ANNUAL REPORT 2014

Research Division

Technoscience Studies

Profile areas:

Design for Digital Media

Feminist Technoscience

Innovation System and Development

ICT for Development

Department of Technology and Aesthetics
Faculty of Computer Sciences
Blekinge Institute of Technology BTH

The Mission of the Research Division of TechnoScience Studies is to Expand and Transform Theoretical and Practical Knowledge Bases of Technology Research & Development & Innovation.

Contents

HIGHLIGHTS

ALL TIME HIGH, 4 DOCTOR DEGREE DIPLOMAS AT BTH COMMENCEMENT CEREMONY

...

TECHNOSCIENTIFIC MEDIA TECHNOLOGY

...

GUEST PROFESSOR PROGRAM STRENGTHENED

...

SIDA BILATERAL AGREEMENT WITH RWANDA

...

BOARD MEMBERSHIP SWEDISH FACULTY FOR DESIGN RESEARCH AND RESEARCH EDUCATION

...

VINNOVA PROJECT NORM-CRITICAL GAME CULTURE

...

REQUESTED INPUTS TO SWEDISH MINISTRY OF FOREIGN AFFAIRS

...

ESTABLISHMENT OF THE INTERGENDER CONSORTIUM

...

Executive Summary

The research division Technoscience Studies has a transformative ambition in bringing a technical university like BTH closer to realities in needed knowledge production in high income as well as low income countries. This is done in practice and theoretically in the four main profile areas Design for Digital Media, Feminist Technoscience, Innovation System & Development and ICT for Development,.

Staff at the Research Division of Technoscience Studies (ToS) was during 2014 heavily involved in the process of *integrating the research into courses in the undergraduate education* within media technology. These eduation programs are profiled in 4 areas namely Digital Game, Digital Audio Production, Digital Visual Production and Web Development and engaging more than 300 bachelor students. The present use of the research of ToS is part of the more radical development of the undergraduate eduaction in media technology at the department. The four programs are going to be merged into one or two programs starting in 2016. The naming of the undergraduate programs was 2014 changed from media tecchnology to *technoscientific media technology,* which is also acknowledge by the VC of BTH. To use the concept technoscientific media technology is a strong sign of even more solid links between the research and undergraduate programs as well as giving the department and BTH an added value in the national and intenational context of media technology. During 2014 shared pedagogic development have been interwoven with research retreat, department retreat and reflection led by an external expert.

The Department has reinforced its position at the *Swedish Faculty for Design Research and Research Education, D!* hosted by KTH. Linda Paxling, one of PhD students at ToS, has been accepted as a doctoral student also at D! and Lena Trojer has become a full member of the board od D! (www.designfakulteten.kth.se).

The R&D program within the profile of Design for Digital Media was strengthened during the year with a very active guest professor Kåre Synnes from Luleå University of Technology especially in the work of developing a master program in media technology. During the year BTH finalized the process of 'calling' Kåre Synnes as full professor at Department of Technology and Aesthetics. Professor Synnes will continue as guest professor still some time before answering the 'calling'. Professor Kristine Jørgensen, University of Bergen, visited the department in January for continued cooperation. In the new organization of BTH Peter Ekdahl became the *head of department* from the ^{1}st of January 2014. He has focused much of his work in the *thoroughgoing transformation of the undergraduate programs* in technoscientific media technology with solid anchoring at BTH heading layer during the process. The regional relevance of the research is enhanced by involvement and collaboration in NetPort and its profile New Media. Research and undergraduate education are strongly intertwined and result in establishment of companies by students within media technology and especially so within digital games

VINNOVA approved a project named *Norm-critical game culture.* The project lasts 18 months and is aimed as a prestudy for a larger research project. A norm-critical game culture is a pilot study on how norms and power discriminate the innovation process in game development and ultimately the game culture.

Where in an innovation process does gender equality come in and how do we question and change the current power structure in the gaming industry? The focus is on University undergraduate students and their thoughts and behaviour on innovation, gender and games. The study provides a platform to identify norms and attitudes among future game developers, increase awareness of a norm-critical perspective within gaming and experiment with the concept of gaming in collaboration with the private and public sector. The objectives are to 1) develop knowledge on game development and the gaming industry, its needs and possible entry points for innovation and 2) develop skills and methods on how gender can be transformed from a theoretical perspective to an action in the gaming industry. The prroject organization includes Linda Paxling as Project Coordinator, Elin Hallgren as Consultant and seminar leader and Pirjo Elovaara and Lena Trojer as mentors.

ToS was invited by the Swedish *Ministry of Foreign Affairs* to give a presentation of and share our ten years of applied and practice driven R&D in Innovation System and Clus-

ter development in an exclusive seminar at the Swedish Government Office in October 2014. Our experiences became an appreciated input to the *Strategy for Research Cooperation and Research within Development Cooperation 2015 – 2012*, approved by the Swedish Government 20141218 (UF2014/80398/UD/USTYR) and made explicit footprints in the strategy text.

The revised full proposal for *the Research Training Partnership in Innovation and Use of Research Results* in the '*University of Rwanda* - Sweden Program for Research, Higher Education and Institutional Advancement' was highly recommended for funding. The budget total approved is 1 753 000 SEK 2015 and 2016. The objectives are 1) to increase the use of research and competences produced within the program, by the Rwandan society at large and 2) to increase participation of Rwandan researchers and University Community in activities related to national and regional innovation systems. Tomas Kjellqvist is the Swedish coordinator and Theophile Niyonzima, UR, the Rwandan coordinator of the program.

ToS was *requested to be partner* in the Sida sponsored 5 year bilateral research programs for both *Uganda* (Makerere University) and *Tanzania* (University of Dar es Salaam plus Tanzania Commission for Science and Technology). Because of BTH internal circumstances these 2 proposals were moved to be hosted at Lund University with Lena Trojer as Swedish project coordinator.

