakup, Lina commissioned Loos to reconstruct her bedroom in the new apartment. Again, photographs of the design survived but they show another image of Lina, one, which maybe she herself wanted to stage.

Subsidized contemporary housing projects in Vienna want to proliferate and accommodate a variety of family forms and socio-cultural roles. By looking at some contemporary examples, for example by SUPERBLOCK architects, the last part of the contribution will analyze the contemporary reflection of how women are perceived and included into or excluded from the architectural discourse.

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SYBILLE REIDL:

The challenges and potentials of gendered innovation projects: an interdisciplinary perspective – a field report

Fixing the knowledge (Schiebinger 2008) is a new strategy to promote gender equality in the European Research Area (ERA) (European Commission 2013). This means that the gender dimension will be integrated into research and innovation content as a cross sectional issue in Horizon 2020. The aim of this strategy is to make knowledge production more inclusive in at least two ways: First by considering different social groups as potential users of future technologies and by integrating their specific needs in the design and development process. Second by attracting more women into the research profession and making research teams more gender divers. Both developments will lead to different knowledge, innovations and technologies technologies will not be designed any longer by and for white middle class men. Therefore sex and gender analysis concerning the respective technological research field are necessary to identify a possible genderrelevance (Schiebinger/Schraudner 2011). This gender sensitive perspective on science and technology and their modes of knowledge production is necessary for gender in research projects and is introduced in such projects by gender experts often with a social science background. Gender in Research projects therefore bring together researchers from different disciplines with specific interests, expertise and understandings of these projects. They have a strong interdisciplinary agenda and are facing similar challenges. In these Research projects different stocks of knowledge meet. How do research teams deal with not fully understanding knowledge of other disciplines, with not being able to assess the relevance of other knowledge and with differences in methodologies and focus on research questions etc.? How can they manage to work together and not next to each other? Our presentation is based on two ongoing gender in research projects in the fields of engineering and medicine. It will discuss the potentials and challenges of these projects against the background of research on interdisciplinary cooperation.

The presentation will not only be based on the perspective of gender experts but will also include the opinions, views and

experiences of scientists, engineers and medical scientists participating in these projects which we have discussed and collected in reflecting sessions and meetings. We will summarize our lessons learnt to enable other projects to build on our experiences.

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Room: **Theresia Oedl-Wieser**

THU36 : Gender Equality Indicators

MATHIAS WULLUM NIELSEN:

Gender consequences of the Danish Bibliometric Indicator: New pieces in an old puzzle

The increased emphasis on 'excellence' and 'quality assurance' in the national and international research systems has triggered a significant expansion in the use of bibliometric indicators in the assessment of research performance. This article investigates the collateral gender consequences related to the introduction of the Danish Bibliometric Research Indicator (BRI) which is a model for measuring research quality and allocating performance based funding for research institutions. As pointed out by O'Brien & Hapgood (2011) research performance measures are often employed to encourage certain behaviours of scientific staff and institutions. In the case of the BRI, this involves political (and managerial) aspirations of promoting research productivity and directing the publication behaviour of scientist towards the most 'prestigious' publication channels. More specifically, the model is based on a differentiated counting of peer-reviewed papers, rewarding 3 points for publications in 'well-regarded' and highly selective journals and 1 point for publications in "normal level" journals.

On the basis of a mixed-methods approach combining a bibliometric analysis of the publication output of 2500 Danish researchers' and elite interviews with 24 department heads at a Danish university, the article aims to answer the following questions: 1) How does the BRI compare with existing measures of research performance (i.e. publication and citation counts) – in a gender perspective ; and 2) what are the collateral gender consequences of this model in relation to managerial practices of recruitment and promotion. In dealing with these questions, the article, among others, draw on Wendy Espeland's sociological work on commensuration and Peter Weingart's reflections on the potential adverse and unintended effects of bibliometric indicators.

Preliminary results

The first part of the analysis, revolving around the results of the bibliometric study, reveals that the introduction of

the BRI significantly amplifies the existing gender gap in Danish researchers' performance by rewarding the average publication of male scholars with more points than that of their female colleagues. The article suggests that this result might be due to hidden biases in the journal classification system leading to the BRI's differentiation between "well-regarded" and "normal" publication channels".

The preliminary findings of the second part of the analysis, which draws on interviews with department heads, indicate that the prospective impact of the BRI on practices of recruitment might add a new chapter to the longstanding story of women's cumulative disadvantage in science and research.

References:

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ANGELA GENOVA, BARBARA DE MICHELI:

**Gender Budgeting:
pilot experiences to make structural changes in
scientific organisations in Europe**

In European Union countries, women account for 45% of those who achieve the title doctor of research but only 30% of active researchers and 18% of professors (European Commission 2012; European Commission 2005, 2009a, 2009b; Blickenstaff 2005). In the past two decades, various initiatives have been developed to promote greater gender equality in research. However, the results have thus far been extremely limited and have not overcome of discriminatory structural and cultural barriers (Castano et al. 2010; Ceci and Williams 2011). Inequalities are produced and maintained in many different, often invisible, aspects of organisations, consolidating an inequalities regime in the academic workplace (Acker 2006).

Budgeting is generally considered a gender-neutral policy instrument, because the data, expenditures and revenue it considers make no specific mention of men or women. Budgeting thus appears to be gender neutral, but only because it generally ignores the different socially determined roles, responsibilities and capabilities of men and women (Bettio, Rosselli 2008; Sharp 2003; Elson 1997; Villagomez 2009; Addabbo et al 2010). Rather than gender neutral, normal budgeting, therefore, must be considered gender blind (Budlender et al. 2002). Financial choices reflect the dominant culture and its related power relationships, because power is created through the concentration of resources. When addressing gender equality, then, it is important to understand and monitor how resources are distributed and what effects each assignment has on each gender. Gender budgeting introduces a "gender equality perspective into the budgetary process to ensure an efficient allocation of resources based on identified needs, and to restructure revenues and expenditures to strengthen gender equality and women's empowerment" (OECD 2010).

Gender responsive budgeting is a complementary tool to gender mainstreaming (Villagomez 2004).

The paper presents the preliminary results of the experimental definition and implementation of gender budgeting in six scientific organisations that are research centres of excellence in Italy, Spain, Germany, Slovenia, Sweden and Serbia in the areas of science, technology, physics and information technology. The Gender Budgeting implementation is part of the Genis Lab project (2011), which has the objective to make certain structural changes in six European scientific organisations in order to address the factors that limit women's participation in research¹.

