



Female Empowerment in Science and Technology Academia

## APPENDICES 1-3

### FESTA TOOLKIT WP3.2



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### Towards Raising Organizational Awareness

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## APPENDIX 1 – INSTITUTIONAL CONTEXT ELABORATED

The four WP3.2 partners come from four different countries and from different institutional contexts, both in terms of what is at stake on the national levels, what the organizational context prescribes and delineates, and where the FESTA-team is situated and can work from and with. Understanding these relative differences is important in assessing our individual points of departure for the FESTA tasks and objectives, and also the way they ultimately are put into practice.

Appendix 1 provides elaborated insight into organizational structure and decision making, funding, teaching and research, employment, hiring and promotion, advertisement and appointment, and gender structure at each of the four different WP3.2 partner organizations.

## INSTITUTIONAL CONTEXT UPPSALA UNIVERSITY (UU)

The FESTA project team at Uppsala University is situated in the Equal Opportunities Office, which is part of the Human Resources Division at the University Administration. The Equal Opportunities Office is an administrative unit under the central Equal Opportunities Council. Besides investigating appeals, informing university staff, and coordinating equality work done by departments, it largely works proactively, giving seminars about equality in different areas of academic work. The FESTA project is a cooperation between the Equal Opportunities Office and the Faculty of Science and Technology.

The FESTA team is represented by:

- FESTA coordinator, task leader for task WP 5.2.: Minna Salminen-Karlsson, associate professor in sociology, researcher at Centre for Gender Research and gender equality specialist at Human Resources Division, Equal Opportunities Office.
- Coordinator for all tasks at Uppsala University: Nina Almgren, PhD in history and gender equality specialist at Human Resources Division, Equal Opportunities Office.
- Internal expert: Elisabeth Larsson, associate professor in scientific computing, senior lecturer at Department of Information Technology, Division of Scientific Computing.
- Team member task WP3.2: Louise Kennerberg, analyst at Human Resources Division, who has developed the gender equality indicators at Uppsala University before FESTA.
- Team member task WP6.2: Ulrike Schnaas, educational developer at Planning Division, Quality Enhancement and Academic Teaching and Learning, Development of teaching and learning.
- Team member task WP6.1: Fredrik Molin, PhD in Business Studies and researcher at IPF (Institutet för personal- och företagsutveckling).

The description of the structure and governance below covers Uppsala University as a whole and not solely the Faculty of Science and Technology or the departments, which have chosen to participate in the FESTA project. This is in order to be able to make a comparison of context between partners.

## ORGANIZATIONAL STRUCTURE AND GOVERNANCE OF UU

### ORGANIZATION STRUCTURE AND DECISION MAKING

Uppsala University is a government-funded higher education and research institution. It is located on several campus areas in Uppsala and from July 1<sup>st</sup> 2013, Uppsala University has incorporated Gotland University College, and has now also a campus at a distance.

Uppsala University consists of three disciplinary domains: Science and Technology, Medicine and Pharmacy and Humanities and Social Sciences, which in turn are divided in faculties, numbering nine in total. Uppsala University has around 4 500 academic staff and 1 500 support staff, including units like the University Library. The university has about 40 000 students.

The Swedish government governs the universities by a yearly letter of regulation, which gives general goals and orientations. Uppsala University is governed by the University Board. The University Board oversees all Uppsala University business and is responsible for ensuring that its assignments are executed. The Board is an overall planning and controlling body. The university has an Internal Audit directly accountable to the University Board. The majority of the members of the University Board are non-academics and they are directly nominated by the Swedish Government. In addition, the board includes representatives of staff and students.

The Vice-Chancellor is the head of the university as a public authority and the operative manager. The Vice-Chancellor is appointed by the Swedish government. The Vice-Chancellor has a deputy – titled Deputy Vice-Chancellor – who serves in the Vice-Chancellor’s place when he or she is not on duty and who otherwise substitutes for the Vice-Chancellor to an extent determined by the Vice-Chancellor. The Vice-Chancellor’s decisions are normally made at special meetings in the presence of the Deputy Vice-Chancellor, the University Director, and student representatives. The University Director is the head of the administrative support organisation of the university.

The Disciplinary Domain Board is the decision-making body of the disciplinary domain. The majority of the members of the Disciplinary Domain Board are individuals with academic competence. The chair of the Disciplinary Domain Board is titled the Vice-Rector. Disciplinary domains are organized in faculties with the faculty boards, and departments with the department boards.

Students and PhD students have the right to be represented in all of the university’s decision-making and investigative bodies.

#### **FUNDING**

The Board confirms the university’s budget, including the distribution of the collective resources and the principles governing the use of resources. The university’s budget is affirmed in the Swedish state budget by the parliament. About 65% of the university budget is directly financed by the government, approximately 30% for teaching and 35% for research activities. 35% of the university budget comes from external funding secured in competition, either

governmental or EU research funding or cooperation with private financiers, for example collaboration with industry. Funding for teaching is mainly based on the number of enrolled and graduated students, and adjusted according to discipline. The government sets yearly limitations for the maximum number of students that will be financed. The university may receive subsidies and donations and join partnerships with private organizations concerning both research and teaching. The financial turn-over of Uppsala University is around 583 Million Euros.

Higher education in Sweden is free for students from the EU/EEA and for students participating in exchange programmes. Students from other countries must pay tuition fees. A number of scholarships and grants are available. State funds may not be used for scholarships for PhD students, because of the general rule that a PhD position is regular employment. Yet, a number of PhD students work on scholarship at the early stages of their careers.

#### **TEACHING AND RESEARCH**

The government decides which academic areas the university is allowed to give courses and programmes. The Higher Education Authority (under the Ministry of Education and Research) has to approve the programme plan and give the university the right to examine students from that programme. The universities are free to determine their own examination and grading practices.

#### **EMPLOYMENT, HIRING AND PROMOTION**

The Appointment Regulations determine, under the Higher Education Ordinance, what teaching positions may exist at the university as well as the university's work with recruitment and promotion of teachers.

According to the Higher Education Act there has to be professors and senior lecturers at every higher education institution. Beyond this, each higher education institution decides the categories of teachers. Uppsala University has professors, visiting professors, adjunct professors, senior lecturers, associate senior lecturers, postdoctoral research fellows, lecturers, adjunct senior lecturers and adjunct lecturers.

The Appointment Regulations constitute the pan-University point of departure for recruiting and promoting teachers. They have been complemented and adapted to local needs within disciplinary domains and faculties by local guidelines. The academic career path comprises associate senior lecturers, senior lecturers and professors. Additionally, there are postdoctoral research fellows, whose posts have the objective of obtaining qualifications. Alongside the possibility of being appointed without having had any previous teaching position at Uppsala



University, it is also possible to be promoted from one teaching position to another within the academic career path.

The general employment rules in Sweden require any temporary position which has been held by the same individual to be transformed to a permanent position after two years. However, PhD and post-doctoral fellow positions are exempted.

The departments define the specific job content and specify the tasks in the individual advertisements.

#### **Positions not requiring a PhD:**

*PhD student:* A fixed term position, normally consisting of four years of PhD studies interspersed with one year of teaching and/or administrative duties. It is also possible to hold the position for two years and finish with a licentiate rather than a doctoral degree.

*Lecturer:* A teaching position which does not require a PhD. Often temporary, but can be permanent. This position is used by departments to manage a teaching load normally (but not always) on early courses. For some people this is a position keeping them in the academia until they get into PhD education, for some, though few, it becomes a permanent position. The departments are expected to use this employment category very restrictively.

*Adjunct junior lecturer:* A person who brings special competence to the university, but whose main employment is outside the university. Fixed term position.

#### **Fixed term career building positions requiring a PhD:**

*Post-doctoral position:* One to two years. Normally including exchange between universities (i.e., post-docs at Uppsala University normally have done their PhD at another university, often abroad).

*Post-doctoral research fellow:* A fixed term position up to four years. Consists mainly of research, but also of teaching and administration.

*Associate senior lecturer:* A fixed term position up to four years. Consists mainly of research, also of teaching and administration.

The main difference between post-doctoral research fellow and associate senior lecturer is in the career track options. The position of post-doctoral research fellow is truly fixed-term, that is, at the end of the period the person has to apply for positions. An associate senior lecturer position can be transformed to a permanent senior lecturer position, after an evaluation of the person's achievements. It is not possible to be re-appointed to any of the two positions after

the fixed four-year period is over. Nor can the same person have both a post-doctoral research fellow position and an associate senior lecturer position in sequence. The different disciplinary domains favor these two alternatives differently. Associate senior lecturership is the predominant form at the Faculty of Science and Technology.

**Positions at the level of senior lecturer:**

*Senior lecturer:* Permanent position including both teaching and research. However, time for research in the position itself is scarce (10-20%), so the individual needs to secure additional funds to exchange teaching for research.

*Researcher:* Temporary position for, normally, working in (or leading) particular research projects, to which the position is tied. A common form of employment for both junior and senior researchers when a department is not in need for more teaching staff. The researcher may either bring in a researcher project, or be employed in someone else's project. The position may also involve teaching, if the department has temporary teaching needs.

*Reader:* Rather a degree than a position. Both senior lecturers and researchers (in rare cases even younger academics) can reach the degree of reader which is a prerequisite for becoming a professor.

*Adjunct senior lecturer:* A person who brings in particular competence to the university, but whose main employment is outside the university. Fixed term position.

Applicants for a position of senior lecturer are assessed on the basis of the qualifications stipulated in the job advertisement. The appointment as senior lecturer depends on both research and teaching qualifications. However, research qualifications are normally given more weight. The applicant is expected to have a qualification course in university pedagogy, if not, the employment is conditioned so that s/he is required to get that qualification during the first year of employment. Applicants from outside Sweden are expected to be able to teach in Swedish after two years. The applicants for senior lecturer positions at Uppsala University often have excellent qualifications, for example, having held a professorship somewhere else.

**Positions at the level of professor:**

*Professor:* There are two types of professor positions. Either the position is announced as a professor position, or the position is announced as a senior lecturer position, and the applicant desires to be proved and declared as 'professor competent'. If an applicant is declared to be professor competent, the position is transformed to a professor position. In general, resources for research tend to be better for the positions that originally were designed as professor positions, but institutional statistics make no difference between

professors who have reached their positions in these two different ways. Both types are permanent positions.

*Adjunct professor:* A person who brings in particular competence to the university, but whose main employment is outside the university. Fixed term position.

**Advertisement and appointment:**

All permanent positions have to be advertised. A position has to be described in a gender neutral manner. It is possible to use search committees, but in case this is done, the committee has to be gender balanced and recommend both female and male applicants. The advertising has to be done in a suitable way and it is mandatory to publish it on the university webpage. The time for application has to be at least two weeks. Temporary appointments up to one year need not be advertised.

For the positions of assistant senior lecturer, senior lecturer and professor, two peer reviewers from other universities have to be engaged, for the position of post-doctoral research fellow one peer reviewer. The two reviewers have to represent both genders, unless there are particular reasons (which have to be explained in writing). The department in question suggests reviewers, which are appointed by the faculty. The peer reviewers have to make a ranking of the applicants, though two applicants are allowed to have the same ranking when their merits are equal.

In particular cases the Vice-Chancellor may appoint a professor without the ordinary advertisement and competition. This procedure is expected to be used very restrictively and can be appealed in the Higher Education Appeals Board.

The appointment decisions are made by the appointment committees, which operate on faculty basis. The committees have to be gender balanced.

The Domain of Science and Technology uses a standard form for the peer reviewers, to be sure that all candidates will be evaluated for all the relevant aspects. In addition to the peer reviews, interviews and trial lectures are used. The decision has to be based on both scientific and teaching merits and what else has been stated as requirements in the job advertisement. The head of the department where the position is placed has a right to speak in the final meeting of the committee, but is not part of the decision. The decisions are normally based on consensus, even if a member has the possibility to file for dissent. For lecturers, the faculty board confirms the decision of the committee, for professors the rector confirms. All material, including the peer reviews and the minutes from the meeting are public. All appointments can be appealed in the Higher Education Appeals Board.

## GENDER STRUCTURE

The university's gender equality work is designed to meet the requirements established by the university, the Swedish State and society at large, as provided for in the Swedish Discrimination Act and other relevant laws, ordinances and internal rules and guidelines. Gender equality work must be integrated into all activities at Uppsala University.

### Organization of work

Overall responsibility for ensuring that equality issues are addressed in goal-directed fashion rests with the University Board and the Vice-Chancellor. Operational responsibility rests with the chair-persons of the faculty boards, the heads of department and all other leadership and management personnel at the university. The work in question shall involve cooperation among employers and employees and between the university and students. Special university-wide support functions serves to support a systematic approach to equality issues on the part of faculties, departments and other organizational units. A number of the university's research milieus represent valuable resources in this connection.

*The Council for Equal Opportunities* serves the Vice-Chancellor in an advisory capacity with regard to the long-term approach to equality issues in connection with the university's core undertakings of research, education and cooperation. This council comprises representatives from the relevant organisational units at the university and students representing the first-, second- and third-cycle programme levels. The Council for Equal Opportunities is concerned with discrimination based on sex, sexual orientation, gender identity and/or expression, ethnicity, religion or other belief, disability, age and social background. The Vice-Chancellor's advisor with regard to equality issues serves as the council's chairperson.

*The Equal Opportunities Office* at the Human Resources Division is responsible for fostering, coordinating, highlighting and complementing efforts at the various departments and faculties. It is an administrative unit under the Council for Equal Opportunities and consists of five people (three working with gender equality). The unit pursues its objectives in close cooperation with officials at the Student Affairs and Academic Registry Division, the Buildings Division and the Division for Communication and External Relations. The FESTA project is a cooperation between the unit and the Faculty of Science and Technology.

For local gender equality work, each department/equivalent must appoint a gender equality group and a gender equality officer. Both employees and students must be represented in this gender equality group. Similarly, faculty boards are recommended to establish special bodies to deal with gender equality matters (Faculty gender equality committees). The Faculty of Science and Technology has one such committee.

### *Gender equality plans and follow-up*

The university's gender equality work is conducted in accordance with the three-year gender equality plans established under Ch. 3 Sec. 13 of the Discrimination Act at the pan-university level, the disciplinary domain/faculty level, and department/equivalent level if at least 25 people are employed. These plans must contain goals that can be followed up and directives for time-specific, concrete measures including a clear assignment of responsibility.