Technoscience studies is one of nine partners in a 4-year EU project called GenisLab, within which a number of researchers at ToS are involved. European universities in the fields of physics, nanotechnology and ICT collaborate with technical partners in Italy for advanced gender equality in the academies. 2014 was the last and ending year of the project. During the year the GenisLab project team has worked to apply Genius Labs tailored action plan (TAP) at BTH and tried to ensure that the BTH equal treatment plan, which includes the TAP, comes to concrete implementation. The equal treatment plan emphasizes the integration of *gender perspectives into the university scorecard*. ToS participated in 2 conferences both in Dresden, of which the second one was the final, summing up conference for GenisLab. ToS has delivered a *substantial report* in English called Gender Budgeting, Human Resources, Organisational Culture - Development of Methods. The report can be downloaded at documents on www.bth.se/tks/teknovet.nsf.

During the year efforts to establish an *InterGender consortium* has been performed. The background is the successful work of InterGender, the Swedish-International Research School in Interdisciplinary Gender Studies, funded by the Swedish Research Council with 12,5 million SEK, 2008-2014. ToS has from the start being a member and represented in the InterGender board. Since its inception, InterGender has organized 27 international PhD courses, of which ToS has organized the first one and later one more, as well as three international conferences with a main focus on PhD students' participation and training. The VC of BTH has signed the agreement of the international consortium.

One *new PhD course* started during the year namely *Methods in Technoscience*. The course can be seen as a search for a common ground on method and methodology in Technoscience Studies. The epistemological "floor" problematizes the scientific process and we need to "walk the talk". There is much at stake, our ambition is to improve the scientific inquiry, but we risk to be rejected by the representatives for "normal" science. We have chosen a more difficult road, with great liberty in research, but also with a great responsibility. *Another PhD course* is under development and is offered to all departments at BTH. Its title is *Ontoepistemological points of departure in feminist technoscience* with the aim for the doctoral student to acquire more in-depth knowledge within the field of theory, in which feminist technoscience is developed. The course offers the opportunity to reflect consciously and with nuance upon different perspectives of theories of science, and their consequences for the individual doctoral project.

The Sida funded research project Innovative clusters closing the gap between University and Society in East Africa. A living proof of Mode 2 excellence? with Birgitta Rydhagen as project manager ended 2014. The main aim is to study how innovative clusters can foster timely implementation of knowledge products with socioeconomic relevance in Uganda and Tanzania. *An anthology* with invited chapters by PACF key persons and cluster members was

published by *NM AIST* (Nelson Mandela African Institution for Science and technology) Arusha and with the title The Role of Universities in Inclusive Innovation – cluster development in East Africa.

The highly appreciated cooperation with and support from the local government of Karlshamn and the Bank of Karlshamn continued during 2014 within the context of NetPort. To participate in developing NetPort as a strong innovation system is an inspiring driving force for ToS, which thus is fulfilling one of the core values in the profile of BTH.

The *NetPort Energy Cluster* aims at making the region totally independent on fossil fuels by 2030, through a *Triple Helix cooperation* between BTH, the municipality and regional authorities and companies in the region. The approach is to build up Karlshamn as a knowledge centre on energy systems optimization, based on distributed energy production and efficient use of residual energy for old and new activities. Improved competitiveness of companies in the region is another aim along with an increase of job opportunities. During the year Tomas Kjellqvist has participated in the work of formulating proposals for strategic innovation agendas addressed to VINNOVA and the Swedish Energy Authority.

A specific quality of Technoscience studies is the strong and concrete link between BTH and governmental bodies, which constitutes examples of co-evolution of knowledge. One of the PhD students is a public sector doctoral student being a staff member of the local government of Karlshamn as well. Another of our doctors, now postdoc, has a high position at a ministry of industry and trade in Uganda and a third one at a council of science and technology also in Uganda.

At BTH annual academic ceremony *4 doctors* from Technoscience Studies were graduated. This was *'all time high'* for Technoscience Studies.

During the year ToS had six active doctoral students within the PhD program. The ties of ToS to international R&D collaboration were strong, with specific links to Norway, Denmark, Tanzania, Uganda, Bolivia, Rwanda, Italy and Germany.

BTH strategic plan 2013-2016 emphasizes international collaboration and innovation inreal-life. ToS was during the year strong in realising these goals through doctoral training and research, and also through collaboration for in-real-life innovation in East African countries and Bolivia via SICD (Scandinavian Institute for Competitiveness and Development.

Background

The research division of Technoscience Studies belongs to the department of Technology and Aesthetics (DITE) at Blekinge Institute of Technology – a profiled University of Applied ICT and Sustainable Development. From 1st of January 2014 the department belongs to the Faculty of Computer sciences in the reorganisation of the whole university. The activities at ToS began in 1998 in the then Department of Computer Science and Economics with earmarked funds appropriated by the Parliament through the research bill 1996/97:5. A professor chair in ICT and gender research was filled the 1st July 1999. ToS is a new field of technology and engineering and is highly innovative in terms of development of gender research within technoscience, media technology, methodology for ICT related research and innovation system and cluster development.

In addition to research, undergraduate and graduate education the activities embrace work with-knowledge networks, campus development, external engagements, internal work at BTH and support work for external funding of research and research collaboration.

SICD (Scandinavian Institute for Collaboration and Development) is originated from a collaboration between Swedish and East African partners since 2003 and Bolivian partners since 2007. This is a result of support from both Sida and VINNOVA. In 2008 Sida and VINNOVA decided to outsource there joint interests of Innovation System and Cluster Development to a cooperation platform placed at a Swedish university. The host organisation of SICD became Blekinge Institute of Technology (BTH), Campus Karlshamn, Sweden.