The introduction of gender budgeting have faced many resistances in the organizations and the theoretical background as well as the implementation strategies have been largely discussed within each scientific organization with heads of departments, administrative officers and researchers. Gender budgeting analysis shows a persistent gender unbalance with regard to three main typology of resources: funds (Rothe et al. , 2008) space (Massachusetts Institute of Technology, 1999) and time (Winslow, 2010). Women face barriers in accessing funds as well equal distribution of space and have a different time managing with regard to family balance and scientific commitment (Whittington 2011). Analysis and discussion of these data is the first step in the process of increasing awareness on gender discriminations and in the identification of specific action to promote structural changes in each scientific organisation taking part in the project.

KIRSTIN ECKSTEIN:

**From Gender Reports to Gender Budgeting - On the
Way with Meaningful Gender Equality Indicators**

Gender equality at universities is a well-established topic, there are many scientific studies and debates - theoretical and empirical ones. Gender data reports show some achievement, but the success story of gender equality takes a long time. Maybe gender budgeting can be used in higher education management to ensure a balanced gender ratio in academic life in the long run. Since 2013 gender budgeting is anchored in the Federal Constitutional Act in Austria, coming along with an 'outcome orientation'. For that reason the federal authorities are obliged to formulate specific outcomes, including outcomes in the field of gender equality. At the next step there are 'target agreements' between ministry and universities. The universities have to define concrete measures and indicators in order to realize and monitor the outcomes in all academic fields, including gender equality.

Thus the universities are required to develop measures for achieving the outcomes and to formulate indicators to measure their success. Therefore we will need meaningful gender equality indicators, which are not only about the representation of women, but also integrating resources, rights and realities (according to the 4-R-Gender Mainstreaming-Analysis-Tools).

In my presentation I will give some examples for integrating gender equality into control tools of university management, based on experiences from the University of Graz and its gender budgeting project.

FRIDAY, SEPTEMBER 5, 2014

09:00 – 10:30

Parallel Sessions FRI 37 – 42

Room: **Margarete Schütte-Lihotzky**

FRI37: ADVANCing Women Science, Technology, Engineering and Mathematics (STEM) Faculty: A Showcase of Promising Practices from National Science Foundation Funded Institutions

YOLANDA MOSES:

Moving FORWARD for Women in STEM Fields at UC Riverside: Not by Policy Alone

The National Science Foundation awarded a three year PAID (Program for the Advancement and Information Dissemination) grant to the University of California, Riverside in 2011. The campus is in year three of the grant. With the support of campus leadership (the Chancellor and the Provost), the PIs have created and are implementing the FORWARD (Faculty Organization foR Women's Advancement, Recognition and Development) program, a comprehensive and sustainable effort to support the professional advancement of women faculty in the STEM fields at the University of California, Riverside (UCR) and across other selective institutions in the state of California. To accomplish this, we have : (1) established new electronic systems and conducted extensive data mining on our campus to evaluate the recruitment, retention, and professional success of women faculty in the STEM fields; (2) established on-going programming for women in STEM to foster success, leadership, and community-building skills and opportunities (within the institution); (3) analyzed the extent to which current policies help or hinder women in attaining their success goals in the University; and (4) started the process of building a statewide network of women of color (WOC) faculty in the STEM fields at selective higher education institutions throughout California from which women of color can garner personal and professional support.

While incremental progress has been made in recruiting women faculty to UC Riverside over the past decade , the FORWARD program focuses on strategies to retain and advance STEM women, especially WOC, to leadership roles (succession planning for the next generation of Department chairs, Deans, etc.). The programs and workshops developed through this PAID project are designed to support faculty women as they develop individual roadmaps to success, both inside and outside their departments, while obtaining the necessary leadership training to achieve their goals.

This presentation will offer a number of contributions to the understanding of how some policies designed to help women can really be barriers that actually inhibit the advancement of STEM women in academia. The presentation will augment our understanding of the common policy barriers faced by women faculty in the STEM fields at UC

Riverside (both personal and institutional), while also advancing our knowledge of the obstacles unique to women of color faculty who must contend daily with the intersection of race and gender bias. By compiling and extensively analyzing institutional data on the recruitment, retention, and professional success of women STEM faculty, the presentation as a case study, will provide a better understanding of the relationship between institutional policies, practices, and the advancement of women faculty in STEM in a research university. Our data show that key policy changes, with new cultural understandings, must go hand and hand with sustainable programmatic change. In other words, creating sustainable activities intended to support the professional advancement of women faculty in STEM can, under certain conditions, create lasting institutional change.

YVETTE HUET:

Utilizing Faculty Climate Surveys to Drive Institutional Change

The University of North Carolina at Charlotte ADVANCE Faculty Affairs and Diversity office (FADO) is the centerpiece of efforts at UNC Charlotte to create an inclusive institutional climate. ADVANCE FADO began through an NSF Institutional Transformation (IT) Award in 2006. The ADVANCE FADO IT proposal was based on results received when faculty participated in a nationwide survey conducted by the UCLA Higher Education Research Institute (HERI.) The HERI survey was followed by an extensive self-study that included focus groups. From this information, areas were identified that faculty women saw as weak or lacking in support of their career development; which, in turn, led to the establishment of ADVANCE FADO programming. Examples of successful initiatives include mentorship programs for both new and mid-career faculty, leadership and chair development programs, faculty recruitment training, and faculty development conferences. Continued evaluation of institutional climate provides valuable information, including an appreciation of which programs have been successful and an understanding of how change is integrated (both successfully or unsuccessfully) into the culture of the university. To this end, ADVANCE FADO developed its own internal climate survey instrument that was used to collect information in 2010 and 2013. The data derived from these surveys provided evaluators with insight into the degree to which changes have been accepted, implemented, and embedded into the culture of the institution. ADVANCE FADO will continue to engage the academic community at UNC Charlotte through such evaluative processes in on-going effort to build an accepting and supportive work environment for all faculty, regardless of gender or race.

SAMANTHA HOWE:

Enhancing the Role of Chairs and Deans in Higher Education Culture Change

In academic departments and colleges, chairs and deans have the potential to become agents of culture change because they occupy positions of authority closest to where most significant activity occurs in academia—research, teaching and service (Lucas and Associates, 2000). Department chairs, in particular, are well positioned to provide leadership in creating an inclusive and supportive culture for all faculty, staff and students (Fried, 2003; Hecht et al, 1999; Olsen and Crawford, 1998; Wergin, 2003). Research shows, however, that women faculty members are less satisfied than their male colleagues with their relationships with chairpersons (Smith and Plant, 1982) and are more likely than men to leave their academic positions due to a problematic department climate (Jonsrud and Atwater, 1993). Similar findings pertain also to faculty of color (Cooper and Stevens, 2002; Mack, Watson and Camacho, 2013). When women graduate students and faculty are very few, as in the case of many STEM (science, technology, engineering and mathematics) departments, they experience particularly challenging conditions, report low levels of satisfaction, and have significantly higher levels of attrition than their male counterparts (Bystydzienski and Bird, 2006; Etzkowitz, Kemelgor and Uzzi, 2000). The relatively few faculty members of color in predominantly white colleges and universities encounter numerous obstacles to success, and especially to obtaining tenure and promotion (Cooper and Stevens, 2002). Given this reality, it is important that department chairs, and their immediate supervisors—college deans—are equipped with skills that can help them facilitate positive department climates and to transform cultures that are often at best chilly, and at worst hostile, to female faculty and faculty of color.