Gender equality plans at various levels must harmonize in such a way that plans established at the disciplinary domain/faculty level are based on the pan-university plan and that departmental plans are grounded in both the pan-university plan and that of the respective disciplinary domain/faculty.

Pursuant to the Discrimination Act (2008:567) employers must engage in goal-directed work within the framework of their operations to promote equal rights and opportunities in working life without regard to gender.

Targets prioritized for the three-year period must be achieved as a result of the measures implemented during the period. The focus is therefore on annual quantitative and qualitative evaluations. At the end of the three-year period, the Council for Equal Opportunities submits a comprehensive report regarding target fulfilment to the Vice-Chancellor.

The officer in charge of each respective measure must present a report within the framework of the regular follow-up of activities. This applies to measures in all gender equality plans throughout the university, that is, at pan-university, disciplinary domain/faculty, and department/equivalent levels. Reports from assignments and measures must be included in the follow-up of activities in a manner that makes them readily identifiable and serviceable as a basis for analysis of target fulfilment.

Target fulfilment must be reviewed at the end of each year of activity. This applies to all gender equality plans throughout the organization. The responsibility for this review lies with the individual(s) charged with establishing the respective plans.

Gender equality indicators are designed to be used in this goal-driven work so that areas for improvement can be detected and impact of measures can be evaluated. They address ten areas: gender balance in leadership positions, gender balance in different positions, employment conditions (temporary, part-time), parental leave and sick leave for male and female employees, for PhD students their financing, degree of (research) activity and gender balance in degrees achieved, for students gender balance in enrolment and in degrees achieved.

The areas have been chosen on the consideration that they should be possible to extract from existing databases with no additional work required.

#### *Areas of work*

**Decision making bodies:** All important decision-making and preparatory bodies must have equal (in the range 40%-60%) representation of both women and men. Any deviation from this rule must in general be explained in writing. When putting forward candidates for positions, committees etc., both women and men have to be represented.

**Parental policy:** Employees of both genders are encouraged to take parental leave. The university supplements the refunds of the social security system (80% of salary) with additional 10%. In evaluating individuals, time for parental leave has to be subtracted from academic age. Combining work and family has to be facilitated. For example, no meetings or teaching is to be scheduled outside office hours and students should know their schedules well in advance.

**Recruitment:** Positions have to be described in gender neutral terms in advertisements. Female candidates in male dominated areas have to be paid particular attention to and search committees have to look for candidates of both genders. If two candidates have equal or almost equal merits, the one representing the minority gender is to be selected.

**Gender neutral salaries:** Salaries are examined every three years to discover and correct gendered differences in occupational groups doing the same or equal work.

**Information:** Information of Uppsala University's gender equality policy or more specific gender equality issues is given by personnel from the equal opportunities unit to all new employees during their 'introduction days', and to departments and faculties on request. In the university teacher and supervisory training gender issues in teaching are discussed.

**Harassment:** There is a procedure for managing cases of sexual harassment among staff and students.

**'Power package for gender equality':** Supplementing its ordinary gender equality work, in 2008 Uppsala University presented its 'power package for gender equality', with two aims: to increase the percentage of female professors and to increase the number of women in academic leading positions. The measures have included leadership training for women, special grants for women who take on leadership positions to compensate for loss of research time, special research grants for women close to professor competence and economic incentives for male dominated departments to recruit women.

### **Gender equality work at Faculty of Science and Technology**

In addition to the general university measures, the Faculty of Science and Technology has implemented some measures of its own. The faculty gives economic rewards to departments that recruit women for permanent or tenure track positions. The fixed term appointments of PhD students are not only lengthened with the duration of parental leave taken, but with three months extra to allow them time to get on track again. The faculty supports a mentoring program for female PhDs and female networks. In addition there are single measures, such as supporting a summer school for female PhD students in physics.

The Faculty Committee for Equal Opportunities requires reports from the departments about their equality work. An increasing percentage, presently around 50% of the people responsible for gender equality at department level, get some remuneration from the department for their work

### **WORKING CONDITIONS FROM A GENDER PERSPECTIVE**

Uppsala University is a large university and the disciplinary cultures and working cultures vary greatly between the disciplinary domains. Even the Faculty of Science and Technology with its 15 departments and 1 800 employees comprises a number of different research environments. The differences are due to different ways of doing research (from lab groups in biology to much more solitary research in mathematics), different department heads (who sometimes have significant influence, sometimes less so), different ways of organizing, different economic situations etc. In general the departments at the Faculty of Science and Technology are in a good financial situation and attract dedicated researchers from around the world. More than one third of the academic staff in the faculty comes from outside Sweden.

As for gender in the working environment the departments also vary. Investigations have been made in PhD students' experiences of their working environment at three departments. The results have not been statistically significant, but they indicate that male PhD students get more encouragement and are happier with their colleagues, their research groups and supervisors. More female than male students experience that they get particular tasks because of their gender and that their competence is questioned for the same reason. Female PhD students in general see problems with gender equality in their environment that male PhD students do not report, and say that men have more influence than women at their departments.

Similar investigations have not been made into the conditions of more senior employees. The PhD students (women more than men) who prefer a non-academic career after their degree point at the competitiveness and unsecure financing as the main problems in the academy. This is certainly the case at the faculty, where half of the research budget consists of external

funds. On university level, teaching is stressed as important and the demands increase with more diverse student groups, making it necessary to find a balance.

Most research groups are led by male professors, though there are a number of female and also young female research leaders. Through the work conducted in FESTA we have encountered both groups with women in early career positions, who are not interested in staying in the environment but rather aspire for a position somewhere else, as well as research groups which actually manage to attract women because of the female friendly working environment they provide.



## INSTITUTIONAL CONTEXT UNIVERSITY OF SOUTHERN DENMARK (SDU)

The FESTA project is not a project of SDU as such but strictly a faculty concern and will only gradually become a formal SDU-project at the widest level.

The FESTA project team at SDU is situated at the Faculty of Science, which is one of five faculties at the university. At the faculty level we have access to our departments and the possibility to make distinctive management decisions for our faculty, but not for the whole university. However, we can approach the university level indirectly through the Vice-Chancellor's Gender Equality Board (GEB).

The FESTA team is represented by:

- Project Manager: Eva Sophia Myers, Head of Dean's Office /Faculty Administration
- Task leader WP3.2, WP6.1 and WP6.2: Liv Baisner, academic administrative officer and representative in the GEB and Faculty Equality Board
- Task leader WP2: Gitte Toftgaard Jørgensen, academic administrative officer
- SDU FESTA Steering Committee:
  - Professor Henrik Pedersen, Dean of The Faculty of Science
  - Professor Marianne Holmer, Head of Department of Biology
  - Professor Nina Dietz Legind, Chair of GEB
  - Chief Consultant Jakob Ejersbo, Head of unit for organizational and personal development
- External supervision: Gender expertise, statistical expertise

The description of the relative autonomy below covers all of SDU and not just the Faculty of Science. This is in order to be able to make a comparison of context between partners.

## ORGANIZATIONAL STRUCTURE AND GOVERNANCE OF SDU

### ORGANIZATION STRUCTURE AND DECISION MAKING

SDU is a government-funded, independent institution within the public administration under the Minister for Science, Technology and Innovation. The university has to follow laws and regulations regarding university staff and institutional affairs.

SDU is a comprehensive university with both research and teaching at all levels. It has five campuses and was the first Danish university with decentralised campus structure. SDU was established in 1966.

Research, teaching, communication and the transfer of knowledge at SDU are grouped into five academic faculties:

- The Faculty of Humanities
- The Faculty of Science
- The Faculty of Business and Social Sciences
- The Faculty of Health Sciences
- The Faculty of Engineering

The faculties are supported by:

- The University Library of Southern Denmark, which provides relevant information for researchers, teachers and students at SDU. In addition to library services for SDU staff and students, the library also provides services for other interested external users, the business community and other libraries
- Joint services, which consists of all the administrative and service units that support the academic environments

The supreme authority at the university is held by the University Board (UB), which is responsible to the Minister for Science, Technology and Innovation for the activities and overall resources of the university. The University Board looks after the university's interests as an educational and research institution and establishes guidelines for its organization, long-term future and development. The UB enters into development contracts for periods of three years with the Minister for Science, Technology and Innovation, and formulates the mission and vision of SDU. The UB appoints the Vice-Chancellor, and, on the recommendation of the Vice-Chancellor, also appoints a Pro-Vice-Chancellor and a University Director.

The UB consists of nine members, of whom five are external members from private industries, two are students, one is a member of the scientific staff, and one a member of the administrative staff.

The Board of Representatives acts as the university's liaison with partners, the business community, the public sector and cultural institutions – regionally, nationally and internationally. The Board of Representatives consists of 42 members, who, under the terms of the statutes, will observe the activities of the university and be kept informed about matters affecting the university. The Board of Representatives discusses the university's research, courses and other activities on an overall level and can submit remarks on these areas to the UB. The Chairman and Vice-Chairman of the Board of Representatives are members of the joint committee, that

appoints the external members of the UB. The Board of Representatives meets three times per year.

Day-to-day management of the university is handled by the Vice-Chancellor within the framework established by the UB. The UB, the Board of Representatives and the day-to-day management are supported by the Management Secretariat.

The Pro-Vice-Chancellor assists the Vice-Chancellor in the day-to-day management as agreed with the Vice-Chancellor. The University Director is, on the authority of the Vice-Chancellor, head of the university's administrative functions and handles legality control.

The Vice-Chancellor is assisted in the day-to-day management by the Executive Board (EB). The Executive Board consists of the Vice-Chancellor, the Pro-Vice-Chancellor, the University Director, the five Deans and other management representatives selected by the Vice-Chancellor. The Vice-Chancellor is the chairman of the EB. The EB holds around 13-15 meetings per year. The rest of the university management, i.e., Heads of Department and Heads of Studies, perform their duties on the authority of the Vice-Chancellor.

SDU, with campuses in six cities, covers a wide range of academic competences and activities distributed across the five faculties.

## **FUNDING**

The UB must administer the funds of the university in a way that best promotes the university's objectives. Following recommendations from the Vice-Chancellor, the UB approves the university's budget, including the distribution of the collective resources and the principles governing the use of resources, and signs the financial statements.

The Minister of Higher Education and Science provides subsidies for the university's teaching, research and dissemination activities and other assignments allocated to the university. The margin for subsidies for research and dissemination activities and other assignments allocated to the university is laid down in the annual Central Government budget bill. Following negotiations with the Minister of Finance, the Minister of Higher Education and Science may lay down rules governing subsidies for the universities' activities, governing which students trigger subsidies and on the calculation of the number of active student FTE. The university may receive other subsidies and donations than those defined by the Appropriation Acts. The university may undertake income-generating and grant-financed activities. Higher education in Denmark is free for students from the EU/EEA and for students participating in exchange programmes. All other students must pay tuition fees. The tuition

depends on citizenship, type of residence permit to Denmark, and the choice of studies. The university may claim a deposit from certain foreign applicants for processing their application for admission to a programme if their qualifying examination is not Danish.

A number of scholarships and grants are available from the institutions and from public funded schemes. The university may grant full or partial scholarships to select foreign students. The margin for scholarships and grants is laid down in the annual Appropriation Act. In addition the university is entitled to use surplus accumulated to grant additional scholarships or grants. The Minister of Higher Education and Science lays down rules governing the administration of scholarships and grants.

Within the above scope, the university disposes freely of subsidies, income and capital collectively.

The annual income of SDU (2012) is 351 mio €, out of which approximately 30% is external research funding from private or public funds and EU (that is, approximately 50% of research is externally funded).

#### **TEACHING AND RESEARCH**

The university determines which research-based programmes to offer within its academic fields. The programmes must be approved by the Accreditation Council (cf the Act on the Accreditation Agency for Higher Education). The Minister of Higher Education and Science lays down general rules governing programmes, including tests, examinations and grading.

#### **EMPLOYMENT, HIRING AND PROMOTION**

The university follows the rules laid down or agreed with the Minister of Finance concerning salary and employment terms, including pensions, for the university's staff. The university is also obliged to follow the rules laid down or agreed with the Minister of Finance concerning separate remuneration. SDU staff, who are employed in scientific positions, are subject to the regulations for scientific employees at universities. Below is listed the standard positions in the job structure for scientific staff, according to the Memorandum on job structure for academic staff at the universities. The job structure provides the framework for the positions. The university management defines the specific job content and specifies the tasks in the individual advertisements.

**Positions below the level of assistant professor:**

- PhD Fellow* The position of a PhD Fellow is a fixed-term education position. In Denmark (as in Sweden), PhD posts are employment-positions.
- Research assistant:* The position of a research assistant is a fixed-term academic position. The principal duties are research and/or teaching. The position is held for a maximum of three years. Reappointment is not possible. Applicants for the post of a research assistant must have a Masters degree.
- Assistant Lecturer:* The position of an assistant lecturer is a part-time position that carries out teaching activities. The position can be held for a maximum of three years. Reappointment is possible to the extent this is in accordance with the Fixed-Term Employment Act. Applicants for the position of an assistant lecturer must have a Masters degree.
- Part-time Lecturer:* The position of a part-time lecturer is a part-time position with main emphasis on the performance of qualified teaching duties. Both permanent and fixed-term employment is possible. Applicants for the position of an assistant lecturer must have a Masters degree as well as additional qualifications at high level.

**Positions at the level of assistant professor:**

- Assistant professor:* An assistant professorship is a further-education position. The main responsibilities are research (including publications/academic dissemination duties) and research-based teaching. Supervision is provided as well as the opportunity to enhance pedagogical competencies with a view to a written assessment of the assistant professor's teaching qualifications.
- Post-doctoral research fellow:* The position of a post-doc is a fixed-term academic position for up to a maximum of 4 years. Normally, the position will be weighted in favour of research. The position contains no enhancement of pedagogical competences. The post may therefore not alone qualify for appointment as associate professor/senior researcher.
- Researcher:* The position of a researcher is a further-education position. The main responsibilities are research (including publication/academic dissemination duties) and research-based Public Sector Consultancy. In addition, a certain amount of teaching may also be required. Supervision is provided as well as the opportunity to enhance pedagogical competencies with a view to a written assessment of the assistant professor's teaching qualifications.