ToS is fully integrated into the profile of BTH in terms of both applied ICT and interactions in-triple helix (university-government-industry) constellations.

BTH campus Karlshamn

Most staff at the Division of Technoscience Studies is involved in BTH's construction of a university campus in Karlshamn. This effort began in 2000 and has intensified as operations grow. The collaboration at NetPort pertains to all kinds of undergraduate education and student issues, cooperation with upper secondary schools and other education providers, various EU project constellations, support for research also in cooperation with experience-based learning, local government and business contacts, incubation activities with participation in the savings bank's foundation of Karlshamn Bank (Sparbankens Näringslivsstiftelse) to promote economic development, etc.

The long term support from the local Government of Karlshamn is highly appreciated and constitutes a base for a very fruitful development of NetPort and BTH campus Karlshamn.

NetPort office, companies within the NetPort focus areas and BTH are situated in the same premises. There are many activities going on at NetPort, which means visibility for BTH's presence in Karlshamn and a form of indirect marketing. The contacts with NetPort's director and staff during the year were vital for a fruitful collaboration especially in the profile area of Digital Media at BTH campus Karlshamn.

Theoretical stance

One of the aims of Technoscience Studies is to develop complex knowledges about ICT including media technologies as reality-producing technologies as well as of the transformations that follow in its wake. This presupposes participation in the appurtenant processes of transformation and knowledge production. The epistemological base for this is found in the profile are Feminist Technoscience within Technoscience Studies. Seeing ICT as reality-producing technologies rests on the idea that all of us, researchers in the field included, are enmeshed in development processes. No innocent positions exist. ICT intervenes in and co-creates people's everyday lives. On the other hand, ICT is developed and interpreted and practiced by people. This aim of Technoscience Studies is thus to create theoretical bases and practices for developmental processes in ICT-related fields as well as in the context of innovation systems. The latter has increased in importance for ToS with a strong and upcoming research profile in innovation system and development. Most of these activities are performed together with a number of international partners.

Within international gender/feminist research with strong links to the dominant technological fields of our age – information and communication technology, biotechnology and material technology – there is a widespread understanding of the production of knowledge and technology as processes taking place in distributed systems. In these days and age knowledge is generated in the overlapping borderland of universities, industry and other regional, national and international entities as well as governmental bodies. These processes are not least apparent in our region Blekinge as well as in the cooperation countries in Africa and Bolivia and affect the way in which R&D&I work is carried out. The term technoscience connotes this understanding of the concurrent production of knowledge, technology and reality. The way in which technoscience is defined by scholars like Donna Haraway raises important questions about boundaries and transgressions between science, technology, politics and society, humans and nonhumans etc. as well as implosion phenomena within the same spheres.

The PhD program of ToS belongs to the faculty of technology at BTH. Along with research activities based on the individual research projects, ToS also has a joint research programme organised as division seminars and courses in order to develop epistemological competences and skills for theoretical and methodological work. Prospective doctoral students and university lecturers also participate in this research programme.

Staff

Administrators

Peter Ekdahl, Head of Department, DITE
Pirjo Elovaara, Deputy Head of Department, DITE
Lena Trojer, Head of Research, DITE
Roger Tònklint, Director of Studies, DITE
Ulrika Magnusson, Research education administrator, Central Unit of Administration, BTH
Madeleine Persson, Economist, Central Unit of Administration, BTH
Christian Bladh, Economist, Central Unit of Administration, BTH

Researchers

Carlos Acevedo, Doctoral student
Paul Carlsson, Doctoral student, University lecturer
Linus de Petris, Lic, Doctoral student
Peter Ekdahl, PhD, Senior lecturer
Pirjo Elovaara, Associate professor, PhD, Senior lecturer
Anders Falk, Doctoral student, University lecturer
Peter Giger, PhD, Senior lecturer
Elisabeth Gulbrandsen, Lic., Doctoral student
Kerstin Gustavsson, University lecturer
Tomas Kjellqvist, PhD, Project director
Linda Paxling, Doctoral student
Birgitta Rydhagen, Associate professor, Senior lecturer
Kåre Synnes, Guest professor
Lena Trojer, Professor, Head of Division

Associated Researchers

Erik von Bahr, Senior advisor, SICD
Christina Björkman, PhD, senior researcher
Peter Kempinsky, Senior advisor, Kontigo AB, SICD
Peter Lating, PhD, postdoc, collaboration partner
Lydia Mazzi, PhD, postdoc
Joshua Mutambi, PhD, postdoc
Charles Otine, PhD, collaborating partner
Fatuma Simba, PhD, postdoc, collaborating partner
Dan Sjögren, Project manager, Facilitera, SICD

Postgraduate degrees awarded

Licentiate of Technology Pirjo Elovaara	2001 02 02
Licentiate of Technology Christina Björkman	2002 06 14
Licentiate of Technology Peter Ekdahl	2002 10 25
Doctorate of Technology Birgitta Rydhagen	2002 12 18
Licentiate of Technology Annelie Ekelin	2003 01 27
Licentiate of Technology Inger Gustafsson	2004 05 07
Doctorate of Technology Pirjo Elovaara	2004 05 28
Doctorate of Technology Christina Björkman	2005 05 23
Doctorate of Technology Peter Ekdahl	2005 12 09
Licentiate of Technology Peter Giger	2006 06 09
Licentiate of Technology Peter Okidi Lating	2006 12 04
Doctorate of Technology Inger Gustafsson	2008 01 18
Licentiate of Technology Ellen Kalinga	2008 05 28
Licentiate of Technology Suzan Lujara	2008 05 28
Doctorate of Technology Peter Okidi Lating	2009 03 06
Licentiate of Technology Fatuma Simba	2010 06 28
Doctorate of Technology Ellen Kalinga	2010 12 08
Doctorate of Technology Suzan Lujara	2010 12 08
Doctorate of Technology Peter Giger	2010 12 15
Licentiate of Technology Rebecka Molin	2011 02 11
Licentiate of Technology Charles Otine	2011 03 31
Licentiate of Technology Lydia Mazzi	2011 06 01
Doctorate of Technology Maria Bäcke	2011 05 27
Licentiate of Technology Joshua Mutambi	2011 06 10
Licentiate of Technology Julius Ecuru	2011 09 24
Doctorate of Technology Fatma Simba	2012 09 27
Doctorate of Technology Lydia Mazzi	2012 11 07
Doctorate of Technology Charles Otine	2012 11 07
Doctorate of Technology Tomas Kjellqvist	2013 06 14
Doctorate of Technology Julius Ecuru	2013 11 28
Doctorate of Technology Joshua Mutambi	2013 11 28
Licentiate of Technology Linus de Petris	2013 12 19