In this paper we focus on how department chairs and college deans in institutions of higher learning can use their positions in the organizational structure to facilitate culture change that emphasizes inclusivity and recognition of diverse contributions, thereby creating a supportive climate for women and underrepresented faculty. We first discuss organizational culture change more broadly, with particular emphasis on institutions of higher education. We then examine the case of Project Comprehensive Equity at Ohio State (CEOS), a National Science Foundation funded initiative at The Ohio State University, which focused on institutional change through transformational leadership of deans and chairs in STEM colleges and departments. Based on feedback from a series of workshops, results of a leadership inventory, interviews with participants, and findings of university climate surveys, we argue that department and college cultures can begin to undergo meaningful change when administrators acquire effective skills that enable conscious and deliberate work to promote inclusive values, policies and practices.

MARCI LEVINE:

ADVANCE Grants as Leverage for Culture Change in a Private Mid-Sized, Research Intensive American University

Lehigh University's context provides opportunities and challenges in shifting cultural attitudes and career outcomes for women in STEM. The ADVANCE grant, obtained in Fall 2010, provides capacity to refine systems for recruitment, mentoring, and engaging department chairs and supporting male allies. Lehigh has leveraged the presence of ADVANCE (LU-ADVANCE) to facilitate institutional change in the following ways:

LU-ADVANCE is located within the Provost Office, signaling to the community that gender equity is a priority. Several senior leaders are part of the ADVANCE implementation and advisory teams, and ADVANCE is represented on the President's "Council for Equity and Community". Concurrent with the award, the Vice Provost for Academic Diversity (VPAD) position was created. The senior leadership and other campus units are directly connected to ADVANCE, enabling recognition of lessons learned about implementing gender equity initiatives at personal, department, college and institutional levels.

Regarding recruitment, search committee members recognize and respond to the Provost's expectations for attention to diversity and participation in ADVANCE programs. Recruitment outreach sessions led by ADVANCE and VPAD inform about hidden biases and strategies to mitigate negative impacts on recruitment processes to all departments. To date, these multi-pronged efforts correlate with increased proportions of women in applicant pools, in interview pools, and given job offers. In the most recent hiring cycle, we gained 27 new faculty members (12 STEM); 13 of the new faculty are women (6 STEM). These successes are leveraged when administrators advocate for diversity across the faculty.

To impact retention of STEM women, LU-ADVANCE offers multiple initiatives with potential to endure. For example, ADVANCE created Interdisciplinary Networking Committees as a mechanism for STEM women to access mentoring and networking critical to career success. This model was adopted for all new faculty. Evaluation indicates an expectation of intentional mentorship is growing (baseline survey data suggested this was lacking). For associate professors, LU-ADVANCE provides women STEM faculty resources to reach their individual leadership and research goals through development of a 2-year mentored plan of action. The University broadened eligibility to women in non-STEM disciplines to reduce the chance that current female associate professors become stagnant. LU-ADVANCE launched a STEM Chair Breakfast series to develop a toolkit addressing needs and challenges of STEM department chairs in fostering an inclusive culture. The administration recognizes these tips will be valuable to future chair orientations. Plans to cultivate male allies are in place, modeled after a workshop by North Dakota State University FORWARD.

LU-ADVANCE's evidence-based strategies inform administrators of paths that benefit women in STEM. The challenges for future gender equality policies include identifying resour-

09:00 – 10:30

Parallel Sessions FRI 37 – 42

Friday, Sept. 5

ces to ensure individual, departmental, college, and university commitments can be sustained following the grant. In Lehigh's context, each individual wears many hats, and a challenge can be securing time to do the work. As attention to gender equity in daily processes becomes the new normal, and as senior leadership continues to demonstrate their dedication to gender equity in all disciplines and layers of the institution, ADVANCE will deliver on its goals of culture transformation.

AUTUMN REED:

**Tackling the Gendered Organization:
ADVANCing Women Leaders in STEM at the University
of Maryland, Baltimore County**

The recruitment and advancement of women faculty within the science, technology, engineering and mathematics (STEM) fields still proves to be a challenge at universities. While most of the obvious institutional barriers to the advancement of women in academia have been eliminated, several factors, including an increased share of family obligations and fewer opportunities for mentorship and networking contribute to women not pursuing the tenure track or senior research and administrative positions in greater numbers. In 2003 the National Science Foundation (NSF) awarded The University of Maryland, Baltimore County (UMBC) a \$3.2 million ADVANCE Institutional Transformation (IT) grant to recruit, retain, and advance women faculty in STEM. Now institutionalized, the ADVANCE Program at UMBC is recognized as a U.S. model for inclusive excellence in STEM. In this presentation, I discuss three specific interventions, UMBC's Family Support Plan, The Eminent Scholar Mentoring Program, and the ADVANCE Leadership Cohort Program, as promising models to systematically transform the gendered organization and culture of the university from the institutional level.

UMBC's Family Support Plan, developed in 2005, is the first intervention I showcase. UMBC was one of the first institutions of higher education in the United States to develop and implement a comprehensive family support plan for its faculty. In my overview of this initiative I focus on the background of the initiative, the components of the plan, its implementation, and its impact on the recruitment and retention of STEM faculty at UMBC. The Eminent Scholar Mentoring Program, which facilitates a mentoring relationship between new women STEM faculty at UMBC and a prominent researcher in their field, is the second intervention I highlight. In my discussion of this program, I share the history of the program, its structure, and its impact on the retention of women STEM faculty at UMBC. Finally, I offer UMBC's ADVANCE Leadership Cohort Program, which focuses on intentional career advancement to promote the advancement of women STEM faculty to positions of leadership, as a third promising practice for addressing the persistent underrepresentation of women leaders. I describe the development of the program, its activities, its evolution, and its impact on the lives of the women participants and women's leadership at UMBC.

Through my presentation of these three interventions, I emphasize the need for universities to adopt a holistic

approach, which focuses on the recruitment, retention, and advancement, to address gender inequality in STEM. Additionally, I offer these three programs as models that other universities can modify to tackle and transform their own gendered organization.