Applicants for the post of assistant professor/post-doc/researcher must hold academic qualifications at PhD level. The post as assistant professor/post-doc/researcher may take the form of a fixed-term post held for a maximum of 4 years or a permanent post as part of which the employee after a maximum of four years transfer to a position of associate professor/senior researcher.

The university decides whether a position should be advertised as a fixed-term post or permanent post. Transfer to permanent employment requires no job advertisement. The reappointment of an employee in a fixed-term position is possible. However, appointment at the level of assistant professor may not exceed eight years, of which a maximum of six years as a fixed-term employee at the same institution. After six years as a fixed-term employee at the same institution, the employee leaves the post unless permanent appointment is obtained.

**Positions at the level of associate professor:**

*Associate professor:* The associate professorship consists mainly of research (including publication/academic dissemination duties) and research-based teaching. Associate professors may be asked to manage research, provide guidance and supervision of assistant professors and researchers as well as take part in academic assessments.

*Senior researcher:* The post of a senior researcher consists mainly of research (including publication/academic dissemination duties) and research based Public Sector Consultancy. In addition, a smaller amount of teaching obligations may be required. Senior researchers may be asked to manage research, provide guidance and supervision of assistant professors and researchers as well as take part in academic assessments.

Applicants for a position of associate professor/senior researcher are assessed on the basis of the qualifications stipulated in the job advertisement. Appointment as associate professor/senior researcher depends on research qualifications at the level that can be achieved by satisfactory completing a period of employment as an assistant professor/researcher/post-doc, but may also be obtained in other ways. It is assumed that applicants have received supervision and enhancement of pedagogical competencies and have received a positive written assessment of their teaching qualifications. The post of associate professor/senior researcher normally takes the form of permanent appointment, but may also be fixed-term.

**Positions at the level of professor:**

*Professor:* The professorship consists mainly of research (including publication/academic dissemination duties) and research-based teaching. Moreover research-based Public Sector Consultancy may be required.

Furthermore, professors may be asked to manage research, provide guidance and supervision of assistant professors and researchers as well as take part in academic assessments.

Applicants for a position of professor are assessed on the basis of the qualifications stipulated in the job advertisement, but must also be able to document a high degree of original academic production at international level, which documents that the applicant has contributed to developing the academic discipline. Emphasis must also be placed on assessment of the applicant's ability to manage research and any other management function.

*Professor with Special*

*Responsibilities:* The post of professor with special responsibilities involves fixed-term specific functions as well as duties that are otherwise associated with professorship. The special responsibilities may last three to five years with an option of a further extension, which means that total employment represents a maximum of eight years. Normally the positions are established with the view to appointing particularly talented, preferably young researchers to develop a promising discipline at international level.

*Adjunct professor:* A person who brings in particular competence to the university, but whose main employment is outside the university. Fixed term position.

**Advertisement and appointment:**

Positions at professor and associate professor level must be advertised internationally. The university lays down rules on the academic assessment of applicants in connection with appointments to academic positions. The Vice-Chancellor may decide to offer a candidate a position at professor or associate professor level without advertising the position if there is a particularly well qualified candidate for the position who, in an academic assessment, is found to be clearly better qualified than any others who might be considered for the position if it is advertised under the normal procedure.

If foundations, councils or non-governmental grant givers have made at least half the funding available for the appointment of a person nominated by the grant givers in question, the Vice-Chancellor may appoint this person without advertising the position, but only if there is a positive academic assessment.

Fixed-term appointment for a period of up to one year – or for up to two years for foreign employees at professor or associate professor level – and reappointment for up to one year

may take place without advertising, provided that the member of staff in question is assessed as academically qualified for the position.

The procedure for academic assessment follows the Ministerial Order on the Appointment of Academic Staff at Universities no 242 of 13 March 2012 (Ministry of Higher Education and Science), Conditions of employment 2007 for academic staff at universities, ref. memo of the University and Building Committee of 13 June 2007. Assessment is performed by assessment committees in accordance with the relevant job advertisement. The assessment committees must, as far as possible, be composed of an even number of members, of which the majority must be external to the SDU. An internal SDU rule stipulates that the assessment committee must have a mixed gender composition. Dispensation from this rule can only be given by the Dean.

According to the provisions for appointments Section 4, Subsection 2, the task of the assessment committee is to decide whether the applicants possess the academic qualifications in research, teaching, presentation etc. that are required in the conditions of employment and whether they meet the remainder of the academic qualifications stated in the advertisement. The assessment should be expressed in such a way that it presents both a factual and a comprehensive basis for a decision by management.

SDU uses an online recruitment system SDUjob – e-recruitment, and the submission of assessments of applicants for academic positions must be made in this assessment portal. It is the responsibility of the chairman of the committee to type up the individual assessment and to give the final collective assessment of “qualified” or “not qualified”. The individual members of the assessment committee must separately for each individual candidate give an assessment of “qualified” or “not qualified”. This assessment will consequently form the basis for whether the overall assessment of the given candidate is unanimous or based on a majority vote.

The assessment committee must not make a prioritized list of the qualified applicants – not even as an informal advice. The assessment is solely an academic assessment of whether the applicant is qualified for the position in question or not based on the requirements of the conditions of employment and the individual announcement.

Pursuant to 13(1) of the Consolidation Act no. 695 of 22 June 2011 on Universities (The University Act), the Statute for SDU stipulates that scientific appointments are the Dean’s responsibility, as delegated by the Vice-Chancellor. They take place by an appointment committee, chaired by the Dean and with the Head of Department and Chairman of the assessment committee as given members. The Dean may call upon other members of the appointment committees. The basis for the task of the appointment committee is the



unprioritized list of qualified candidates prepared by the assessment committee and interviews. For assistant, associate and full professor positions, the interviews can be supplemented by lectures and presentations.

### **GENDER STRUCTURE**

The gender equality work at SDU is rooted in the Development Contract for 2012-14 signed with the Ministry of Science, Innovation and Higher Education and the Gender Equality (Consolidation) Act No. 1678 of December 19<sup>th</sup> 2013<sup>1</sup> from the Ministry of Gender Equality and Ecclesiastical Affairs. The gender equality work is defined and elaborated in activities to meet the targets in the Gender Equality Action Plan 2014-2015.

The EB is responsible for the overall development and implementation of work on gender equality at SDU. The Vice-Chancellor's Central Gender Equality Board (GEB) has the operational responsibility and initiates appropriate actions following the Executive Board's approval.

In addition to the defined goals with the Ministry of Gender Equality and Ecclesiastical Affairs and the approved action plans for the GEB, SDU's EB decided in 2013 that each faculty must have their own gender equality board in order to carry out the gender initiatives at the faculties and meet the targets set by the Ministry of Higher Education and Science in the University Contract.

Due to the Act to amend the Gender Equality (Consolidation) Act No. 1288 of December 19<sup>th</sup> 2012, SDU – as all other Danish universities – has to set targets in order to ensure a balanced gender distribution among the upper collective governing body of the university (at SDU the

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<sup>1</sup> The Equality Act, Consolidation Act No. 1678 of 19.12.2013

The Act on equality between women and men is intended to promote equality between women and men, including equal integration, equal influence and equal opportunities in every aspect of society on the basis of women's and men's equal worth. This law is also intended to prevent direct and indirect discrimination on grounds of gender and to prevent harassment and sexual harassment. According to the law, the university has to work for equality and incorporate gender equality in all planning and management. Since 2013, the university has to prepare a report on gender equality every two years by September 1<sup>st</sup>. The report must include information on whether the university has formulated a policy of equal opportunities and, where applicable, the details of this policy. Moreover, the report must include the gender distribution in relation to the different job categories and other factors relevant to assessing the university's corporate action on equality. The Minister for Higher Education and Science processes the submitted reports and submit by November 1<sup>st</sup> of the year in which such reports are prepared, a comprehensive report attached to the individual submissions to the Minister for Gender Equality. The Minister for Gender Equality writes each year before March 1<sup>st</sup> write a report and a perspective and action plan for gender equality to the Danish parliament.

upper collective governing body is the UB) and develop policies to increase the number of the underrepresented sex on the other levels of management. This part of the amendment took effect on April 1<sup>st</sup> 2013. The overall objective of the gender distribution of the UB at SDU is 40/60.

The targets prioritized by the Ministry for Higher Education and Science for a given period must be evaluated and target fulfillment reviewed each year and the focus is therefore on annual quantitative and qualitative evaluations. The faculty equality boards and the GEB have to report their activities to the EB once a year. Moreover, SDU has to report their activities and numbers to the Ministry of Gender Equality and Ecclesiastical Affairs once a year and for the first time in the spring 2014. This reporting includes, among others, statistics on gender distribution and recruitment.

According to GEB's most recent action plan, approved by the EB in December 2013, working with gender equality as SDU is important for reasons such as

- SDU aims to recruit and retain the top of the talent pool – regardless of gender;
- developing talent is crucial for the university's development and is part of the university strategy;
- a mixed gender composition among teachers and administrative staff who meet the students must reflect the gender composition of our students;
- researchers and leaders of both genders secure a broader academic focus in teaching and research;
- SDU must comply with the legislation to increase the number of the under-represented gender among leaders.

The GEB has carried out different initiatives:

- Internal supplementary maternity rights for staff categories post-doc, assistant professor, associate professor and professor approved by the EB and the Liaison Committee for the entire university; these rights consist of a period of three months without teaching commitment per six months p/maternity leave.
- Since 2010 annual career programmes for young scientists have been facilitated by the HR-unit. The programmes are intensive seven month programmes and include individual coaching sessions, two facilitated two-day seminars (with topics such as strategic career planning, competences, networking strategies, negotiation skills, communication, conflict resolution, and gender awareness, personality profile tests), and a number of shorter network- and follow-up meetings.
- Since 2011, annual management trainee programmes have been facilitated; in 2013 the programme enrolled 20 participants of which 50% were women in leadership positions at SDU.

- The Vice-Chancellor is ambassador for a national programme for more women in management and has signed the “Charter for more women in management and Science”. As part of working with this, SDU has been engaged in a mentoring programme for female leaders. The programme includes both private companies and public institutions. The programme is for female leaders from scientific as well as administrative backgrounds.
- The GEB at SDU has conducted a survey of correlations between assessment committees used in the evaluation of scientific staff consisting only of men and assessment committees with mixed gender composition and whether the gender composition of these assessment committees has implications for how men versus women are assessed qualified. It is the job of the assessment committee to assess whether an applicant is qualified for a position or not. At the Faculty of Science at SDU 50% of the assessment committees with three or more members are all-male. The GEB found that male applicants are assessed qualified with the same frequency no matter what the gender composition of the assessment committees is. That is not the case for women. If an assessment committee consists of men only, only 46% of women applicants are assessed to be qualified. However, with a mixed gender assessment committee, 67 % of the women are assessed as being qualified. This indicates that the gender composition has significant impact on women’s chances of being employed. For this reason, the EB has decided that all assessment committees with three or more members must have a mixed gender composition. Dispensation from this rule can only be given by the respective Dean.
- Based on data from 2011 regarding annual wage negotiations, the GEB has analyzed whether there are differences in how men and women are taken into account in the allocation of pay rises. No gender differences were indicated in the data, but the numbers may be too small to be significant.

Faculty of Science initiatives apart from FESTA-engagement:

- Two appointments on the basis of open job-advertisements and attractive start-up grants with the express objective to attract women. However, both appointments proved unsuccessful – the people hired under these conditions were never fully integrated into the established research groups and contexts – indeed there are indications that they were effectively excluded, and they left prematurely.
- Inclusive processes in formulating scientific and educational strategies.
- The idea-group – a counseling group for the Dean with female representatives from each of the four departments, which was in existence from 2008-2011 and whose task it was to advise on how to improve working environment and present ideas for initiatives to foster more women in science. The group also initiated an informal

women’s mentoring network, which is still in existence, as well as an annual network-lunch for women scientists at the faculty.

- A faculty fund to avoid c/overt (and illegal) pressure on young women to not become pregnant, by relieving departments and research groups/units of the extra expense in financing maternity leave imposed by the specific refund-practices of the government. This arrangement ensures that the entire expense is refunded the department – three fourths by the state and municipality, one fourth by the faculty. In cases where external funds allow for this extra financing, the departments may keep both the faculty compensation and the external funding. This practice has been adopted by the other faculties of SDU.

## INSTITUTIONAL CONTEXT RWTH AACHEN UNIVERSITY (RWTH)

### National context

Gender Equality Policy in Germany has become of growing importance over the last years. This is caused especially by the discourses about the incipient demographic change and a resulting (possible) skilled worker shortage. The OECD stated that ‘in Germany young women have higher educational attainment than young men, but gender gaps in labour market outcomes persist’ (OECD 2012: 1). The proportion of employed women is 68%, but many women, especially mothers, work part-time. At median earnings, the gender pay gap is the third largest with 22% across OECD countries; half of this pay gap is due to gender differences in working hours. Part-time employment also often curtails career progression: gender pay gaps for workers who are over 40 years of age are three times as high as for younger workers. Shorter work histories, fewer working hours and lower earnings also contribute to relatively low pensions for women. The average pension payment to women is about half of what is paid to men. This "pension gap" is the largest in the OECD (OECD 2012).

In all federal states of Germany there is a Federal States Equality Act (LGG). This law obliges all public facilities including universities to the equalisation of men and women as well as to the fostering of an active advancement of women. The implementation of this law takes place in gender equality plans, in the appointment of equal opportunity officers, and in case of an underrepresentation also in the commitment to privilege a female applicant opposed to a male applicant if the qualifications are equivalent. Beyond that, the General Equal Treatment Act (AGG) is meant to prevent any discrimination or disadvantage out of reasons of race, ethnicity, gender, religion, worldview, age or sexual identity. Therefore, persons concerned are also protected of disadvantages in non-governmental facilities and can take legal actions if necessary. Nevertheless, the increase of women on leadership positions at universities remains slow. Over the last decade the increase was about 10 percent at professorship level (from 11.9% in 2002 to 19.9% in 2011<sup>2</sup>). The proportion of female academic staff on grade A was only 15% in comparison to 20% on EU-27 level in 2010, whereas the proportion of female PhD graduates was 44 % (EU-27: 46%). (EC 2013) However, scrutinizing the broad fields of science, mathematics & computing and engineering, manufacturing & construction, then the proportions of female PhD graduates were 38% and 15% respectively.