Research projects

The research projects are listed below within the four main profile areas of the research division of Technoscience Studies. The projects can either be doctoral thesis projects or research projects. In some cases the projects belong to more than one profile area.

Design for digital media

Theoretical Frameworks for ProduSer Oriented Design for Digital Media

Peter Ekdahl, R&D project

The aim is to develop a research structure as well as theoretical frameworks for the concept ProduSerOriented Design for Digital Media. When starting the process of producing digital media, there are no separate roles as producer and user. The roles are intertwined in complex and dynamic relations. The understanding of these complex relations opens up for new ways of developing relevant and future oriented applications. The R&D project is closely linked to the under graduate programmes Digital Games, Digital Visual Production, Digital Audio Production, Web Development and Basics for Digital media. The project encompasses development of a deeper and more complex understanding of digital media technology and design as an area of knowledge. The aim of the project is also to define core areas and develop transformational strategies in order to find out how traditional disciplines relate to the core areas of media technology and design including serious gender perspectives.

Complexity and Depth in Contemporary Media

Peter Giger, R&D project

Media can be viewed as a continuous terraforming machine with the self-proclaimed aim of constructing virtual or possible futures to act upon. We made the machine. Continuously, we are becoming the machine. As persons, we are inevitably connected with our past and future through functions and locations in the terraforming machine.

My project in 2015 is to discuss how the contemporary instance of this terraforming machine is transforming flows of complexity and depth into new forms of media. More precisely, how are historical notions of "literary quality" translated into the contemporary plethora of literary expressions?

The concept of 'terraforming' is a methodological figuration meant to put the spotlight on action and responsibility instead of the more deterministic senses of continuous growth and random change.

This project is based on preliminary research of "intellectual depth in social media" done in 2014, funded by Karlshamn Municipality linked to NetPort.

Exploring æffect in media practises

Linus de Petris, PhD project

My research is based in media technology and technoscience. The (onto)epistemological foundation is based on feminist technoscience and proceeds from my licentiate thesis. By transforming my findings in e-government practices, and with design and use of media technology in focus, the research starts with a literature study, which is later combined with one or more action research projects.

In different research situations, the reality production of technoscientific and media technology practices is diffracted to explore concepts such as materialities, sensualities, inscriptions and institutions. Specifically, the research starts by intertwining the concepts of effect and affect, introducing æffect.

Due to a change in employment, my research activities during 2014 have been limited in time to set a new course of action, partly by engaging more in the undergraduate programs.

Digitizing rituals: A technoscience perspective on games as a reality-producing and reality-transforming technology.

Anders Falk, PhD project

The main research objective is to provide a technoscientific understanding of games as a reality producing practice, what realities the games produce, how these realities might intra-act with existing realities and what this might mean for the actors involved. The research will highlight examples of what games incorporate from existing cultural mechanics and what they as a subculture contribute to the mainstream culture.

The researches main aim is to widen the understanding of games and game development for legislators, game developers and players alike.

The reality producing dynamics of the mobile artefact - a feminist technoscientific practice of entangled methodology and controversy

Linda Paxling – PhD project

The research objective is a feminist and postcolonial technoscientific exploration of how the mobile phone is changing the reality producing dynamics in various contexts.

The research aim is to confront power structures that continue to reside in the infrastructures of technology and development and create alternative realities that cross (imaginary) boundaries between stakeholders working with mobile technologies.

My empirical material is intermeshed between everyday practices and epistemological concerns. I experiment with ethnographic, action-oriented and participatory methods to address commonalities and differences, and foremost controversies, in the infrastructuring of mobile technologies and development. I entangle conversations with representatives from mobile companies in Uganda, UN policies on the post-MDG goals and open space workshops on mobile futures with the attempt to visualize the infrastructuring between knowledge production and the embodied mobile artifact.

If we imagine another reality with another set of stakeholders - Who could they be and how would their reality immerse with figurations of participation, democracy and equality? What would the design process look like?

Keywords:

Feminist technoscience, postcolonial technoscience, cyborg anthropology, mobile phone, M4D, ICT4D, design ethnography, intersectionality.

Creativity, innovation and motivation in Swedish higher Education, with focus on media technology graduate educations.

Paul Carlsson, PhD project

The PhD project starts in the issue of creativity and how these factors are implemented in technical graduate educations in Sweden.

Educational reports published over the last 20 years have consistently identified creative thinking and problem solving as among the most crucial skills necessary for success in today's workplace, and thus have called on educational institutions to do more to promote these abilities (Carnevale et al., 1990; Secretary's Commission on Achieving Necessary Skills, 1991; Partnership for 21st Century Skills, 2008).

The overarching question is how to design a creative learning environment in the context of media technology training. How to encourage creativity, innovation, motivation combined with problem solving and personal development. How to design an "education of humility" that combines technoscientific understandings with the possibilities of the 21th century.