Room: **Marilda Azulay**

**FRI38: Gender equality check: Vincible
roadblocks in implementing gender
equality in higher education institutions!?**

VERENA AICHHOLZER, KATHARINA CHUDZIKOWSKI:
**Careers and career development at Austrian
universities from a gender perspective**

In recent years universities have implemented new means of policies as they undergo a process of change, resulting from international (e.g. Bologna Process) and national (e.g. University Act 2002 in Austria) university reforms. Policy documents which are the basis for this transformation process promote the values of human capital, employability, lifelong learning and mobility in order to enhance economic competition (Holborow, 2012). In general Universities are responsible for endowing skills that lead to a competitive advantage, both for future employers or graduates as well as for employees at university and higher education sector in general (Warhurst & Thompson, 1998). The establishment of new introduced management practices, service- and customer-orientation and a general type of more result-orientated steering is guided by a tightly integrated regime of managerial discipline, cost efficiency and control (Clarke & Newman, 1997; Deem, 2003; Sousa et al., 2010). From an employee perspective, especially, due to internationalization and new introduced policies, trends that are especially relevant for young career scholars can be summarized as the following: recruitment difficulties, increasing obstacles in getting promoted, abolition of academic tenure and career perspectives, work intensification and overload, diffusion and blurring of work roles (e.g. Muller-Camen & Salzgeber, 2005), increased job insecurity, declining collegiality and commitment to the organization (Bryson, 2004) as well as new "careerism" (Rajagopal & Lin, 1996) and contingent employment (Feldman & Turnley, 2004). Moreover, the increase of non-standard employment forms like part-time, dependent self-employees and freelance contractors and other precarious working conditions (Pernicka & Stadler, 2006) have implications on how they react to career challenges (Taylor, 2013).

However, academics remain the central resource of every university and hence, they should be supported accordingly with personnel development. This study takes a closer look at personnel development at Austrian universities and especially the further education and further development of their academic personnel. Hence, we will ask the following research questions: How do young academics correspond to personnel development schemes at universities? How do they describe their career perspectives at universities and how do they conceptualize alternative career perspectives?

How does gender influence career decisions of young academics?

Empirically, we utilize a qualitative case study approach which focuses on four Austrian institutions. We are especially interested in the group of academics described as group of “prae-docs” – representing academic staff teaching, working on their dissertations and conducting other research for their departments simultaneously. The central theme regarding personnel development has been analyzed at these chosen universities.

Our findings unveil several tensions that early career academics deal with. Especially, they suggest that early career academics perceive a lack of perspectives for career paths at universities on a national level. They are aware that international mobility is relevant however short term contracts are still seen as constraining for further career development. This is identified as paradox situation as on one side the universities are interested in long-term personnel development plans and on the other hand those academics experience “employment with expiry date”. Besides personnel development action supporting career models in early stages, mainly a lack of overall strategies is perceived on an institutional and national level. This is especially relevant looking at the growing number of “external funded project assistants”. The most challenging effect of the internationalization within the academic system is the demand for a stay abroad especially for women balancing their career and family life. There is little support perceived from universities for this “career transition”. Generally, the gender relations were described as “still asymmetric” what could legitimate personnel development measures for women (e.g. coaching for women) and gender-specific measures (e.g. gender trainings for professors / managers) as well. This requires not only the personnel development department or women’s promotion department but the support of the university management in general.

RENATE BUBER, SILVIA MILLE:

**Carrying out gender-equitable recruitment:
The interplay between legal requirements and
management decisions at universities**

This paper aims to investigate an ideal recruitment process of young academics at universities referring to legal frameworks for gender equality as well as anti-discrimination in Austria and, consequentially, to discuss resulting management requirements.

At first, a brief introduction of the Universities Act 2002 (UA), the Plan for the Advancement of Women (PAW) as part of the university’s by-laws and the Federal Equal Treatment Act 1993 (FETA), which constitute the essential legal basis for gender equality and anti-discrimination issues and the advancement of women, is given. After that, the responsibilities of the Equal Opportunities Working Groups (EOGs) and the Arbitration Boards are described. Subsequently, the elements of an ideal recruitment process are theoretically outlined.

Within the recruitment process, the EOG has to monitor whether the requirements of the gender equity legislation and the PAW are met. If the 50%-quota on female employees has not been achieved, women have to be preferentially selected if they are equally well qualified. In practice, there are many pitfalls and workarounds hindering these goals. It is, in the end, rather challenging to create a positive organizational culture that promotes women and a strategically oriented human resources (HR) management that integrates gender-equality and equal opportunities (EO) as basic principles.

At the Vienna University of Economics and Business (WU) much is still to be done in order to implement a comprehensive and successful recruitment process based on gender equity. For that reason, a focus group interview was conducted (Morgan 1998, 14f.; Krueger 1998a,b,c). Nine experts from academia and practice were invited to discuss gender equity-based recruitment and measures to advance women in academia.

The findings are discussed against the background of strategic HR and recruitment issues (Berman et al. 2010; Dickens 2005; Kay 2011). While this is carried out at a general level, special suggestions are made for the WU where appropriate.

Summarizing, suggestions on the operative level include for instance training in gender issues for all groups of personnel, and certainly for those persons who are directly involved in recruitment procedures; mandatory training in the legal aspects of recruitment for all persons involved in hiring; development of hiring toolkits to organize recruitment procedures along legal and managerial requirements; see examples of Rutgers University (2014), University of Florida (2012), The University of Queensland (2013) or LSE (2014); professional recruitment procedure for academics, organized and supported by the personnel unit; principle of doing interviews in a panel format.

At the strategic level, universities face the challenge of anchoring EO principles. This will require the willingness of those in positions of responsibility to change habitual activities. A general rethinking of decentralized practices of recruitment is required, as well as readiness for actors to cooperate in personnel issues instead of behaving rather like lone warriors. From a managerial point of view, the development of HR strategies is a responsibility of the university management. The following points represent the cornerstones for a professional discussion on the future of academics in universities: (1) integration and harmonization of Development Plan (DP), PAW and the university’s performance agreement with the Federal Ministry of Science, Research and Economy, and the development of a comprehensive and authoritative code of conduct; (2) harmonization of the strategic principles, for instance internationalization and excellence (from the managerial point of view) with the EO principle (as a legal requirement and an ethical responsibility); (3) development of a university employer brand and job announcements designed along marketing principles.

RENATE BUBER, LENA WARCZEWSKI, MARION ZEGER:

Plans for the Advancement of Women in higher education institutions: How do they contribute to successful gender equality work at Austrian universities?

“All university bodies shall make efforts to achieve a balanced representation of men and women at work in all areas of university activities. Appropriate action shall be taken to attain this goal, particularly by means of the adoption and implementation of a career advancement plan for women.” (Universities Act 2002|Sec. 41)

The Austrian Universities Act on the Organisation of Universities and their Studies (Universities Act 2002) provides that all university members shall endeavour to achieve a fair balance between the sexes. The Austrian universities have to adopt adequate measures, especially the application of Plans for the Advancement of Women (PAW). Within recruitment processes Austrian Equal Opportunities Working Groups (EOG) have to monitor whether the requirements of the gender equity legislation and the PAW are met (Senk 2013).