### *Excellence Discourse*

With the launch of the German Excellence Initiative in 2007 by the Ministry of Education and Research and the Science Council the proportion of fixed term contracts has risen at universities which were successful in this competition that comprised three funding lines: Graduate Schools, Clusters of Excellence, Institutional Strategies.<sup>3</sup>

<sup>2</sup> cf. [http://www.gesis.org/cews/fileadmin/cews/www/statistiken/18\\_t.gif](http://www.gesis.org/cews/fileadmin/cews/www/statistiken/18_t.gif) [16.09.2013]

<sup>3</sup> cf. [http://www.dfg.de/en/research\\_funding/programmes/excellence\\_initiative/](http://www.dfg.de/en/research_funding/programmes/excellence_initiative/) [13.11.2013]

RWTH Aachen University is one of twelve universities in Germany that was successful in all funding lines and is therefore labelled as Excellence University. The goal of the Excellence Initiative was to foster international cutting edge research by identifying the “pikes” and make them internationally visible. Behind this concept lies a pyramid model of selecting and promoting the “best” and based on the idea of meritocratic elite: performance is to be the sole selective factor. This also based on the belief that there are objective criteria for judging performance in science. Equal opportunities are seen as formal criteria of the performance principle. Quality is to be proved in competition. This model of excellence has influenced the self understanding and culture at RWTH Aachen University.

#### **Institutional Context – FESTA Project**

The FESTA project team at the RWTH is situated at the Rectorate Staff Unit “Integration Team – Human Resources, Gender and Diversity Management” (IGaD). Establishing the Gender and Diversity Management staff unit in 2007, RWTH was the first University of Technology nationally that has created a structural framework that provides a basis for the development and implementation of a gender and diversity management strategy. IGaD supports RWTH in integrating gender and diversity aspects at different level of the university. It coordinates processes pertaining to gender and diversity and brings together relevant actors.

The central tasks of IGaD include:

- Strategy Development: IGaD defines goals and develops strategies that help to establish gender and diversity in teaching and learning as well as in central bodies and committees of the university.
- Controlling: IGaD also has the task of making visible and integrating into the university’s controlling instruments the gender and diversity-related awareness, knowledge and competencies that exist in teaching and learning, in the administration, and in the various bodies of the university.
- Consulting: With its gender and diversity expertise, IGaD is the first point of contact for all RWTH members who have questions pertaining to gender and diversity-relevant issues.
- Mentoring: Offering mentoring programs for diverse target groups, IGaD supports early career researchers and helps them with their career planning under consideration of gender and diversity aspects.
- Awareness-raising: IGaD raises awareness of gender and diversity-relevant questions and issues through conferences, events, lectures, publications, and public relations activities.
- In this way, IGaD contributes to achieving equal opportunities and diversity in the university’s organizational units and their fields of activity.
- The FESTA Team is presented by:

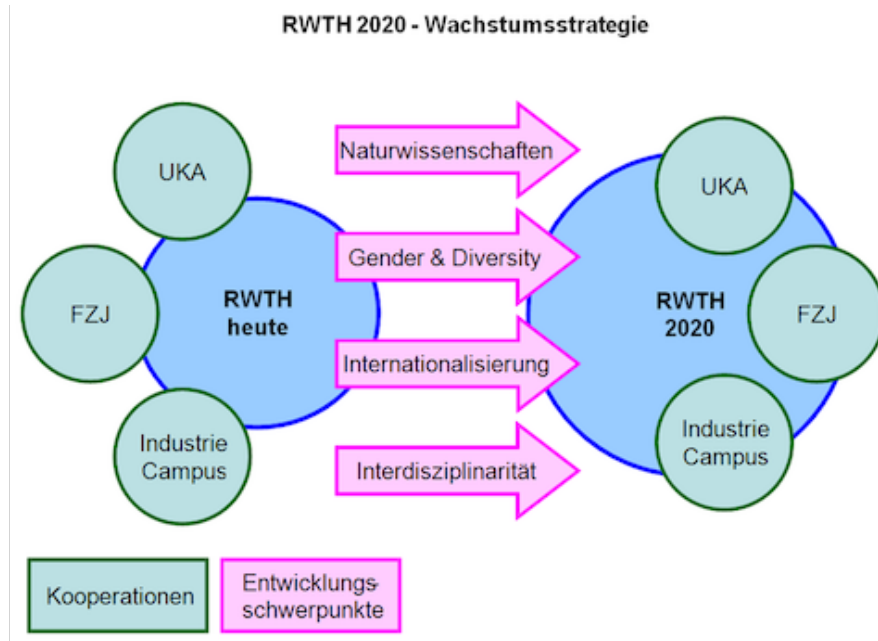
- Project Leader: Dr. Andrea Wolfram, Deputy Head
- Project Coordinator: Manuela Aye, Social Scientist

### **Institutional Strategy RWTH 2020**

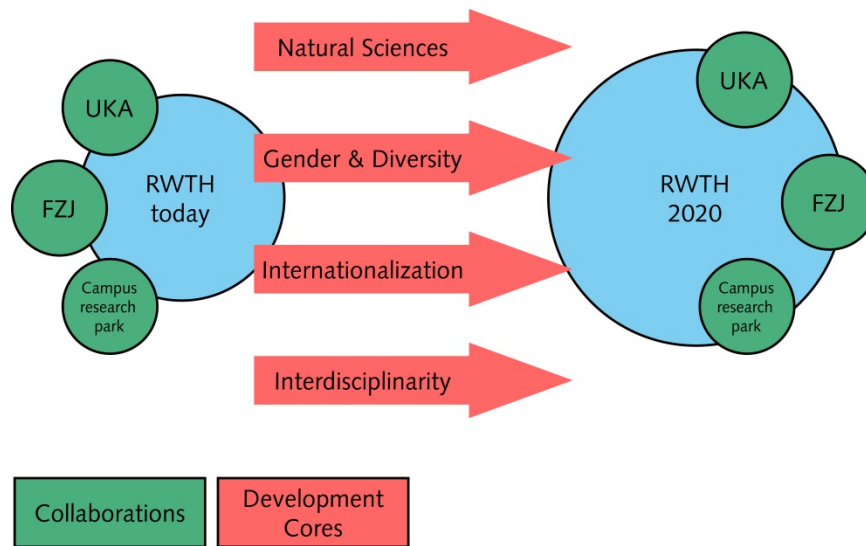
In 2007, RWTH Aachen began to pursue a new strategic orientation, after having been granted funding in the first approval phase of the Excellence Initiative of the federal and state governments. The third funding line of the institutional strategy RWTH 2020: Meeting Global Challenges was created for the Excellence proposal. The strategy is primarily tailored to the area of research. After a successful start to the strategic reorientation, RWTH Aachen declared, independent from the Excellence Initiative, that it was crucial to apply this update and further development work to all areas of the university, in order to sustainably strengthen the competitive ability of the university as well as to broaden the developed goals and demands in the area of teaching.

The focus during the development of an RWTH Aachen university-internal strategy was that this strategy would be carried and lived out by the entire university, so that a uniform conviction for the future could be created and high identification with the repositioning could be attained. The Rectorate developed a draft paper that was discussed, worked out, and finally passed in 2009 through an open communication culture between the University Board of Governors, the Senate, the Strategy Board, the Deans, and a discussion process with various players.

The paper, designed to be fully integrative, focuses on measurable achievements in quality in teaching and qualitative growth in research. Through the respective measures, the seven following goals should be attained by 2020: answers for the great research questions of our time, growing attractively for the best minds in the world, support and funding at all levels, an increase in the quality of teaching, improvement of scientific performance indicators, leading positions in major interdisciplinary research projects and external funding.



RWTH Aachen Growth Strategy



In order to reach this goal an intensification of collaborations with the Aachen University Hospital (UKA), *Forschungszentrum Jülich (FZJ)*<sup>4</sup>, and the RWTH Aachen Campus research park

<sup>4</sup> Forschungszentrum Jülich (research center, member of the Helmholtz Association) has nine research institutes with 53 subinstitutes working in the areas of energy and climate research, bio- and geosciences, medicine and neuroscience, complex systems, simulation science, and nanotechnology.

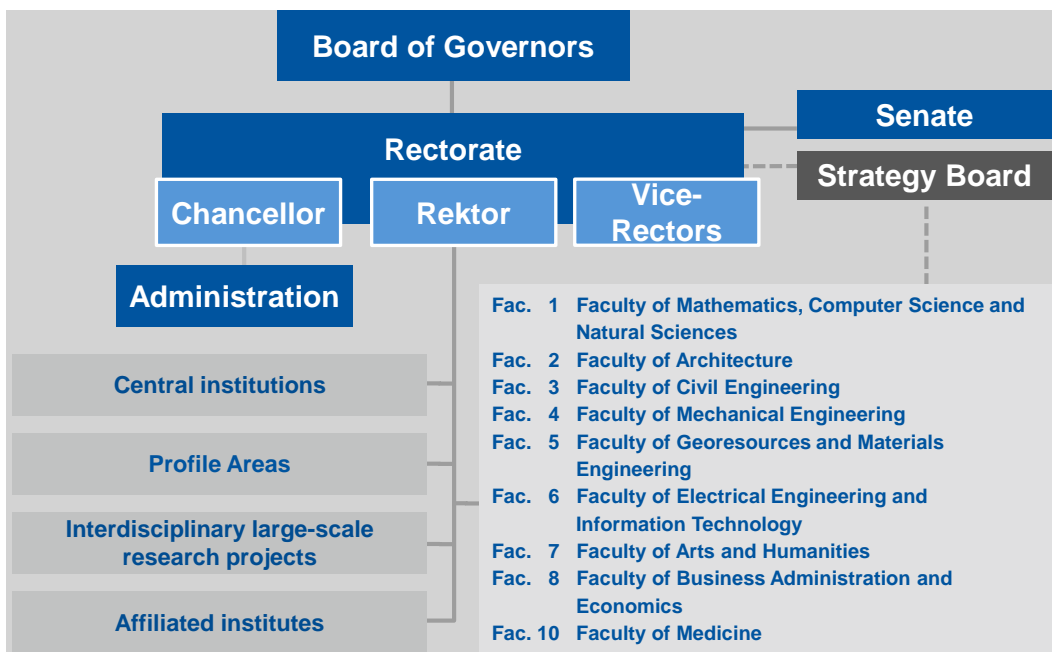


was pursued and a focus was being placed on four areas, where developmental needs were identified: the natural sciences, gender and diversity, internationalization, and interdisciplinarity.

For the second time in a row, RWTH Aachen has succeeded in the Excellence Initiative by the German federal and state governments, thus being able to consolidate its position within the German research landscape in the years between 2012 and 2017. In June 2012, its new Institutional Strategy, titled “RWTH 2020: Meeting Global Challenges. The Integrated Interdisciplinary University of Technology,” was confirmed by the authorization committee. This decision in Germany’s excellence initiative strengthens the leading position of RWTH Aachen University in Germany and enhances its international competitiveness.

One of the long-term goals of RWTH Aachen University is to sharpen its scientific profile as an integrated, interdisciplinary, and international university of technology. This will be achieved with the help of a fundamental restructuring process which focuses on the university's core competences in the natural sciences and engineering, involving all faculties.

The Institutional Strategy II aims to achieve two major objectives: making a substantial contribution to top-level research in Germany and participating in the global competition of universities. The in 2007 launched Gender and Diversity Structures (among them the Integration Team – Human Resources, Gender and Diversity Management) became fixed structures of the university.



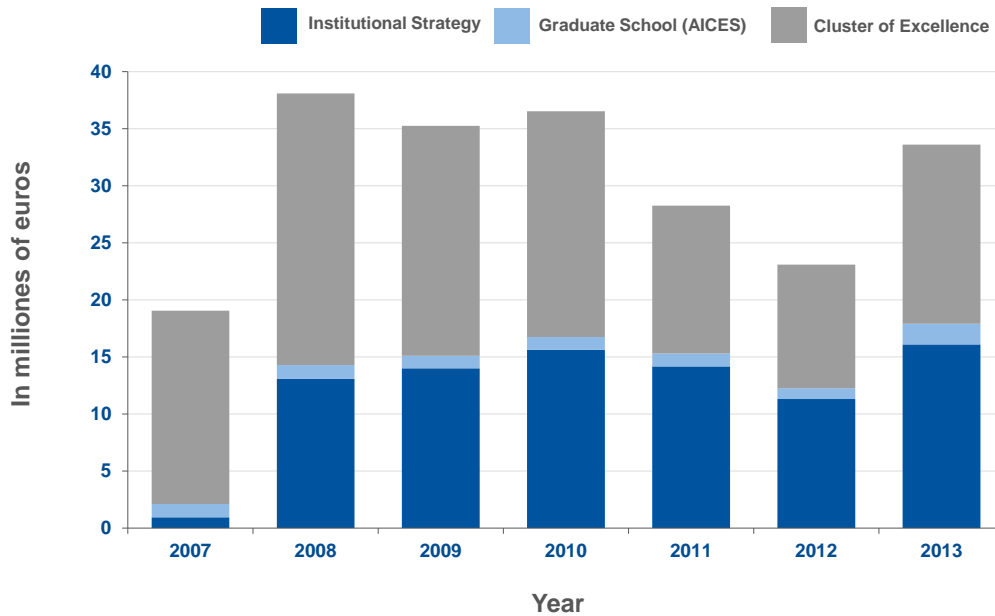
Source: [http://www.rwth-aachen.de/cms/main/root/Die\\_RWTH/Einrichtungen/~enz/Organisation/?lidx=1](http://www.rwth-aachen.de/cms/main/root/Die_RWTH/Einrichtungen/~enz/Organisation/?lidx=1)

RWTH Aachen University is headed by the Rectorate. In addition to the Rectorate and the Rector, as its head, the Board of Governors and Senate are the central university governing bodies. The Strategy Board is also a part of the RWTH Aachen's management structure and advises the university on its future plans.