ICT for development

The reality producing dynamics of the mobile artefact - a feminist technoscientific practice of entangled methodology and controversy

Linda Paxling, PhD project see above.

Transdisciplinary Research Development in Triple Helix Context in Uganda

Dr Peter Okidi Lating, post doc project

The aim of the postdoctoral study is to strengthen transdisciplinary research skills of the candidate and improve graduate supervisory skills as part of the staff capacity development in the College of Engineering, Design, Art and Technology, Department of Engineering Mathematics / Computer Engineering, Makerere University, Uganda,

Innovation system and development

Business Incubation Systems as an integral development strategy for industrialization of Uganda

Joshua Mutambi, PhD, postdoc.

The main objective of the postdoctoral study is to investigate the level of collaboration and incubation practices of institutions, agencies and university programs to promote technology transfer, business start-ups and influencing sustainable business models. All this is in the context of emerging innovation systems and improving competitiveness.

This is envisaged to inform the respective incubation institutions and policy processes and help in particular formulating relevant strategies and prospects of advancement (in terms of upgrading incubation environment and increased productivity regarding business development and competitiveness in Uganda) and growth of sustainable businesses.

Unlocking the Binding Constraints in Uganda's Innovation System

Julius Ecuru, PhD, postdoc.

The post-doctoral work will continue exploring innovation systems in the development context in Uganda and east Africa. Many policy makers and politicians recognize how the potential role of science, technology and innovation could play in the economic development and wellbeing of their societies. However, the rhetoric is not adequately matched with allocation of resources to STI, and development of enabling policies. Uganda, for example does not have a clear policy for financing innovation, and struggles to find ways of promoting innovations and competitiveness in the country. The post-doctoral work, therefore, aims at assisting policy makers understand the dynamics of innovation systems, and hence assist them develop innovation policies that are responsive to the demands of growth and competitiveness.

Formation of clusters focusing generation of a co-evolution context of university and industry in Cochabamba region, Bolivia

Carlos Acevedo, PhD project

Main objective is to develop knowledge about Innovation Systems and clustering processes focusing on the generation of a co-evolution based context between the university-industry-government .

Specific objectives are to:

a) To analyse national policies created to strengthen the National Innovation System.

b) To analyse the SME cluster development taken place in the region of Cochabamba, Bolivia.

c) To determine success mechanisms to make the innovation processes more dynamic in the co-evolution context between the university, firms and government.

Understanding energy systems as innovation systems.
Understanding the role of the university in the national innovation system.

Tomas Kjellqvist, R&D&I projects

Inspired by work done in the project "Solar power to the people" I started research with the aim to understand energy systems as innovation systems. The main finding from the previous project was that implementation of solar technology in the productive sector in African countries was due to the absence of an innovation system in the energy sector. The project had also identified that the innovation system on renewable energy sources was only emerging in Sweden. Thus it had been very difficult to identify possible partnerships for collaboration between Swedish companies and companies in East Africa.

I set out to design a research program on how energy systems could be understood with the concepts derived from theories on innovation. To make the connection I realized that I had to go to the roots of Systems theory and to understand the evolution of energy systems I needed to get a better grip on theories on evolutionary economics. As the transition to renewable energy requires solutions for a decentralized energy production in distributed systems I also needed to integrate methods dating back to the quantitative revolution in economic geography back in the 1960´s. The work on tying these different perspectives together is ongoing, and I find it intriguing. It will allow me to do an overview on transitions in the Swedish energy system since the 1980s and also to integrate a wider definition of the energy system actors. This theoretical and epistemological framework has already proved to be valuable in participatory action research conducted with the Netport Energy Cluster. To get a better understanding of how my approach could be used within a framework of development and environment I initiated a collaboration with researchers at the Södertörn University.

Another work done during the year is a Study on Human Resource Development for Science, Technology and Innovation in Ethiopia, which was a consultancy for the German Aid organization GZ. In this I developed a framework for the possible integration of knowledges from research higher education and vocational training with learning by doing and using technology. This work has also contributed to my understanding on possible ways of handling knowledge challenges within the energy cluster. I also foresee that I will be able to use that framework in the forthcoming project on "understanding the role of the University of Rwanda in the National Innovation System", which was approved and granted in the last quarter of 2014.

As a part of my activities with the Swedish National Commission for Unesco, I wrote a small paper on the international dimension of Integrated Science. This paper was based on findings from my thesis work in 2012.

Innovative clusters closing the gap between University and Society in East Africa. A living proof of Mode 2 excellence?

Birgitta Rydhagen, project manager, Lena Trojer, funded by Sida 2010 – 2012 and extended to March 2014.

Universities in East Africa collaborate in innovative cluster initiatives in diverse locations in knowledge production in the context of application. This means that scientific researchers participate in socio-economic development and poverty reduction by developing knowledge in close collaboration with actors in local communities, with business and Government. The umbrella organization PACF (Pan African Competitiveness Forum) provides a supportive structure and facilitates collaboration between cluster groups in different African countries.

The study focuses on two cases where cluster initiatives develop innovative solutions to address changing situations - climate change, increasing global market competition, deteriorating natural resources and an increasing need for diversified income generation among women and men. One case is the Tanzanian Zanzibar cluster for seaweed production. The other case is salt production cluster in lake Katwe, Uganda. Both clusters aim towards increasing product quality and product diversity to increase the income, and at the same time improve social conditions for workers and their families. Many of the participants are women.

The main aim is to study how innovative clusters can foster timely implementation of knowledge products with socioeconomic relevance. Focus is on the research component, since socioeconomic development is part of the strategic policies of universities in Uganda and Tanzania. The project includes focus group discussions and participatory exercises with PACF key persons and cluster members.

Early 2014, an anthology with invited chapters by PACF key persons and cluster members was published. Final report was submitted to Sida.