Our paper examines the relevance of the PAW for gender equality work at Austrian universities. The following questions outline the main focus areas: What are the experiences of EOG members with regard to the implementation of advancement plans? To what extent can these plans support the work for equal opportunity stakeholders? How does practical gender equality work benefit from the formal and thus institutionalised framework? What are the aspects that are conducive to and hinder the implementation of the PAW at Austrian universities? How can practical gender equality work be developed on the basis of an organisation's Human Resources strategy?

In terms of method, verbal data about the impact of the PAW is gathered by semi-structured interviews with EOG members. We have developed a case vignette for this purpose, as this allows us to explore practical work in context, and provide a less personal and therefore less threatening way of exploring sensitive topics (Reutlinger et al. 2013; and Barter/ Renold 1999).

In the first part, the work environment of EOG is presented. It is aimed to identify the quality of relationships to the different stakeholder groups and the key players in equal opportunities policies respectively, in and outside the university. It is shown that the most important stakeholders in the eyes of the interviewees are the Ministry of Science, Research and Economics, the Coordination Centres for Promoting Women and Gender Studies, the respective university management, the Arbitration Boards and the Federal Equal Treatment Commission. The paper then summarizes and evaluates subject areas of EOGs. EOG members distinguish their fields of responsibility clearly from other stakeholders, e.g. the Coordination Centre. It may be the case that the EOGs do not fully comprehend their sphere of action. Stronger cooperation with other stakeholders, for example the personnel office, the external relations office or the association of university teachers, could extend EOG's scope of influence. Furthermore, close collaboration with other EOGs could expand their power. According to its self-perceived

main areas of responsibility, EOGs are predominantly responsible for monitoring recruitment procedures from a mostly formal perspective in terms of discrimination. They have minimal impact in terms of active contributions to promoting activities and more generally to managerial decisions. In a detailed central section this working paper analyses the relevance of the PAW for EOGs work. As a general rule, the institutionalisation of the PAW is considered as being beneficial. This is due to the fact that the PAW form part of the university's by-law. PAW are seen as an “important guiding principle”, as “helpful” and as “indispensable”. However, the implementation and adaption of the PAW cause problems and the effectiveness of the PAW is controversially discussed. The data shows that, as a rule, it is doubtful that the PAW really promotes gender equality. For example, the EOGs' power to influence the definition of the content of the PAW is limited. Moreover, the level of awareness of the PAW among university members is poor. Furthermore, the PAW are characterised by a lack of operational measures and clear consequences (e.g. financial incentives).

In conclusion, the paper argues that the assessment of the current situation pinpoints the need of new ways and measures to achieve the PAW goals. The gender perspective should be consequently applied to all decision processes at Austrian universities (see also Wroblewski et al. 2007).

KATHARINA MADER, ANGELIKA SCHMIDT:

Feminist activism and gender equality – Where has feminist activism in higher education institutions gone?

University reforms in Austria since the early 1990ies have redefined the framework for gender equality and feminist work. The current context of managerial universities opens up new windows of opportunity for equality policies and programs. The focus of equality programs is put on formal, visible and quantifiable procedures – in essence on “body counting” (Alevsson/Billing 2002). Moreover critical accounts of equality work attest a lack of space for reflexivity of equality agents on the dimensions they employ for defining targets and measuring success as well as their positioning within feminism and/or feminist activism. In this context, feminist activism and movement in higher education institutions in Austria has been facing changes and challenges since the 1980ies and 90ies: grassroots feminism has led to a transformation towards gender equality, its move further into the center and the mainstream of universities (Bendl/ Schmidt 2012). Thus, the question arises, how much space do feminist approaches have in the current gender equality discourses? Hence the aim of this paper is to examine what has been discussed about feminist activism and feminist movement within the gender equality discourses to sustain the target of gender equality.

In order to answer the research questions, our paper provides an overview of the feminist approaches in a nutshell, analyzing gender equality in the context of feminist movement and institutional integration of gender equality within documents as well as institutions are discussed for all Austrian universities.

Our analysis shows that institutional forms of gender equality go in line with feminist activism at universities, but the drivers and the forms of activism have been diversified concerning their feminist foci. In this respect we should be aware that in the Austrian academic field we found a mixture of professional and market-control logics and especially the different governance forms (institutional self-regulation vs hierarchy of governing rules like cost efficiency) and different forms of collective power (professional vs associative power) are creating a paradoxical tensions between feminist movement activities and institutional integration (Pernicka/Lücking 2012; Chudzikowski/Schmidt 2014). Therefore, our research not only mirrors the organizational change processes and dynamics within the system of Higher education regarding feminist activism, it also contributes to “sense making” and traces changes.

Room: **Inés Novella**

FRI39: Change Processes

ANKE LIPINSKY:

The gendered organisation as narrative – patterns of appropriation, justification and renunciation of gender equality action during evaluations

Throughout Europe higher education establishments have introduced gender equality policies and practices in form of institutional action plans in recent years. Effectiveness and outcomes of such “gender action plans” depend on a multiplicity of factors, not least on the willingness of senior faculty and research administrators to play a part in implementing the gender action plan (Andersson et al 2009; Wroblewski 2012). Gender knowledge and competency are often new requirements to faculty and administration and its use seems limited to professional behavior. Thus, interviewing senior and management staff of higher education establishments during the implementation process of gender actions can offer insights into reciprocal dynamics between gender policies and their practical implementation.

The focus of attention of this paper lies on the qualitative analysis of narratives about professional experiences in the above mentioned setting. By looking at form and function of narratives, the paper illustrates patterns of appropriation, justification and renunciation of gender equality actions of faculty and science administrators during the evaluation of institutional action plans. Examples originate from a series of interviews carried out during evaluations of gender equality plans, amongst other, in the context of the INTEGER project, from research institutions in France, Ireland and Lithuania.

Methodology applied for assessing narrative strategies emanates from comparative cultural studies and interdisciplinary narratology: narrative strategies have been researched in comparative cultural studies during the last thirty-five years, taking into consideration diverse forms and

functions of narratives, i.e. appropriation or justification (cf. Lehmann 1980; 2007). Looking at narrative strategies of professional experiences in the context of evaluations of gender equality plans can lead to a better understanding of cultural and managerial barriers to the effective implementation of equality plans in gendered organisations.

Literature:

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UTA KLEIN:

Gender Equality and Diversity Politics in Higher Education: Conflicts, Challenges and Requirements for Collaboration

The contribution discusses the relationship of gender equality politics (including gender mainstreaming) and diversity management in organisations of higher education.