**Funding**

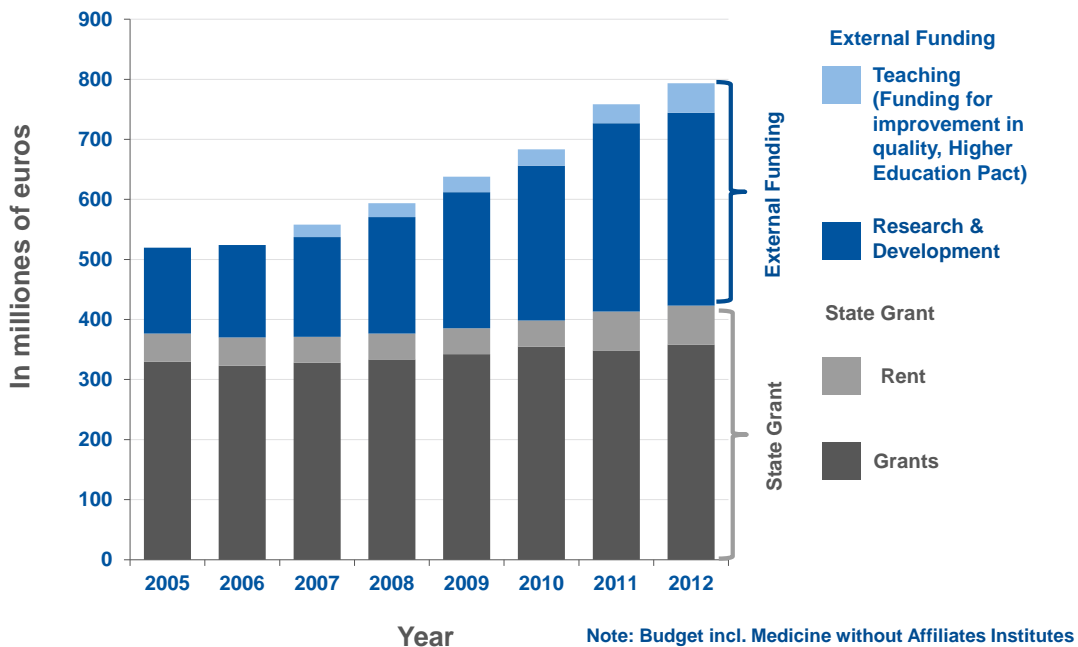
The German state governments have to ensure basic funding of the universities. All in all, almost 90% of funding for the universities comes from the public authorities, however most of the means (80%) are from the states governments. The federal government have a share in financing research projects, specific programmes (such as the Excellence Initiative) as well as in financing research-sector structures at universities, including large research apparatus (approx. 10%). Ca. 10% of funding come from private resources which contain mainly contract research.<sup>5</sup> However, also most of the public funding is distributed through performance-related resource allocation or on the base of project and program applications at the *Deutsche Forschungsgemeinschaft* and the *Bundesministerium für Bildung und Forschung* as well as at some other federal ministries. Finally, public research financing enters in the national research organisation such as *Max-Planck-Gesellschaft (MPG)*, *Helmholtz-Gesellschaft deutscher Forschungszentren (HGF)*, *Fraunhofer Gesellschaft*. The Annual Budget for the year 2012 was 794 Million Euros at the RWTH Aachen, including 321 Million Euros for external funding.

**Excellence Initiative – Total Volume of Funding (Granted Funds)**

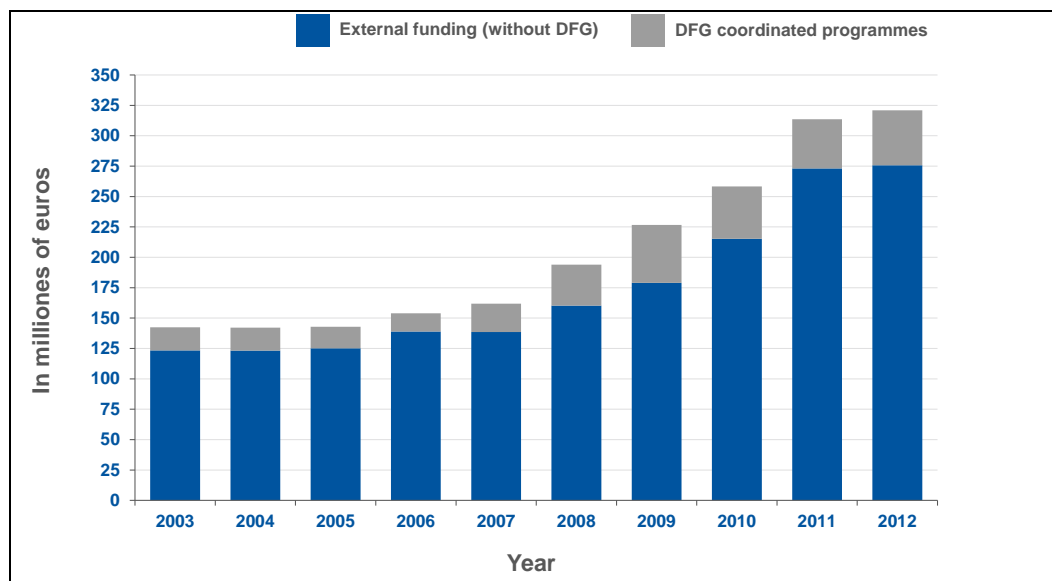


<http://www.hrk.de/themen/hochschulsystem/arbeitsfelder/hochschulfinanzierung/> [12.01.2014]

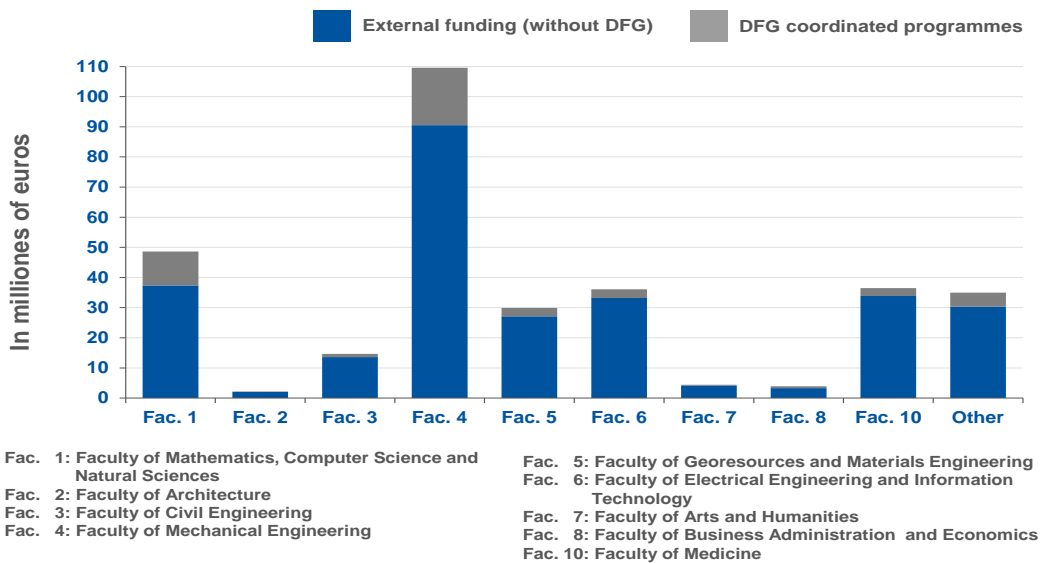
### Development of the Faculties' Budget



### Development of External Funding



**External Funding by Faculties 2012**



Source of all graphs: RWTH – Department for Planning, Development and Controlling

**Teaching and Research**

Most of the teaching has to be done by the professors (normally 4 lectures in a term at universities) and also by the senior scientists who hold permanent positions. However, also the young researchers who are employed on non third-party funded fixed term positions often have a small teaching load of one lecture that is fixed in their contracts. Most of them support the professors also in the management task around teaching and research. And finally, there seems to be also a practice that some of the third-party funded young researchers are involved in teaching, too. In 2012 the rate of degrees was 6116 (share of women: 37,3%), of which 2444 were first degrees (share of women: 35%). Moreover, there were 773 doctor degrees (share of women: 34,4%) and 32 habilitations (share of women: 40,6%) in 2012.

**Quality Management in Teaching**

In October 2009, RWTH Aachen was recognized in the Excellent Teaching competition for its institutional strategy "Students in Focus". It is one of six universities, whose concepts for improving basic teaching in German university development were funded with prize money of one million Euros by the Stifterverband für die Deutsche Wissenschaft<sup>6</sup> and the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in Federal Republic

<sup>6</sup> Stifterverband is the business community's innovation agency for the German science system.

of Germany (KMK). The prize money should be used for the optimization of information that prepares students for studies, for better support in the beginning of one's studies, and for the development of innovative projects in teaching<sup>7</sup>. For this reason various activities arose to support excellent teaching at RWTH. One of the activities is the “Logbuch Lehre” (Logbook Teaching). It started in June 26, 2013. The Logbook is a blog-based web portal for all news and developments around the topic of teaching and learning at our university. The blog is designed to be a forum for instructors, students, and university institutions who want to present and discuss news, concepts, ideas, and experiences in the arena of teaching and learning. The blog seeks to be a showcase for teaching innovations, a multiplier, and a portal for discussion and exchange.

Another activity is the “Teaching Talk” which started in 2011 and was initiated at the request of teachers and student representatives. The annual event informs teachers in particular, but also students and other interested university staff members about the implementation of the “Excellent Teaching Institutional Strategy”. It also enables dialogue about teaching related topics on a larger platform. Finally, RWTH established the project CiL (Center for Innovative Learning Technologies) which sustainably integrates ‘blended learning’ concepts. As heart of the matter acts the platform L<sup>2</sup>P. L<sup>2</sup>P offers various features and functions including virtual classrooms, course-related material, self-testing, discussion forums, etc.

### **Employment, Hiring and Promotion**

#### **Positions at the universities in Germany**

- Professors: The post of a Professor is mostly a fixed-term, education position.
- Associate Professors: An Associate Professor is the title given to habilitated scientists with teaching qualification at a university or other higher education institution which holds no regular professorship.
- Junior Professors: Junior Professor is a title which should help young scientists with outstanding promotion without the previously used Habilitation to enable directly independent research and teaching at universities and to qualify for appointment to a lifetime professorship.
- Adjunct Professors: The award of an Adjunct Professorship is a judgment of the faculty.
- Honorary Professors: Honorary titles in academia may be conferred on persons in recognition of contributions by a non-employee or by an employee beyond regular duties.

<sup>7</sup> cf. [http://www.rwth-aachen.de/cms/main/root/Die\\_RWTH/Profil/Lehre/~ccbd/Exzellente\\_Lehre/?lidx=1](http://www.rwth-aachen.de/cms/main/root/Die_RWTH/Profil/Lehre/~ccbd/Exzellente_Lehre/?lidx=1) [13.01.2014]

- Lecturers: A lecturer is a person who holds a university courses without being sure in an employment relationship with this college. The lecturer will be paid on a fee basis or carries out his activity free of charge.
- Other academic staff (2022 at 2012): Civil servants and employees, who perform academic services in research and teaching in academic departments and academic university institutions, are grouped into academic staff. The academic institutions are headed by professors.
- Non-academic staff (1879 at 2012): Non-academic staff includes employees in the university administration and employees in individual research institutions, who support researchers. This includes administrative assistants, system administrators, technical employees, technicians, foremen, or mechanics.

#### **Description of working conditions of the scientific staff**

Working conditions at German Universities are framed by the law “*Wissenschaftszeitvertragsgesetz*” (*WissZeitVG*) which was launched in 2007. The law regulates fixed term contracts in the sciences and research at German higher education institutions. It contains rules for temporary employment of scientific and artistic staff at universities and non-university research institutions and includes rules for the qualification phase and for the case that the job is financed by third-party funds. The *WissZeitVG* does not allow employment at universities and non-university research institutions for more than twelve years. This period is divided into a qualification phase consisting of six years and further six years of a post-doc phase. Within this time, a dissertation should be written and further qualifications, such as gaining a professorship, should be achieved. The law was originally supposed to simplify scientists’ work on research projects at universities and non-university research institutions by means of third-party funds and thus to create more legal certainty. It does, however, lead to the problem that post-docs might have to leave the academic institution if they could not manage to gain a professorship or any equivalent qualification. A possibility for a temporary employment beyond the qualification phase is the collaboration in a temporary fixed and mostly third-party funded project or a permanent employment.<sup>8</sup> One consequence was that scientists, who do not want to leave science, work in third-party funded projects with temporary employments after the twelve years and try to reach one of the rare permanent positions that are mainly professorship positions. Either they have applied for an announced position in a research project that most often a professor has organised or they have submitted a successful proposal. These proposals, which were submitted at national funding organisations or within the funding possibilities of scientists of the European Union, refer mainly to research projects or an own post or research group. Next to the high prestigious funding possibilities such as the ERC starting grants or comparable national models which give the funding holder

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<http://www.kisswin.de/en/career-paths/legal-information/wisszeitvg.html> [13.11.2013]

bigger independence at the university most of the post with own funding are located at a department under the responsibility of a professor.

Accordingly, the personnel structure at German universities in 2009 shows that 68% of the scientific personnel have fixed term contracts. Below the level of independent university lecturers (professors) who comprise only 15% of the whole scientific personnel, only 17% of the dependent scientific personnel have permanent positions. Within the group of dependent scientific personnel an increase of fixed term contracts can be observed (from 79% 2000 to 90% in 2010) and also an increase of part time employment (from 38% to 45%) as well as an increase of third-party funded financing of the employments (from 36 to 43%). (cf. Konsortium Bundesbericht Wissenschaftlicher Nachwuchs 2013: 15). Furthermore, almost half of them have contracts with less than one year duration.<sup>9</sup> Nevertheless, motivation and working atmosphere is often seen as very good and above-average among the academics (Schmidt 2010).

### **Appointment/Hiring Processes at RWTH**

The following criteria are usually relevant for the judgment of scientific achievements in the context of selection procedures in Germany which consists of two selection steps (cf. Färber/Spangenberg 2008: 177). The first selection is relevant to get invited to an interview and to a lecture (shortlisting of candidates) and the second one is to select from the invited candidates:

1. Selection step: Selection by numerable criteria such as number of publications (impact-factor), volume of external funds (reputation of external funds), teaching experience (yes/no), habilitation (post-doctoral lecturing qualification) (yes/no).
2. Selection step: Discussion about the quality of publications (articles in high-caliber journals; contribution to the knowledge base of the discipline), projects, lectures, cooperations/collaborations, supervision of young researcher, habilitation, teaching achievements.