Feminist technoscience

The New Production of Politics

Elisabeth Gulbrandsen, PhD project

The main objective is to explore conditions for developing responsible technoscientific cultures – in and beyond the academy. The linearity as well as the division of labour suggested by the "technology push" and "society pull" policy models are heavily criticized for ignoring the complexity and dynamics that emerge partly as a consequence of the success and pervasiveness of science and technology in late modernity.

Science and society have both become transgressive invading each other's domains, and policy questions are enhanced into political questions. A third, more interactive policy model is emerging figured in transdiscursive terms like "strategic science", "innovation system", "postnormal science", "technoscience", "mode 2", "agora".

Complexity and Depth in Contemporary Media

Peter Giger, R&D project, see above

Epistemological Issues in Computer Science Education from Gender Research Perspectives

Christina Björkman, research project, quiescent during 2014

This is a project with university teachers in computer science at a Swedish university. The focus of the project is gender, knowledge and learning in computer science, and the project aims to deepen

the teacher's knowledge and experience in these areas in order to develop their teaching. In the longer perspective, this concerns how to make computer science more interesting to a larger group of people than is the case today. This can be accomplished by, for example, discussing issues such as what computer "is", and how it is presented, and to learn to respect and accommodate greater diversity among students and their backgrounds, interests, motives and understandings.

Theoretical Frameworks for ProduSer Oriented Design for Digital Media

Peter Ekdahl, R & D project, see above.

The reality producing dynamics of the mobile artefact - a feminist technoscientific practice of entangled methodology and controversy

Linda Paxling – PhD project, see above.

Innovative clusters closing the gap between University and Society in East Africa. A living proof of Mode 2 excellence?

Birgitta Rydhagen, project manager, Lena Trojer, see above.

Exploring æffect in media practises

Linus de Petris, PhD project, see above

Feminist TechnoScience and a Shared Fragile Future - challenging the epistemological infrastructure in technology

Lena Trojer, R&D project

The research, which is mainly practice driven in developing countries, brings forward discussions on how we, as researchers in technoscience, are deeply involved in technological transformation processes through our knowledge production. The focus is turned towards the knowledge production itself and the university as partner in distributed research processes. The contemporary situation is understood as circumstances, where the boundaries between universities, industry, public sector and other kind of institutions, organisations and authorities are exceedingly hazy concerning knowledge production and evolving into complex co-evolving processes. The discussion is kept to the role and accountability and responsibility of the actors at the universities. There is an emphasis on the need for selfreflection / diffraction in technological transformation processes as far as scientists are concerned. The ontoepistemologcal base for this research is found in feminist technoscience.

Development of the R&D profile Design for Digital Media

Position

The development work of the Media Technology Group in the undergraduate programs indicates that the core knowledge foundation of design for digital media is evolved in the expression of the production (in Swedish gestaltande produktionen). Consequently there are specific demands on the epistemological and methodological bases as well as the formation of the R&D profile to support the activities.

The objectives of the R&D profile of Design for Digital Media are:

- to strengthen and more clearly articulate the design environment for undergraduate courses
- to develop Master programs and courses on graduate level
- to provide relevant qualifications for the teacher staff of Media Technology at graduate level
- to strengthen cooperation with external education and research actors nationally and internationally
- to develop co-production with the industry and the public sector.

The R&D profile of Design for Digital Media includes the following:

- Seminars developing the conceptual repertoire. The activities are open to the teacher as well as researcher staff. This enables us to identify and prioritise the needs of qualification for our teachers. The activities include seminars with guest speakers, literature and writing workshops, participation in conferences with papers.
- Courses at graduate level to qualify the teachers and invite applicants from other university sections and colleges in order to broaden our networks.
- Graduate school at the national level in collaboration with other universities. This facilitates teachers' qualifications and networking.
- Research groups focusing three areas: theory, development of design education and applied research.

Integration of Research and Undergraduate Program

In the past year PhD students and senior researchers have worked closely with students within courses and projects in the undergraduate programs. Examples of courses are:

- Concept design for digital media. Groups of students worked together with researchers on projects involving digital story telling in physical environments. Most projects were initiated by the students and some were initiated by senior researchers and PhD students.
- Bachelor Thesis in Media Technology. Senior researchers acted as supervisors and/or examiners for undergraduate students' bachelor theses. The subjects studied by the students were selected together with senior researchers and the examiners worked throughout the semester continuously assessing the thesis.
- Techno scientific research methodology. A course on advanced level that was managed by senior researchers and PhD students. Students in the undergraduate program studied techno scientific research methodologies in preparation for their thesis work (2015). Two teachers also took the course as a step towards doctoral studies (2016/17).

Other collaborations between undergraduates and post graduates includes joint seminars with external researchers, development of future courses and programs and projects with external partners and funding.

The Swedish Faculty for Design Research and Research Education

Design for Digital Media at ToS is a member of the Swedish Faculty for Design Research and Research Education. The aim of the Swedish Faculty for Design Research and Research Education

(previously the Centre for Research in Design) is to create a solid, critical and future-oriented platform for research, advanced practice and education in the field of design.

The Swedish Faculty for Design Research and Research Education was founded in December 2007 financed by Swedish Council of Research (VR) and Royal Institute of Technology (KTH) and is a national centre for design research based at KTH Royal Institute of Technology. The faculty encourages the development of design as a field of knowledge so that it can respond to social, economic and technological challenges in society in a sustainable, innovative and aesthetically aware manner. Currently the faculty is hosting 47 doctoral students from 12 of its 20 member institutions throughout Sweden. The Department has reinforced its position at the Swedish Faculty for Design Research and Research Education by Linda Paxling, one of PhD students at ToS, being accepted as a doctoral student also at D! and Lena Trojer appointed a full member of the board od D!