First, the theoretical perspective will address the epistemological assumptions about the categories of diversity and gender, the underlying legal principles and the guiding normative policy principals of the concepts of gender equality and diversity management. What differences exist between a concept of a “gender-equal university” and a “diverse university”?

Second, current approaches and practises on gender equality and on diversity management in higher education will be analyzed.

It will be shown that gender (politics) cannot be subsumed in diversity (management). Both orientations can be integrated in the developing “entrepreneurial university” from a systematic point of view. New control and management procedures like performance-based allocation of resources do fit for both concepts. However the two approaches are not replaceable:

Whereas legal obligations and aims are clear cut for gender equality in higher education, they are not yet clear when it comes to diversity. Whereas the category of gender is dealt with on a well elaborated theoretical base, it is not yet clear whether diversity is understood and used in an essentialist or constructionist manner. Diversity is often used as an almost endless list of categories of difference. Furthermore the normative foundation of diversity is not clear. Most universities focus on excellence, on “the best” and do not put an emphasis on equality or antidiscrimination. However, a partial cooperation between gender mainstreaming / equality and diversity management is very useful for certain areas and issues, which will be defined.

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UDUAK ARCHIBONG:

From 'Greening' Transformation to Gender Diversity Change Programme: University of Bradford's Experience

The key question explored by this paper is: 'To what extent can the experience gained from using a Change Academy Model (CAM) [Jackson, 2004] to achieve a 'Greening' transformation¹, be translated into achieving gender equality organisational change within Higher Education [HE]?' Whilst recent developments at University of Bradford [UoB] are clearly supportive of the direction of travel towards greater inclusivity, there remain gender imbalances in some of the senior research roles within the University. UoB is currently developing an institutional action research project aimed at embedding gender equality across the whole organisation. It seeks to implement strategies for systemic and structural reforms to further advance gender diversity within the Research and Knowledge Transfer support structures within the University.

UoB has previously used various organisational change approaches but adopted the CAM, developed by the UK Higher Education Academy (HEA), to embed sustainable development across the institution through to develop and embed its' Ecovercity programme. Ecovercity pioneered the use of the CAM at the UoB and, as a result, has been successful in empowering staff and students, across the entire institution, to lead on shaping the programme of sustainability transformation. This paper reflects on the process of UoB gender equality change and describes a process model that draws on the Ecovercity programme [Hopkinson 2010] underpinned by the social process theory [Reckwitz, 2002] and complex-adaptive systems theory [Dooley, 1997; Holland, 2006].

In order to explore the feasibility of applying the CAM model in achieving organisational cultural transformation in gender equality in research and innovation, a range of diversity competent data collection methods were utilized to gather information from across the organisation. It was imperative to be open and collaborative in exploring discipline-specific and cross-institutional need for structural and cultural change. Outcomes from the ongoing action research will have implications for institutional policy and discipline-specific practices. Key strengths of the CAM process for initiating and embedding gender equality related change in HE will be highlighted.

Suggestions for addressing the main challenges for future

HE gender equality policies will be drawn out, including the need to be able to react to change iteratively while, at the same time, with a sense of urgency, given competing organisational academic demands. At UoB, the programme has been a catalyst for identifying the opportunities and challenges, analyzing barriers and promoting interconnections with other initiatives seeking to reshape the institutional culture.

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DOINA BALAHUR:

Promoting the “co-operation paradigm” for gendering the universities and science organization. A built-in reflective practice model of real transformation to achieve gender equality in science.

Our paper addresses the issue of organizational transformation aiming at promoting gender equality in universities and research organizations. It presents the real processes of structural transformation developed within the frame of a European FP7 project (STAGES) and also, based on relevant research findings, brings arguments on the transformative valences of the „co-operation paradigm”.

So as we have recently observed (D.Balahur, 2011) the sociological literature on the organizational renewal pays attention to two main models of understanding and promoting “structural changes”: one grounded in the “conflict paradigm” and the other one in the “cooperation paradigm”. For the first model, the key- words are those associated with fight and war: “dispute”, “obstacles”, “resistance”, “victims”, “winners” etc. For the second one, the key-words are: “collaboration”, “co-construction”, “mutual understanding”, “communication”, “mutual-respect”, “common interest” etc.

For the first paradigm the main assumption is that change can occur only through conflict (“no conflict, no change”). The dynamics of change would mean a permanent fight. The story of this model could be told as a “journal of frontline”.

The second paradigm could be synthesized under an apposed thesis: “no co-operation, no-change”. There is no real and sustainable change without cooperation and participation. The changes got through fight could be only provisional ones if they do not rely on the parties' agreement on the common interest that is on co-operation. The co-operation and agreement on the common interest supposes

knowledge and the mutual recognition of the interests of each party, communicative action (Habermas) and mutual learning through the praxis of change. The story of this paradigm has as model “the mutual learning” through the transformative and formative praxis.

In our strategy for the implementation the structural transformation for achieving gender equality in science in our university we decided – based on a long lasting and profound knowledge of our university from the inside- that the second paradigm is better adapted to the realities of the 21st century University, to our aims and objectives. That is why, briefly described, we followed a multidimensional, synergic approach (transformative and formative praxis) that stimulated mutual learning, networking, participative action and communication and involved as many as possible beneficiaries, virtually the whole academic and research community, from the top managers, professors, researchers until the Ph.D, MA and undergraduate students (around 1000 participants at our 35 actions and events, among which 100 were actively involved as speakers, organizers, active interlocutors in trainings, workshops, research, public communication etc – www.stages.csmcd.ro).

This direction is known in the scientific literature as an “appreciative approach”, or in evaluation theory and practice as “appreciative enquiry”. Simply speaking, it considers the positive aspects and issues more important than the negative ones and builds the organizational renewal on the achievements and good practice. This approach in organizational change became a “common accepted practice in the organizational development strategy and implementation of organizational effectiveness tactics” so as the literature underlines (Cooperrider and Whitney, 2008).

Our paper will present and support the proposed strategy with relevant research based evaluation data and analysis on the effectiveness of the co-operation paradigm that could become an important resource for the transfer of knowledge on structural transformation for gender equality in universities and research organizations.

Room: **Brigitte Nieße**

FRI40: Senior Career

HEBE GUNNES, AGNETE VABØ:

The adjunct professor (professor II) position in Norwegian higher education institutions – a strategic mean to obtain gender balance?

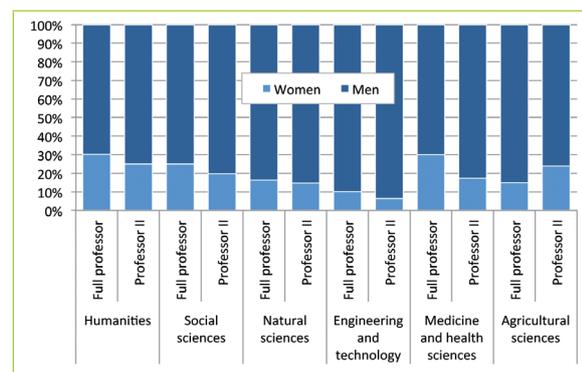
Research question: To what extent are the Norwegian universities using the adjunct professor (professor II) position as a mean to obtain gender balance?