The formal appointment procedure for professorships at RWTH consists of ten steps. After the allocation of the position in the faculty and its advertisement, the first step begins with pre-selecting the candidates after the application deadline (first selection step). The selected candidates are invited to a lecture and an interview with the selection committee (2). Afterwards, three candidates are selected (3; second selection step) and external reviews of the written applications of these candidates are requested from two or three independent reviewers. (4) The reviewers suggest a ranking of the candidates (5). Then the appointment committee and afterwards the faculty council discuss this ranking and make a final ranking which is presented to the rectorate (6). At the end, the commission has to obtain approval from the rectorate. If they all agree to the list the Dean starts negotiation with the candidate (8) and secondly the candidate has negotiation with the Chancellor (8). Finally, the administration controls the

<sup>9</sup> cf. <http://www.zeit.de/2011/50/C-Hochschule-Wissenschaftler> [13.11.2013]

feasibility of the negotiations (9). In the last phase of the process the candidate accepts or declines the appointment (10).

The process governing the way an appointment procedure has to be conducted is determined in an official appointment regulation. In this regulation, criteria are listed for the evaluation of the applicants from which the selection committee can choose: scientific qualification, didactical competence, pedagogical qualification, competence to apply gender and diversity issues in the specific field of science, competence to give new impulses for research and teaching at RWTH Aachen university, engagement in teaching and experience in developing curricula; management competence and especially human resource management, experiences in applying for funding, experience abroad, willingness and aptitude for interdisciplinary cooperation and assumption of responsibility within collaborative research projects, and finally the degree of meeting these criteria. The criteria are not mandatory and can be amended, and weighting among the criteria is not required.

### **Gender Structure**

The aspect of Gender and Diversity Management at RWTH includes several facilities. In 2007, a focal reference authority was created with the executive department IGaD, which works closely with the Equal Opportunity Officer, three professorships with gender-denomination and a Vice-Rector for Human Resources Management and Development. Together, they define the parameters for the realization of the 'People Policy', which is orientated on gender equality and was part of the first institutional strategy of the university. The IGaD coordinates all the strategic processes and connects the different actors and fields of action.

Within the framework provided by the so-called Aachen Gender Triangle, consisting of the Equal Opportunities Officer, the Gender Studies professorships, and IGaD, the staff unit seeks to integrate the experience of the Equal Opportunities Office and the scientific contributions from Gender Studies research to develop hands-on guidelines for the equal treatment of men and women at RWTH. Several years of work in equal opportunities initiatives provides the staff unit with a broad range of approaches that make it possible to achieve synergies and to transfer the experience gained in other diversity contexts.

The integration of gender and diversity perspectives thus means

- to develop, continuously enhance and implement a coherent human resources and organizational development strategy under consideration of gender and diversity aspects;
- to implement gender and diversity policies across the University, in collaboration with all relevant protagonists within and partners outside the University (Gender and Diversity Management as a cross-functional task) .



To support the central and scientific institutions of RWTH in the development of suitable projects and initiatives in order to

- actively and fairly implement the change management processes;
- be open to innovative ideas and approaches;
- develop the ability to recognize the potential of people, and to be able to inspire and motivate them.

All in all, Gender and Diversity Management is considered an indispensable part of the reorganization process underway at RWTH Aachen, which is based on the appreciation of diversity and the achievement of equal opportunities in all areas of the university.

#### References:

OECD (2012): Closing the Gender Pay Gap. Act Now. Country Note Germany. OECD Publishing. <http://www.oecd.org/gender/closingthegap.htm>

European Commission (2013): She figures 2012 – Gender in Research and Innovation. Brussels. [http://ec.europa.eu/research/science-society/document\\_library/pdf\\_06/she-figures-2012\\_en.pdf](http://ec.europa.eu/research/science-society/document_library/pdf_06/she-figures-2012_en.pdf) [20.02.2014]

Färber, Christine /Spangenberg, Ulrike (2008): Wie werden Professuren besetzt? Chancengleichheit in Berufungsverfahren. Campus: Frankfurt/Main.

Konsortium Bundesbericht Wissenschaftlicher Nachwuchs (2013): Bundesbericht Wissenschaftlicher Nachwuchs 2013: Statistische Daten und Forschungsbefunde zu Promovierenden und Promovierten in Deutschland. WBV: Bielefeld.

Schmidt, Boris (2010): „Sind wir nicht alle ein bißchen exzellent?“ Schmidts kleine Elfenbeinwelt 4/2010, präsentiert von [www.academics.de/blog](http://www.academics.de/blog); [http://www.academics.de/blog/wp-content/uploads/2010/04/Elfenbeinwelt\\_4\\_2010.pdf](http://www.academics.de/blog/wp-content/uploads/2010/04/Elfenbeinwelt_4_2010.pdf) [17.01.2014]



## INSTITUTIONAL CONTEXT FONDAZIONE BRUNO KESSLER (FBK)

In FBK the FESTA project team is situated at the General Secretariat and this collocation allows us to have access to all FBK research centers. Nonetheless, we concentrate on the research centers that operate in the scientific-technological areas, i.e., the Center for Information Technology (CIT) and the Center for Material and Microsystem.

The team FESTA in FBK is represented by:

- Scientific responsible person: Andrea Simoni, General Secretary
- FBK FESTA Steering Committee:
  - Alessandro Dalla Torre , Head of Human Resources
  - Lorenza Ferrario, senior researcher of the CMM
  - Ornella Mich, senior researcher of the CIT
  - Anna Perini, senior researcher of the CIT
  - George Pucker, senior researcher of the CMM
- Project Manager: Ornella Mich, senior researcher of the CIT;
- Task members: Tatiana Arrigoni (WP2), Barbara Poggio (WP3.2, WP5.1), Valentina Chizzola (WP5.1), Mario Conci (WP7), Alessandro Rossi (WP4.2), Liria Veronesi (WP3.2, WP4.1 + 4.2), Marco Zamarian (WP4.2)

## ORGANIZATIONAL STRUCTURE AND GOVERNANCE OF FBK

### FBK AIMS

According to the FBK statute, its main aims are the following:

- “cultural activities, scientific research, technological development both in terms of advancement of knowledge and of service to the local community;
- exploration of innovative frontiers of knowledge, with special focus on interdisciplinary approaches and on application methods, thus defining the outline of the scientific activities typical of universities;
- internationalization of Trentino, by promoting cooperation and exchange activities with national and international research institutes so as to increase competitiveness and the capability of attracting human resources and materials from the research system of the province, promoting the involvement of the University of Trento and of the other Italian public and private bodies concerned;
- promotion of the widespread capacity for innovation, commonly intended as being the processing of new developments and cultural, civil, instrumental syntheses involving the local community and economy so as to boost, through the circulation of knowledge and the technologies, the growth of Trentino as the land in which the Fondazione Bruno Kessler has its roots;

- transfer of research results: the supporting of new entrepreneurial abilities, of the growth of new professional skills, as well as of the qualification of the structures of local authorities, aware of the foundation’s role and responsibilities within the sphere of local development dynamics;
- in all of the activities that the foundation may choose to perform autonomously and freely in pursuance of its object as described above, respect of human beings and of the environment as protected and promoted by history, by tradition and by the identity embodied by Trentino”.

Teaching is not part of FBK activities; hence there are no undergraduate students. FBK, though, in agreement with the University of Trento, funds some PhD grants on specific projects so that in 2012 about 90 PhD students have actively taken part in the FBK research activities.

### **ORGANISATIONAL STRUCTURE AND DECISION MAKING**

The “Fondazione Bruno Kessler” is a non-profit organization – with legal entity of private law – that operates in the field of research both in technological scientific and humanistic domains. Created in 2007, in a context of local institutional transformation of the system of research and innovation, FBK inherits the activities of the Istituto Trentino di Cultura instituted in 1962. Among the aspects of major changes there are the stipulation of collective contract for researchers (first in Italy), new procedures of recruitment and of promotion, evaluation procedures of research results, and a renewed institutional mission, new logo.

Research and knowledge and/or technology transfer are carried out by:

- Seven research centers:
  - CMM, Center for Material and Microsystem, that comprises eleven Research Units
  - CIT, Center for Information Technology that comprises fifteen Research Units and four Joint Research Project.
  - ECT\*, European Center for Theoretical Studies in Nuclear Physics and related areas
  - CIRM, International Center for Mathematics Research
  - ISR, Center for Religious Studies
  - ISIG, Italian-German Historical Institute
  - IRVAPP, Research Institute for the Evaluation of Public Policies
- Three explorative projects:
  - CeRPIC, Research Project on International Politics and Conflicts Resolution
  - HICR
  - LabSSAH
- Spin-off and Start-up

Research and technology transfer is supported also by services that embrace administrative units, research support units, communication units, research assessment units, innovation and local relations units.

The governance of the FBK comprises the following organs:

#### *Board of Directors (BoD)*

This is made up of nine members, including the Chairperson, all of who are elected among candidates of high and renowned scientific education or of high and proven managerial experience. Members of BoD hold office for four years and can be re-appointed only once. The Board of Directors is the policy-making body that sets the general policies of the foundation, availing itself of the advice of the Scientific Committee; it passes resolutions concerning the policy guidelines, the general objectives of the scientific programme, and the general management directives of the foundation. The BoD also sets out the criteria and procedures for evaluating the organization and the results achieved. It is responsible for the approval and amendment of the foundation's internal regulations; for the approval of the annual financial statements and the budget; for the definition of the FBK organizational units and the appointment of the relevant managers; for the appointment or dismissal of the General Secretary.

#### *Chairperson*

He/she is the Foundation's legal representative before third parties and in court and is appointed for a term of four-years; he/she can be re-appointed only once. The chairperson convenes and chairs the Board of Directors; leads and coordinates the functions of the Board of Directors; supervises the enactment of the resulting resolutions and the Foundation's overall performance. Subject to the favourable opinion of the Board of Directors, he/she may also delegate, permanently and even for specific actions, the Foundation's representation to Board members, executives, employees or third parties.

#### *Scientific Committee*

This committee supervises the FBK scientific activities and acts as consultant for the Chairperson and the Board of Directors by providing opinions and proposals. The opinion of the Scientific Committee is mandatory on the occasion of long-term programming actions and actions addressing scientific activities. The Scientific Committee comprises at least seven members who shall hold office for a term of four years and may be re-nominated. They shall be elected from among highly renowned and competent scientist's experts in the fields mainly treated by the foundation.

#### *Board of Auditors*

This consists of three statutory auditors and two alternate auditors. All members, both statutory and alternate, shall hold office for four years and may be re-appointed only once. The Board of Auditors fulfills the duties and exercises the powers indicated in articles 2403 and

2403 *bis* of the Italian Civil Code. Liability of the auditors is that envisaged in Art. 2407 of the Italian Civil Code.

*Panel of Founders and Supporters*

Its aim is to maintain vital relations with the institutions representing the social and economic scenario in Trentino. The panel consists of members who are foundation Founders and Supporters.

*General Secretary*

He/she oversees the unitary approach of the guidelines and objectives set out by the Board of Directors and is accountable for their overall implementation. To this purpose, the General Secretary assures the enhanced efficiency, cost-effectiveness and efficacy of the resources employed in connection with the activities carried out by the foundation. The term of office of the Secretary General is four years, after which he/she can be re-appointed.

The *research boards* of Center for Information Technology and Center for Material and Microsystem are advisory groups to the directors of the Centers and consist of the Heads of the Research Units. The boards support the Directors in carrying out the following functions:

- define scientific strategies, for technology transfer and for regional impact;
- collect input on matters related to the operation and management of the center;
- collect information regarding activities of the Research Units;
- promote a uniform and correct communication towards the center personnel

**FUNDING**

Sources for the funding of the foundation’s activities are the following:

- founding granted by the province and by other founding and supporting members;
- contributions, donations, estates, bequests, legacies and grants in general by other public or private subjects not expressly destined to increase the FBK total assets;
- proceeds, considerations and other income deriving from the FBK activities;
- operating surplus destined for the funding of the FBK activities.

In order to carry out its activities, the FBK shall use, in addition to the tangibles and intangibles granted by the province, by other founding and supporting members and by other public and private subjects, also the assets placed at its disposal and the assets instrumental to the activities purchased or made by the foundation. The province may place the foregoing assets at the disposal of the foundation also through its own firms.

**EMPLOYMENT, HIRING AND PROMOTION**

The (contractual) positions in the FBK research area comprises: researchers and technologists. They can be employed with long-term or fixed-term contracts, either full-time or part-time, or with temporary project-based contracts.

Researchers conduct research activities, technological experimentations and development; they are classified according to the following levels:

*Researcher, 1° level:* he/she contributes to the development of scientific issues and programs. He/she is supposed to: work in great autonomy towards the objectives and strategies of FBK; manage the budget and personnel aspects independently; have a research manager role; be recognized for his/her excellence by the scientific community.

*Requisites:* thirteen years of experiences in FBK or other research institutes, nationally or internationally accredited; PhD or equivalent professional experiences; written and spoken knowledge of at least one foreign language. In the absence of the requirements of the previous letters, possession of proven and recognized experience and expertise in the international arena are considered on the basis of the scientific contributions made, the results obtained and the awards achieved.

*Researcher, 2° level:* he/she has autonomous responsibility and takes actions within the committed activities. He/she is supposed to own such a (high) level of knowledge and expertise to actively and significantly contribute to his/her area. He/she can be responsible of projects and/or research groups contributing to identify the strategies of the organization.

*Requisites:* eight years of experiences in FBK or other research institutes, nationally or internationally accredited; PhD or equivalent professional experiences; written and spoken knowledge of at least one foreign language.

*Researcher, 3° level:* he/she collaborates on the research activities, participating to their definition and to their methodologies. He/she is coordinated and supervised by researcher at higher levels.

*Requisites:* PhD or three years of experiences in FBK or other research institute, nationally or internationally accredited; written and spoken knowledge of at least one foreign language.