Design concerns us all - everyday and everywhere, in private and in public. In this sense, design is society's biggest cultural sector. Thanks to its ability to effect renewal, design also has a decisive impact on competitiveness in many industries. Design research is needed so that design can develop its cultural and innovative role to meet the future's complex and rapidly changing world with its increased demands for sustainable development.

Research Development

The R&D program within the profile of Design for Digital Media was strengthened during the year with an appreciated guest professor/researcher program, see Postgraduate activities below. The administrative heads of BTH are acknowledging the results of the program. During the year a process of 'calling' a professor in the profile was finalized. The recruitment of 2 more PhD students in the profile of Design for Digital Media took place. The PhD students will be admitted early 2015.

Postgraduate activities

Visiting Scholars Program

Professor *Kåre Synnes*, Luleå University of technology, www.ltu.se/staff/u/unicorn-1.10291, was a very active guest professor at the department during 2014. This implies important addition of competence for training programs and research in linked profile. Kåre Synnes focused especially the development of a master program in media technology / design for digital media and cooperation with NetPort in Digital Learning Platforms. During the year BTH finalized the process of 'calling' Kåre Synnes as full professor at Department of Technology and Aesthetics. Professor Synnes will continue as guest professor still some time before answering the 'calling'.

The dialogue continued with acting Professor *Kristine Jørgensen*, Bergen University, http://uib.academia.edu/kristinejorgensen. Her visit to BTH campus Karlshamn took place in January 2014.

PhD courses

Posthumanist texts *(Posthumanistiska texter)*

Course based on the book Posthumanist texts. The course was intensified during autumn 2014 and finalized in January 2015.

Methods in Technoscience

One new PhD course started during the year namely *Methods in Technoscience*. The course can be seen as a search for a common ground on method and methodology in Technoscience Studies. The epistemological "floor" problematizes the scientific process and we need to "walk the talk". There is much at stake, our ambition is to improve the scientific inquiry, but we risk to be rejected by the representatives for "normal" science. We have chosen a more difficult road, with great liberty in research, but also with a great responsibility.

Ontoepistemological points of departure in feminist technoscience

Another PhD course is under development and is offered to all departments at BTH. Its title is *Ontoepistemological points of departure in feminist technoscience* with the aim for the doctoral student to acquire more in-depth knowledge within the field of theory, in which feminist technoscience is developed. The course offers the opportunity to reflect consciously and with nuance upon different perspectives of theories of science, and their consequences for the individual doctoral project.

Research Seminars

Staff engaged in research at Technoscience Studies as well as lecturers gather for research seminars, where research activities and fundamental choices for our understanding of the field are discussed and developed and where individual researchers present their work for discussion. The following research seminars were held during the year:

2014 01 31	ToS activities and planning of proposal writing
2014 03 25	ToS and the master program
2014 03 26	ToS and the master program
2014 04 24 - 25	Research retreat, The development of ToS
2014 05 07	Dr Joshua Mutambi & Dr Julius Ecuru, *Skilled and entrepreneurial human resource influence innovations and industrialization in Uganda*
2014 05 08	Dr Charles D Otine, *Big Data for Development - examples, opportunities and challenges in Uganda*
2014 08 19-20	Department retreat including research seminars, activities and development of ToS
2014 09 29	Meeting with VC BTH, discussing ToS's mission and future

Research supervisor training

FLUS

The two universities BTH and Linné University in Växjö and Kalmar provide a joint research supervisor training for staff holding a Ph.D. During the year Tomas Kjellqvist participated in the supervisor training.

Other Activities

ToS partner in the VR funded National Graduate School

InterGender, funded by the Swedish Research Council with 12,5 million SEK, 2008-2014, links Swedish PhD programs in Gender Studies and set up relations to four major European Research Schools within the area. Participants are Gender Studies units at the universities in Blekinge, Göteborg, Linköping, Luleå, Lund and Örebro that have established Gender Studies as a research training area of its own, as well as Gender Studies units at the universities of Stockholm, Uppsala and Umeå. International partners are the Finnish, the Dutch and the Inter-Nordic gender research schools as well as the transdisciplinary gender research school at Humboldt University, Berlin.

InterGender is linking these strong, but scattered research training units in a joint, systematized program of PhD courses, PhD supervisors' courses, thematic research seminars and conferences. ToS organized the first one and later one more. A clustering of PhD students in long-term trans-institutional and ICT-facilitated discussion groups is an aim. It is expected that InterGender will generate synergies and a significantly enhanced level of quality due to critical mass and complementary expertise of the research staff. Pirjo Elovaara, Lena Trojer and Linda Paxling are working with InterGender.

During the year efforts to establish an InterGender consortium has been performed. The Consortium is one of the major outcomes of the InterGender project and thus securing the continuation of the successful InterGender research community. The VC of BTH has signed the agreement of the international consortium.

Internationalisation

Partners in Developing Countries

Department of Computer Science and Engineering, College of Information and Communication Technologies, University of Dar es Salaam (UDSM), Tanzania

Cooperation with the Department of Computer Science and Engineering, College of Information and Communication Technologies (CoICT) at the University of Dar es Salaam (UDSM), Tanzania, has earlier been on an e-learning project. After finalizing the project and receiving doctoral degrees at both BTH and UDSM the collaboration with our colleagues from CoICT have tried to secure postdoc positions. The collaboration continued during the year in follow up the development of an ICT cluster in Tanzania.

Institute of Marine Science, UDSM

The cooperation has included joint proposal writing for the Sida 5 year bilateral program Research Training Partnership Programmes as an integral part of research capacity strengthening.

Tanzania Commission for Science and Technology, COSTECH, Tanzania

The cooperation has included joint proposal writing for the Sida 5 year bilateral program Research Training Partnership Programmes as an integral part of research capacity strengthening.