The adjunct professor position is known as the least equal position in the Norwegian academic hierarchy when it comes to gender balance. The adjunct professor position requires qualifications as a full professor, and is a 20 per cent position that comes in addition to one’s main occupation. An adjunct professor can be recruited through regular application procedures, but is mainly recruited by “calling”. This implies

that an academic with a certain set of skills, or knowledge needed by the institution, can be contacted and offered the position. The recruitment process of adjunct professors differs from the employment process of regular professors, who either get the position by applying for a vacant full professor position or through professor by competence. We believe that this recruitment process might be an obstacle for the recruitment of women, unless the institutions take specific action.

The University of Tromsø (UiT Arctic university of Norway) has been using the adjunct professor position as a strategic mean to recruit more women. In this paper we will investigate how the share of women has developed in the adjunct professor position at UiT and the seven other Norwegian universities over the last ten years.

We will present a short review of the adjunct professor position’s history in Norway, as well as statistics on the demographic pattern of the position by field of science. The paper will present data for the gender balance for full professors and adjunct professors within each field of science, as well as the ratio of adjunct professors per full professor.



Figur 1: Gender balance for adjunct professors and full professors in Norway in 2011 by field of science.
Source: NIFU, Register of research personnel

We have data indicating that the adjunct professor position is a possible way of obtaining a full professorship within medical sciences, but is this also a common way of recruiting full professors in other fields? And does this benefit men and women equally? Does it matter which sectors the adjunct professors are recruited from (i.e. other Norwegian HEIs, research institutes, the Business enterprise sector or abroad) in order to achieve a better gender balance? We will present selected statistics to investigate this question.

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Vabø, A, Gunnes, H and Tømte C (2012): *Women and men in top academic positions and management. State of the art. Paper presented at the 7th Gender Equality in Higher Education conference in Bergen.*

JENNY NEALE, KATE WHITE:

Working from the margins: An atypical approach to becoming senior women academics in Australasia

Much has been written about gendered organisational cultures in higher education and their impact on the career trajectories of women academics. This paper discusses the way in which the university institutional practices and culture act to reinforce a gendered organisation. Using case histories from a New Zealand and an Australian academic, the university environment is explored from the perspective of those who did not follow the typical male academic career path. The social division of labour may be even more pronounced in the context of managerialism and this aspect is explored along with issues raised around the negotiation of a career that was compatible with other responsibilities. The ways in which norms and values can be challenged and movements for change fostered are canvassed. The paper argues that, despite the underlying tension between the individual and the organisation, and the possible limitations that this could create, following non-traditional academic career paths does not necessarily negatively impact on career progression. Furthermore, notions of “success” can be re-defined within the prevailing gendered organisational culture.

BETTINA LANGFELDT, ANINA MISCHAU:

Change and persistence of influential factors on gender disparities in the occupational career of mathematicians and physicists in Germany

The reasons for underrepresentation of women in top positions in STEM oriented occupational areas within academia and economy are manifold and located on the individual, organisational, and societal level. Investigations on that topic usually focus either on analysing structures and circumstances within one single discipline or within the entire subject group of natural sciences. The research project “Gender Disparities in the Occupational Career of Mathematicians and Physicists Within and Outside Traditional Employment Models”, which was funded by the German Federal Ministry of Education and Research and the European Social Fund of the European Union, aimed at identifying intra-disciplinary characteristics as well as inter-disciplinary differences and similarities by using a gender sensitive perspective and by regarding the subject-specific cultures. The empirical part of the project was designed as a mixed method approach with a qualitative preparatory-study and a structured online survey addressing mathematicians and physicists who received their degree before 1 January 2011 (quantitative main study). The online survey (field period October 2012 to February 2013) was announced by several relevant scientific societies and professional associations as well as by equal

opportunity commissioners of universities, universities of applied sciences and non-university research institutes that employ and/or educate mathematicians and physicists. 5174 persons took part in the survey, which can be considered as being approximately representative for mathematicians and physicists who are members of scientific societies or professional associations. The study offers some possibilities of examining the respondent’s career history so that the effects and interdependencies of the above mentioned factors on the individual, organisational, and societal level cannot only be compared for different occupational groups, but also considered within the respondent’s occupational career.

The presentation is going to report on crucial findings concerning gender disparities in the occupational career of mathematicians and physicists – differentiating between fields of activity (e.g. academia and economy) – based on empirical data from the above mentioned research project. Furthermore, it is trying to answer the questions whether these disparities are due to gender-related differences in following certain career strategies such as networking, self-presentation, (academic) visibility or if other factors especially on the organisational (recruitment mechanisms, missing efforts to reconcile work and family life, long working hours etc.) or the societal level (e.g. gender stereotypes etc.) have a greater impact on the occupational success of men and women. Besides so called hard facts and objective indicators, subjective career indicators and attitudes are going to be included in the analysis, too.

Room: **Alison Brooks**

FRI41: STEM

MARTINA ERLEMANN:

Dynamics in the entanglements of gender cultures and disciplinary cultures in science as a key for gender equality: the case of the physical sciences

Although the decrease of women among the academic personnel with each career step holds for all disciplines in higher education institutions, the underlying processes within the institutions which lead to this problem are closely related to the particular disciplinary culture. Thus when problematizing gender equality and asking for the gendering of academic careers in scientific research and higher education, it is indispensable to take into account that the gendering of the sciences differs between different disciplines.

The physical sciences are among those science disciplines with the lowest percentage of women in research and higher education. Whereas in Germany the vertical segregation within physics seems to mitigate slowly, the effects of the horizontal segregation still persists obstinately.

Academic careers in science are influenced by the gender cultures in the respective research institution and its working place cultures. Last not least they are also related to the organizational type of the research institution, e.g. universities or non-university research institutes. Drawing on an ongoing ethnography in four physical research institutions in

Germany I want to discuss recent dynamics in the entanglements of gender cultures and working place cultures for the case of the physical sciences and consider the role of the different institutional settings for these dynamics.

In the course of the fieldwork there emerged different levels on which gender cultures become relevant: Firstly, the day-to-day explicit talk about „gender“, mostly in the context of gender equality, secondly, the doing gender in the interactions of physicists and, thirdly, the performances of gender through research practices of doing physics. The entanglements of the observed gender cultures, working place cultures and their institutional settings will be revised with regard to the recent policy-governed developments concerning gender equality in these research institutions.