*Researcher, 4° level:* collaborates on the research activities of the unit under the supervision of a researcher in the higher level. After three year he/she is tested to evaluate the shift to the third level.

*Requisites:* four years degree; written and spoken knowledge of at least one foreign language.

Technologists conduct activities of technical collaboration related to the scientific-technological researches; they are classified as follows:

*Technologist, 1° level:* he/she performs independently technological activities of high complexity and coordinates and manages of technical-scientific units.

He/she is supposed to: operate with a high degree of autonomy in complex structures, contribute to the identification of the objectives and strategies of the foundation, may be responsible for the coordination of scientific-technical complex structures with autonomous management of budget and personnel assigned.

*Requisites:* thirteen years of experiences (ten in case of PhD qualification) in FBK or other research institutes, nationally or internationally accredited; PhD or equivalent professional experiences; written and spoken knowledge of at least one foreign language.

Technologist, 2° level: under the supervision of the head of the unit, he/she is supposed to help to determine the strategies and objectives of the structure; may be charged with the responsibility and self-management with regard to assistance and technical advice.

*Requisites:* eight years of experiences (five in case of PhD qualification) in FBK or other research institutes, nationally or internationally accredited; Masters degree; written and spoken knowledge of at least a foreign language.

Technologist, 3° level: he/she carries out technical-professional activities and participates on the related activities with limited autonomy under the direction of the head, also with regard to assistance and technical advice.

*Requisites:* three years of professional experiences; Masters degree; written and spoken knowledge of at least one foreign language.

Technologist, 4° level: he/she carries out technical-professional activities under the supervision of a technologist or researcher of higher level.

*Requisites:* Bachelor degree; written and spoken knowledge of at least one foreign language.

Project collaborators, with temporary project-based contracts, carry out activities of scientific research and technological development, favor the transfer of scientific results and innovation. The collaborator is supposed to work autonomously without predetermined constraint of time and attendance and to use the FBK structures only for the accomplishment of the task. His/her contractual position does not articulate into levels.

PhD fellow is a fixed-term education position.

#### **Appointment/selection processes at FBK**

Research positions under permanent and fixed-term employment contracts (*tenure track positions*) and temporary project-based contracts with similar remuneration are determined through open and international calls. The Human Resource Service prepares the Recruitment Notice, which, subject to the prior authorization of the Process Initiator, is then posted on the FBK website. The Recruitment Notice must be posted on the website for at least two weeks;



this deadline, however, may be extended on the Process Initiator's request, and advertised according to the same conditions as the Notice.

After the deadline for submitting applications has passed, an Application Assessment Panel is set up comprising the following members:

- the Requesting Manager;
- the Process Initiator;
- the Head of the People Innovation Service, or his/her representative;
- at least two experts in the relevant field, appointed by the Process Initiator.

If special circumstances so require, the Process Initiator may decide a different composition of the Panel, which must be specified in the Staff Recruitment Request. The Panel decides with a majority of at least 4 to 5.

After the closing date set out in the Selection Notice, HR Service identifies the maximum number of applications as specified in the Notice, strictly in order of receipt, and delivers them to the Panel, which then shortlists the ones it seems most deserving. The Panel, at its discretion, shortlists no less than 5 and no more than 20 applicants, obviously based on the actual number of applications received. The applications are shortlisted by the Panel according to the criteria set out in the Selection Notice and according to the CV screening results, at the Panel's sole discretion. The Panel members are not required to specify and give any reasons for their decisions. The applicants' CVs may also be screened by the Panel members remotely. The applicants not shortlisted for interview are notified of their exclusion by email. For research positions, the shortlisted applicants are interviewed by the Panel and a number of them are required to present papers at a seminar, which, preferably, is held on the same day as the interview. Based on the outcome of the seminar, the Panel, meeting collectively, prepares an assessment document identifying the applicants deemed to be qualified for the relevant position, notifying their decision in this respect. The Process Initiator, having verified that the process by the Panel and the Requesting Manager conforms to the applicable rules, shall approve the conclusion of the employment contract(s), without the power to reconsider the application assessments made or decisions taken.

Position are described in a gender neutral term in advertisement and if two candidates have equal merit the one representing the minority gender is to be selected.

Since January 2014 a new hiring procedure has been adopted. The main changes from the previous have been made both to speed up and simplify the process and to increase its transparency.

## GENDER STRUCTURE

There is no specific units/office dealing with gender related topics, neither in the administration and management area nor in the research area. Furthermore, there is no specific permanent board/committee on gender equality. We consider these absences quite relevant and influential in explaining the actual gender-related situation in FBK. Nonetheless, during the last years there have been initiatives/projects, transversal to the research centers, with the aim to contribute to foster gender equality in the FBK working environment:

- [2000 – 2002] The “Gender and Sciences” group was informally created in ITC-IRST; it was made up of a group of female senior researchers who aimed at increasing awareness on gender issues in scientific working environments.
- [2002 – 2008] Formal recognition of the “Commission for the promotion of women’s presence in the scientific and technological research”, made up of a group of female researchers of ITC-IRST. Activities promoted and supported comprised the organization of seminars aimed at the increase of gender awareness and the promotion of mentoring measures for women. A first collection of quantitative data on women’s presence in ITC-IRST started within this context.
- [2008 – 2010] “Gender and Sciences” initiative: it was guided by a group of FBK researchers belonging to different research units and their aim was to create debates and dialogues on women’s positions in research. Several seminars on gender and science were organized and relevant international expertises were invited to have talks.
- [2009 – 2012] “GOSH – Gender cOnstruction between Sciences and Humanities”: this was a research project supported by the General Secretariat with scope to study the ways in which both humanistic and techno-scientific disciplines contribute to the construction of gender. Adopting a theoretical and comparative approach, it aimed at investigating differences and similarities among the various definitions of gender and the implications that the use of gender categories has on the disciplines themselves, their methods, purposes, language, topics and interpretations of results.
- “SuiGeneris Lunches” [2008 – in progress] are informal meetings organized during the lunch break by the “Gender and Science” staff, dealing with gender-related aspects in the FBK: gender statistics, gender awareness, organizational well-being. The invitation is open to all FBK personnel.
- [2009 – in progress] “Family audit”: the projects is headed by the Human Resources Unit and comprises several actions: tele-working, summer and winter activities for employees’ children, flexi-time, car-sharing, special agreement with the public

transport service). In 2009 FBK obtained the certificate Family Audit for its actions aimed at supporting the work/family balance.

- [2012 – in progress] FESTA EU project represents the first self-financed gender-related project in FBK (with employed staff) and is considered a very relevant occasion to actually pinpoint and implement gender-related policies and actions aimed at structural changes in favor of gender equality. It is supported by FBK top management (General Secretary and head of Human Resources).
- [2013] “Towards a gender inclusive language” is a project financed by the Equal Opportunity Department of the Autonomous Province of Trento that aims at promoting the use of a gender-sensitive language in FBK. Two seminars are organized with experts and they are directed to the administrative and research personnel, separately.



## APPENDIX 2 – DIMENSIONS AND INDICATORS

Dimensions describe what it is we are trying to measure. They are not directly observable but define how to categorize and understand indicators. Dimensions also allow us to see if indicators validly and reliably show what they intend to point out. Indicators become measurable through variables. Thus, variables are observable facts which may say something about the dimensions via indicators. Dimensions may have more than one indicator and indicators may have more than one variable, and thus there may be more than one variable that show aspects of the same dimension. This is the case when a dimension is multidimensional. Typologies, indices, scales and tests are examples of the combination of several single indicators.

The tables below include dimensions, indicators and variables as well as the sources from which they will be drawn.

## UU – DIMENSIONS AND INDICATORS

| DIMENSION | INDICATOR  | VARIABLE  | SOURCE  |
|-----------|--|---|---|
|           |  |   |   |
|           | Parental leave                                     | Parental leave (parental benefit)<br>Temporary parental benefit for care of sick children<br>Unpaid leave   | Primula   |
|           | Sick leave   | Short term sick leave (< 60 days)<br>Long term sick leave (≥ 60 days)   | Primula   |
|           | Doctoral candidate's degree of (research) activity | 10-40 percent<br>41-60 percent<br>61- 80 percent<br>81-100 percent  | Uppdok, which is Uppsala University's part of the national system for student administration, Ladok |
|           | Doctoral candidate's financing                     | Doctoral employment<br>Doctoral candidate who is employed by a company (and gets salary from the company) and pursues research studies within the employment<br>Employment as a doctor with scope to conduct research studies within the employment<br>Other employment outside the university (than at company or as a doctor), which means that research studies can be conducted within the employment<br>Other employment (than as doctoral candidate) in own or other university, which means that research studies can be conducted within the employment<br>Study grant<br>Scholarship<br>No financing or occupation not related to research studies | Uppdok  |
|           | Third-cycle degree                                 | Doctoral degree<br>Licentiate degree  | Uppdok  |

| DIMENSION  | INDICATOR  | VARIABLE   | SOURCE  |
|--|--|--|---|
| Recruitment  | Success rates of appointments to senior lecturer, professor and postdoctoral research fellow positions | No. of applicants by gender<br>No. of selected candidates by gender  | Faculty Office for Science and Technology (electronic application system) |
|  | Positions  | Professor<br>Research group leader/equivalent<br>Senior lecturer<br>Researcher /equivalent<br>Postdoctoral research fellow<br>Doctoral candidate<br>Lecturer<br>Senior research engineer/equivalent<br>Teaching assistant<br>Assistant research work<br>Laboratory research work | Primula   |
| Leadership positions, investigative and decision-making bodies | Leadership positions   | Academic leaders<br>Professors<br>Other leaders  | Primula   |
|  | Investigative and decision-making bodies   | No. of members by gender   | Departments   |
| Salary   | Salaries per position and age  | Average salary by gender<br>Median salary by gender<br>Salary dispersion by gender   | Primula   |

## SDU – DIMENSIONS AND INDICATORS

| DIMENSION                             | INDICATOR                       | VARIABLE  | SOURCE                                    |
|---------------------------------------|---------------------------------|---|---|
| Gender equality in career development | Patterns in hiring              | Gender<br>Age<br>Position<br>Department   | Financial Services                        |
|                                       | Councils, Committees, boards    | Membership in internal councils, committees and board   | Four institutes at the Faculty of Science |
|                                       | Leadership and Management       | Head of PhD School<br>Head of PhD Centre<br>Head of Study Board<br>Head of Studies<br>Head of Department<br>Head of Centre<br>Research Leader   | Four institutes at the Faculty of Science |
| Gender equality in research           | Scientific production           | Organization or participation in conference<br>Participation in workshops, seminars or courses<br>Acting as peer reviewer<br>Participation in media<br>Stays abroad<br>Prizes, scholarships and appointments<br>Acting as editor on journals<br>Other activities<br>Peer reviewed published journal articles<br>Conference material<br>Other material | PU:RE                                     |
|                                       | Patterns of fund application    | Applicant<br>Number of granted funds<br>Head applicant<br>Place of work for the head applicant<br>Cooperation with public institutions<br>Cooperation with private institutions   | PANDA                                     |
| Work/Life balance                     | Parental leave                  | Absence due to children's illness<br>Absence due to maternity<br>Absence due to paternity   | Financial services                        |
|                                       | Job satisfaction and motivation |   | SDU's triannual job satisfaction survey   |



## RWTH – DIMENSIONS AND INDICATORS

| DIMENSION  | INDICATOR  | VARIABLE  | SOURCE  |
|--|--|---|---|
| <b>Degree of gender aspects in research</b>            | Funded projects with gender aspects  | Number of projects with gender aspects in the head line   | Department of third party funding / national research databases |
| <b>Position of women in science</b>                    | Share of projects led by women   | Number of projects led by women relative to all projects  | Department of third party funding / Finance department          |
|  | Female share of publications   | Numbers of publications of women/of men   | Library   |
|  | Prizes / Awards / Honours held by women in relation to all prizes etc.                 | Number of prizes / awards /honours of women / of men  | Department of academic affairs                                  |
| <b>Degree of gender competence of teaching staff</b>   | Courses with gender aspects in the head line of the course in relation to all courses  | Number of courses with gender aspects in the head line  | Department of academic affairs                                  |
|  | Courses with gender aspects in the announcement description in relation to all courses | Number of courses with gender aspects in the announcement   | Department of academic affairs                                  |
| <b>Degree of gender equality in career development</b> | Contract conditions  | Duration in month / Volume in hours by gender   | HR department   |
|  | Success rate of applications for professorships of men and women                       | Number of Applications / number of invitations/ number of appointments by gender (in relation to cascade model) | HR department   |
|  | Age at first appointment on professorship  | Age of appointed professors by gender   | HR department   |
|  | Status of professorship (short-term / long-term)                                       | Numbers of short-term / long-term appointed professors by gender  | HR department   |
|  | Share of women in boards and committees  | Number of women and men in boards and committees  | Department of academic affairs                                  |

| DIMENSION   | INDICATOR                                      | VARIABLE  | SOURCE   |
|---|--|---|--|
| <b>Degree of gender equality in budgeting</b>                           | Salary including bonus of scientific staff     | Wage classification + level of bonus by gender  | HR department  |
|   | Financing of projects led by women and men     | Number and level of financing of projects led by women in comparison to projects led by men | Department of third party funding / Finance department |
|   | Expenses for Gender Equality Measures          |   |  |
| <b>Work (Science) / Life Balance</b>                                    | Maternity leave and Parental leave             | Number of women in maternity leave  | HR department  |
| <b>Institutionalization of gender equality and gender mainstreaming</b> | Gender structures                              | Description of the structure  | IGaD   |
|   | Gender experts                                 | Number of experts   | HR department; IGaD                                    |
|   | Gender concepts                                | Number and Quality of Concepts  | IGaD   |
|   | Gender aspects in the institutional strategies | Quality of Gender Mainstreaming in Strategies   | IGaD   |

## FBK – DIMENSIONS AND INDICATORS

| DIMENSION                             | INDICATOR   | VARIABLE  | SOURCE                            |
|---------------------------------------|---|---|-----------------------------------|
| Gender equality in working condition  | Female presence                                       | Researchers by research center and gender<br>Researchers by research unit and gender  | Human Resource Unit (HR) database |
|                                       | Terms of employment                                   | N° of employees by gender;<br>N° of collaborator (self-employed) by gender;<br>N° of researchers with permanent and restricted time contract by gender<br>N° of R1 (highest level), R2, R3, R4 (lowest level) by gender<br>N° of researchers with full-time and part-time by gender<br>N° of PhD students by gender | Human Resource Unit (HR) database |
|                                       | Salary  | Amount of male/female salary (€):<br>gross fixed<br>variable component  | COGE Unit database                |
|                                       | Sick leave  | N° days of sick leave (by gender)   | HR database                       |
| Gender equality in career development | Promotion (both horizontal and vertical)<br>Turn-over | N° of vertical promotion (by gender)<br>N° of horizontal promotion (by gender)<br>N° of exits (by gender)<br>N° of entrances (by gender)  | HR database                       |
|                                       | Recruitment   | N° of applicants (by gender)<br>N° of selected candidates (by gender)<br>N° of the evaluators (members of selection committee) (by gender)  | HR database                       |
|                                       | Leadership  | Gender composition of heads of research units<br>Presence of women in FBK leadership boards and committees  | HR database                       |
| Gender equality in research           | Network   | N° of participation in conference/meeting (by gender)<br>Place of conference: Italy or abroad (by gender)   | COGE Unit database                |
|                                       | Publications  | N° of publications (by gender)<br>Types of publication (by gender):<br>proceedings and journal articles   | Research Evaluation Unit          |
| Work/Life balance                     | Absence for care                                      | Maternity/parental leave – N days (by gender)<br>Absence due to children’s sickness – N days (by gender)<br>Absence due to family care (Care-for-dependent leave) – N days (by gender)  | HR database                       |
|                                       | Tele-working  | N° of researcher using TW (by gender)<br>Period of TW (in days, by gender)  | HR database                       |



## APPENDIX 3 – HYPOTHESES

Where dimensions describe what we are trying to measure, hypotheses point to what we think or know the indicators will display. The hypotheses we have each formulated are different and in this way reflect our different organizational context and position as agents within our respective organizations and the overarching strategic objectives stemming from these positions.