COLEEN CARRIGAN:

Combating Gender Harassment in Academic Science, Technology and Engineering

Men's overrepresentation in science, technology and engineering fields (STE) is, in part, the result of workplace environments hostile to women scientists and engineers. Drawing on two years of ethnographic research with computer scientists, I present data from academic workplaces, highlighting the challenges women face in STE, particularly at intersection of gender, race and culture. The prevalence of gender harassment in my data is significant. Gender harassment refers to disparaging conduct that is not intended to elicit sex. Instead, it is verbal, physical, and symbolic behaviors that convey hostile and exclusionary attitudes toward women.

To develop new working cultures in academic STE, I recommend diversity activists raise awareness about the prevalence of gender harassment in STE workplaces and create broad, impactful policies prohibiting it. My content analysis of gender policies at 200 research-intensive universities suggests that there is much work to be done to outlaw sexism in the academic workplace. Holding perpetrator accountable is a first step toward fostering just transformative cultures in academic STE.

Activism combating gender harassment in academia highlights systemic acts of violence against women and offers solutions aimed at changing institutional norms rather than merely individuals' behaviors. It is an effective way of quelling a particularly violent strain of resistance to women's participation in advancing science. Gender inequities in STE are most popularly attributed to women's internalized gender roles, stereotypes rooted in the belief that women are less competent than men, or biased evaluative standards of success and competence that favor of male scientist and engineers. While these are critical issues, I argue we must augment critiques of the individual process of stereotyping with scrutiny of institutional practices like gender harassment and the systematic reproduction of male hegemony in STE.

Organizing against gender harassment in academic STE is the praxis of feminist organizational theory, which posits that institutions are guided by unexamined masculine

principles that work to exclude women and impede their success and advancement. For example, jobs within organizational structures are abstract categories intended to be filled by workers with little to no familial responsibilities or personal obligations, a framework that assumes a particular gendered organization of social relations. Underscoring the violence inherent in these unexamined masculine principles, my anthropological research contributes to feminist organizational theory, science studies and programmatic interventions that name, combat and eradicate gender harassment in academia. Thanks to Anita Hill and the groundswell of feminist activism in the 1990's, sexual harassment has entered into US mainstream consciousness and public policy. In this paper, I call for diversity activists to extend upon this hard work and organize to achieve the widespread adoption of gender harassment policies in academia. This activism is essential to creating safe, welcoming environments for women of all ethnicities and in all levels of academic STE workplaces.

MARCELA LINKOVÁ:

Gender in a Trading Zone: Implementing a Cultural and Institutional Change Project at a Czech University

Since 2009, in recognition of the vital importance of changing research cultures and institutions to advance gender equality in research, the European Commission has been funding projects to implement structural change. One such structural change project is currently under way, since January 2014, at a Czech University where it is implemented in cooperation with a team of external gender experts from another partner institution in the Czech Republic. In this paper we employ a key concept of science and technology studies, the 'trading zone' (Galison 1999), to examine the complex material-discursive negotiations of gender equality that is to be advanced during the implementation of this project. We specifically examine two features of the trading zone:

Firstly, we address the enactment of the boundary object as a gradual shift from gender equality to gender balance; and secondly, we study the crucial role of translators in trading zones, specifically the role of the middlewoman and gate-keeping practices. In conclusion, we consider the possible avenues of the gradual development of a shared representation, and advocate for the need of a policy of solidarity.

FABIO GASPANI:

'Oh, Be a Fine Girl: Kiss Me'*

Gender and Careers in Astrophysical Science.

The hard recognition of women-scientists' role and their struggles to reach top positions in the world of research are central issues for national and supra-national institutions and organizations, regarding educational and labour policies. As many scientific reports underline, legislative progress and achievements in formal equality have facilitated the access of a growing number of women in scientific fields of

study, but the female presence in scientific institutions and equal career opportunities are struggling to establish themselves. These institutions refer to a gendered organizational structure, able to reproduce segregation and differences in status of women and men. For this reason, social and cultural practices related to gender can be considered as interpretative keys through which the processes of stratification and mobility in the workplace can be investigated.

The paper uses a gender perspective to analyze the experiences of scientists operating in astrophysics. This topic is investigated through qualitative interviews conducted in academic institutions and research institutes located in an Italian city. Interviewees are scientists of both sexes, selected from the research staff at different levels, on the basis of substantive representation.

In particular, the research explores the role that gender plays in career paths, investigating the mechanisms of competition and professional promotion in scientific organizations. Therefore, the organizational culture of the astrophysical sector is analyzed, that is composed of beliefs and models of action constructed, learned and recreated by the components of this disciplinary field. Within organizations, gender relations are always under construction and are managed through practices that reproduce different conditions and act on the structure of formal and informal power relations. Female subjects have to face practices and modes of action that point to the gender models socially accepted and to the system of constraints and opportunities with which women have to measure themselves. In addition, their identity construction as women-scientists is the result of processes that interactively act on different levels and spheres of life, and are linked to social norms and representations related to gender roles.

Scientific organizations operate through a pervasive and assumed gender culture that may be difficult to bring into question. For anyone who is engaged in research activities and for those who prefigure gender oriented positive actions, the fight against inequality should have the aim of increasing the correct awareness of discriminations.

* *The title dates back to the system with which the astronomer Annie Jump Cannon (1863-1941) classified the stellar spectrum in different categories in order of decreasing temperature, creating the alphabetical sequence O, B, A, F, G, K, M. To easily remember this scale, the expression 'Oh, Be A Fine Girl: Kiss Me' was then coined*

Room: **Theresia Oedl-Wieser**

FRI42: Creating an e-gateway to gender and science resources for research, policy and action – GenPORT (Workshop)

ALEXANDRA BITUSIKOVA

LIISA HUSU

RACHEL PALMÉN

This workshop introduces the ongoing process of building an extensive European webportal for pooling and sharing resources on gender and science for the purposes of research, policy and action. The portal will be the result of the GenPORT project that is funded by the EU FP7 Science and Society area (2013-2016) (<http://genport.uoc.edu/>). The portal aims to serve a broad group of science, technology and innovation stakeholders (science here understood in its broadest sense, including humanities and social sciences) interested in gender and science issues, and gender equality promotion in science and the scientific community, in Europe and beyond. In the workshop we present the first version of the portal's needs assessment conducted among gender equality and science policy makers. We also invite conference participants and gender and science stakeholders to discuss their expectations for the portal, and give direct feedback and suggestions on the contents and functions they would like to see in it. In the workshop and the conference more generally, there will also be an opportunity to give feedback on specific resources and types of resources that should be included in the portal. GenPORT is coordinated by Universitat Oberta de Catalunya, Spain, and the other partners are: GESIS, Germany; Fondazione Giacomo Brodolini, Italy; Portia, UK; Univerzita Mateja Bela, Slovakia; and Örebro University, Sweden.

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