## UU – HYPOTHESES

Strategic goals are not included in the table below. The departments will set their own detailed and specific goals grounded in the goals for gender equality work at Uppsala University and the Faculty of Science and Technology. In the case of salaries per position and age, the strategic goals will be based on the latest pay survey and analysis including action plan for equal pay.

| INDICATOR  | HYPOTHESIS   |
|--|--|
| Leadership positions                               | Gender imbalance at all three departments, which has decreased since 2009  |
| Positions  | Gender imbalance at all three departments  |
| Form of employment                                 | Gender balance at one department<br>Gender imbalance at two departments<br>If an organization has an overrepresentation of one gender in secure contractual arrangements as permanent and full-time employment it indicates a bias in terms of power and influence                               |
| Parental leave                                     | Gender imbalance at all three departments<br>Gender-specific difference in parental leave and temporary care of sick children may indicate that there are different expectations for men and women within the organization   |
| Sick leave   | Gender balance at one department<br>Gender imbalance at two departments<br>Gender-specific differences in sick leave may indicate gender-specific differences in the physical or psychosocial work environment   |
| Doctoral candidate's degree of (research) activity | Gender balance at all three departments  |
| Doctoral candidate's financing                     | Gender balance at all three departments  |
| Third-cycle (doctoral and licentiate) degrees      | Gender imbalance at the Faculty of Science and Technology.<br>Gender-specific differences in terms of the distribution of the licentiate and doctoral degrees and in the number of degrees may indicate differences in study conditions and who are encouraged to remain within the organization |

| INDICATOR  | HYPOTHESIS   |
|--|--|
| Salaries per position and age  | Men higher average salaries than women<br>Men higher median salaries than women<br>Higher male wage dispersion<br>Pay differentials between women and men performing work to be regarded as the same and gender differences in wage dispersion may indicate unwarranted differences in salaries and the potential for wage growth  |
| Success rates of appointments to senior lecturer, professor and postdoctoral research fellow positions | Women are more often ranked as the first proposal for a lectureship<br>Men more often succeed in their applications for professorship<br>Men and women have equal success rates of appointments to postdoctoral research fellow positions<br>Gender-specific differences in success rates of appointments may indicate unwarranted differences in career opportunities (gender bias in evaluation of scientific qualification) |
| Investigative and decision-making bodies   | At one department gender imbalance<br>At two departments gender balance  |

## SDU – HYPOTHESES

Strategic objectives of the work with our various indicators will be formally approved by the steering committee and Heads of Department in March/April 2014, and are therefore not included here.

| INDICATOR          | HYPOTHESIS   |
|--------------------|--|
| Patterns in hiring | <p><u>Gender:</u><br/>           The gender imbalance is due to:<br/>           The leaking pipeline<br/>           The leaking pipeline mostly takes place after the PhD or Postdoc level<br/>           Less women than men continue their career in academia after PhD-level</p> <ul style="list-style-type: none"> <li>- at SDU, Faculty of Science</li> <li>- outside SDU</li> </ul> <p>Less women than men finish their PhD's<br/>           Reasons for a leaking pipeline:</p> <ul style="list-style-type: none"> <li>- The work conditions do not harmonize with and appeal to the life conditions and wishes of women</li> </ul> <p><u>Retention and recruitment</u><br/>           Lack of retention strategies at the faculties<br/>           Lack of "staff care" at the departments<br/>           Lack of attractive conditions for transitions between positions<br/>           Lack of career guidance and career planning<br/>           Lack of economic resources<br/>           Laws with respect to:<br/>           Job structure at the university<br/>           Foreign scientific employees<br/>           The Danish organization of academic positions is inflexible and does not harmonize with and appeal to the life conditions of women</p> <p><u>Age:</u><br/>           We focus on academic age.<br/>           Women who have been on maternity leave during their PhD or Post doc take longer to finish their degree and longer to advance to a higher position than men and women, who have not been on maternity leave – even when the focus is on academic age</p> <p><u>Position:</u><br/>           A higher percentage of women in permanent position are leaving an academic position for a job in the industry (– there is a high risk academia is left for good)<br/>           Permanent positions: more women than men leave the university and their academic career<br/>           Only by adhering to the academic it is possible to ensure an academic career</p> |



| INDICATOR                       | HYPOTHESIS   |
|---------------------------------|--|
|                                 | <u>Department:</u><br>The Faculty has a gender policy<br>The Faculty has a strategy for recruitment and retention<br>The Faculty has a culture which promotes recruitment and retention<br>The Faculty has a contingency plan  |
| Leadership and Management       | More men than women hold leadership positions<br>More women than men hold educational/study related leader positions that are necessary but not required or salaried   |
| Parental leave                  | More women than men take maternity leave<br>Men tend to shorten their paternity leave as much as possible  |
| Councils, Committees and Boards | More men than women are represented in research related councils, committees and boards<br>More women than men in the educational/study related councils, committees and boards  |
| Patterns of fund application    | More men than women are represented in research related councils, committees and boards<br>More women than men in the educational/study related councils, committees and boards  |
| Scientific production           | Men publish more than women with respect to:<br>Peer reviewed published journal articles<br>Conference material<br>Other material<br>Men network more than women and more strategically with objectives<br>Men are more active than women with respect to:<br>Organization or participation in conference<br>Participation in workshops, seminars or courses<br>Acting as peer reviewer<br>Participation in media<br>Stays abroad<br>Prizes, scholarships and appointments<br>Acting as editor on journals<br>Other activities |
| Job satisfaction and motivation | Retention increases with job satisfaction and motivation<br>More men than women are satisfied and motivated  |

## RWTH – HYPOTHESES

### 1) Gender Mainstreaming in Research

| DIMENSION  | HYPOTHESIS   | STRATEGIC GOAL  |
|--|--|---|
| <b>Integration of Gender Aspects in Research</b> | <ul style="list-style-type: none"> <li>It is necessary to build up gender expertise within the group of researchers to ensure that gender aspects are incorporated in Research.</li> <li>Gender expertise at RWTH University is insufficient.</li> </ul> | <ul style="list-style-type: none"> <li>Gender Studies and Gender expertise ought to be obligatory for every faculty.</li> </ul>   |
| <b>Position of Women in Science</b>              | <ul style="list-style-type: none"> <li>The assumption is that there are fewer women who are project leaders and they have less presentations, publications and prizes.</li> </ul>  | <ul style="list-style-type: none"> <li>Increase of proportion of women who lead projects, given that project funding and coordination is a success driver in academia.</li> <li>Increase the visualization of academic performance of women.</li> </ul> |

### 2) Gender Mainstreaming in Education

| DIMENSION   | HYPOTHESIS  | STRATEGIC GOAL   |
|---|---|--|
| <b>Degree of gender competence of teaching staff</b>        | <ul style="list-style-type: none"> <li>Gender Mainstreaming in Teaching requires gender competence of scientific teachers.</li> <li>Gender expertise at RWTH University is insufficient.</li> </ul> | <ul style="list-style-type: none"> <li>The gender competence of teaching staff should raise the awareness in gender topics at faculties and of students and teachers.</li> </ul> |
| <b>Gender sensitive distribution of education work load</b> | <ul style="list-style-type: none"> <li>Women's involvement in teaching is significantly stronger than men's, which can lead to disadvantages in individual careers.</li> </ul>                      | <ul style="list-style-type: none"> <li>Equal distribution of teaching load</li> </ul>  |

### 3) Gender equality in Human Resources Development

| DIMENSION  | HYPOTHESIS  | STRATEGIC GOAL   |
|--|---|--|
| <b>Degree of gender equality in career development</b> | It is assumed that women still have not the same career opportunities as men. | <ul style="list-style-type: none"> <li>• 20% until 2020 – women in professorships (Institutional Strategy of the RWTH)</li> <li>• 30% until 2030 – women in professorships (Institutional Strategy of the RWTH)</li> <li>• Early provision of career perspectives for women and men.</li> <li>• Equal distribution of job opportunities.</li> <li>• Increase proportion of women in committees to foster their interests and influence in the university's constitution</li> <li>• Systematically fostering of re-entries in science.</li> </ul> |

### 4) Non-discriminating organization

| DIMENSION   | HYPOTHESIS  | STRATEGIC GOAL   |
|---|---|--|
| <b>Degree of Gender Equality in budgeting</b>                           | <ul style="list-style-type: none"> <li>• Women are discriminated in budgeting and the job infrastructure (rooms, personnel, money)</li> </ul>   | <ul style="list-style-type: none"> <li>• Increasing appointment negotiations with female professors/candidates</li> <li>• Gender equal pay</li> <li>• Equal budgeting opportunities for female and male professors</li> <li>• Adequate budgeting of gender measures</li> </ul> |
| <b>Work (Science) Life Balance</b>                                      | <ul style="list-style-type: none"> <li>• Work (Science) Life Balance issues are not gender neutral. Womens more often go into parental leave and reduces working hours. Motherhood and fatherhood are not issues of human resources development at universities.</li> </ul> | <ul style="list-style-type: none"> <li>• Career development by preserving contact to the university.</li> <li>• Family-orientated culture of the university</li> </ul>   |
| <b>Institutionalization of Gender Equality and Gender Mainstreaming</b> | <ul style="list-style-type: none"> <li>• A high level of institutionalization of Gender Equality is the fundament for structural and cultural transformation processes.</li> </ul>  | <ul style="list-style-type: none"> <li>• Institutionalization of Gender Mainstreaming empowers actual transformations.</li> <li>• Increase of gender expertise</li> <li>• Update and strategic enhancement of gender equality measures mainstreaming</li> </ul>                |

## FBK – HYPOTHESES

| INDICATOR                                | HYPOTHESIS  | STRATEGIC GOAL  |
|--|---|---|
| Female presence                          | Imbalance between the genders in FBK technological-scientific research centers  | Increase the percentage of female researchers in the considered research centers (% increase to be established).  |
| Employment terms                         | Different terms of employment that advantage men; in particular, men more than women are present in the highest contractual level positions   | Equal term of employment for men and women.<br>Increase the presence of women within the category of researchers with the highest contractual level positions   |
| Salary                                   | Men gain more than women.<br>Gender exercises an influence on the amount of the variable component of the salary, that is the result of individual negotiations   | Reduce the gender pay gap.<br>Verify whether the differences are mainly due to private, personal negotiations. Particular attention will be paid to this complex indicator as it is made up of and influenced by many aspects (evaluation of research work, individual negotiation, bonus productivity..); our aim is to verify on which of them gender exercises stronger effects. |
| Sick leave                               | Women register more absences from work for sickness than men do.  | Considering absence for sickness as a proxy of working environment, the goal is the improvement of working well-being for women, in particular.   |
| Leadership (formal responsibility)       | Hierarchical imbalance between the men and women researchers, i.e., more men than women are represented in the leadership roles   | Present and promote different types of leadership styles through open calls for higher position too and training courses directed at improving the leadership competences of women.   |
| Recruitment                              | More male candidates than female ones win the calls for research positions (% incidence on total male and female candidates).<br>The presence of at least a woman in the selection/evaluation committee increases the probability that the selected candidate is a woman.   | Reduce the percentage difference between the incidence of winners candidates within women and within men.<br>Increase the number of women in the selection/evaluation Committees.   |
| Promotion (both horizontal and vertical) | Women more than men stay longer in the lower contractual positions.<br>We expect that absences due to maternity leave and/or child and family care influence negatively the career trajectories and that gender bias in techno-scientific research is not only due to the scarce applications of women at the early stages but to obstacles | Fasten the career progression for women preventing from unwarranted differences in the career trajectories  |

| INDICATOR                        | HYPOTHESIS   | STRATEGIC GOAL  |
|----------------------------------|--|---|
|                                  | during the career development  |   |
| Turn over                        | Higher turn-over rate for women researchers  | Prevent from unwarranted exit of women from the research career path  |
| Scientific production            | Men have a higher scientific production than women                                       | Verify whether this hypothesized evidence is influenced by other factors (eg: presence at work, contractual position.)    |
| Network                          | Women attend less conferences than men   | Identify and support incentives for participating in conferences (eg: support for child care.)                            |
| Absence for care<br>Tele-working | More than men, women are absent from work due to family care and use tele-working modes. | Increase the actions that support the work/life balance; promote a “shared work/life conciliation” that involved men too. |