Nelson Mandela African Institute of Science and Technology, Tanzania

Cooperation with the new Nelson Mandela African Institute of Science and Technology (NM-AIST)in Arusha, Tanzania. The collaboration is focused on innovation systems and involves partners via SICD as well as ToS. Lena Trojer is adjunct professor at NM-AIST since 2012. Tomas Kjellqvist is director of the evolving International Graduate School on Innovation Systems, Clusters and Development Graduate School with NM-AIST as one of the main partners. The cooperation during 2014 included planning, writing and publishing the book The Role of Universities in Inclusive Innovation – cluster development in East Africa, which has been appreciated both in Sweden and in East Africa. . The report can be downloaded at documents on www.sicd.se. The cooperation also included joint proposal writing for the Sida 5 year bilateral program Research Training Partnership Programmes as an integral part of research capacity strengthening.

College of Engineering, Design, Art and Technology, Makerere University, Uganda

Cooperation with the College of Engineering, Design, Art and Technology (CEDAT) at Makerere University, Uganda, on ICT4D, e-learning and innovation system projects. The form of cooperation was via postdocs as well as joint proposal writing for the Sida 5 year bilateral program Research Training Partnership Programmes as an integral part of research capacity strengthening.

Muni University, Uganda

ToS is a collaborating partner to the new Muni University, Uganda, in the development of the Faculty of Technoscience both concerning under graduate curriculum, research and ICT infrastructure development.

University of Rwanda

The revised full proposal for the Research Training Partnership in Innovation and Use of Research Results in the University of Rwanda - Sweden Program for Research, Higher Education and Institutional Advancement was highly recommended for funding. The budget total approved is 1,7 million SEK 2015 and 2016. The objectives are 1) to increase the use of research and competences produced within the program, by the Rwandan society at large and 2) to increase participation of Rwandan researchers and University Community in activities related to national and regional innovation systems. Tomas Kjellqvist is the Swedish coordinator and Theophile Niyonzima, UR, the Rwandan coordinator of the program.

Universidad Mayor de San Simón, Bolivia

Cooperation with the Universidad Mayor de San Simón (UMSS) in Bolivia on development of innovation systems. The form of cooperation is via doctoral studies. One doctoral student, Carlos Acevedo at UTT (Technical Transfer Unit at UMSS) is doing his Ph.D. studies at BTH with two Bolivia research supervisors and two Swedish research supervisors.

The Scandinavian Institute for Collaboration and Development

The Scandinavian Institute for Collaboration and Development, SICD, placed at ToS and supported by Sida and VINNOVA continued its activities in East Africa and Bolivia, see the website www.sicd.se. The mission of SICD is to support social and economical development by facilitating cluster development and innovation. SICD include collaborations between Swedish and African partners since 2003 and Bolivian partners since 2007 in programs on Innovation Systems and Innovative Clusters. The African program is coordinated by Pan African Competitiveness Forum, PACF. PACF conducted during 2014 an annual conference in Tanzania, at which SICD was represented. The Sida funded Innovation System and Clusters Program in Mozambique continued. SICD collaborates with FNI (National Research Fund Mozambique) and conducted facilitator training in a team including experts from SICD and PACF-Tanzania and PACF-Uganda. In Bolivia the SICD team was supporting cluster development in Cochabamba in collaboration with UTT at UMSS and with DIPGIS at UMSA (Universidad Mayor de San Andrès) in La Paz.

Partners in High Income Countries

Humbolt University, Berlin

ToS collaborates with Humbolt University via the national graduate school InterGender.

The GenisLab

The project aims to implement structural changes in a group of selected scientific organisations in order to overcome the factors that limit the participation of women in research. The nine partners are: CSIC (Spanish Superior Council for Scientific Research) Institute for Polymer Science and Technology, Spain; IPF - Leibniz Institute of Polymer Research Dresden, Germany; FTM UB _ Faculty of Technology and Metallurgy, University of Belgrade, Serbia; NIC_National Institute of Chemistry, Slovenia; INFN, National Institute for Nuclear Physics, Italy; BTH_Blekinge Institute of Technology, Sweden. Technical partners are: FGB- Fondazione Giacomo Brodolini, Italy; ITC/ILO_ International Training

Centre of the International Labour Organization, Un Agency, International; ADS - Italian women in science organization, Italy.

During the year the GenisLab project team has worked to apply Genius Labs tailored action plan (TAP) at BTH and tried to ensure that the BTH equal treatment plan, which includes the TAP, comes to concrete implementation. The equal treatment plan emphasizes the integration of gender perspectives into the university scorecard. ToS participated in 2 conferences both in Dresden, of which the second one was the final, summing up conference for GenisLab. ToS has delivered a substantial report in English called Gender Budgeting, Human Resources, Organisational Culture - Development of Methods. The report can be downloaded at documents on www.bth.se/tks/teknovet.nsf.

Cooperation between BTH, business and the community/ politics

The cooperation profile of BTH is an explicit praxis in the activities of Technoscience Studies. Indeed, this praxis in itself constitutes empirical results for the production of knowledge, broadens the understanding of technology and innovation and creates relevance for the activities of ToS. Example of such collaboration is students award for their games Traverser (won the Gold Chip award) and Stairs. Both games were results of student start up companies. Another example is PhD student Linus de Petris, whose doctoral studies partly is due to his employment at the municipality of Karlshamn. Participation at Research Friday (forskarfredag) resulted among other things in cooperation with a school library with the aim of testing different digital media techniques.

Publications

Carlos Acevedo, José Eduardo Zambrana Montán, Mauricio Céspedes Quiroga (2014) "National Innovation Systems in Developing Countries – The Bolivian Innovation System", submitted.

Julius Ecuru, Peter O. Lating & Lena Trojer (2014) "Innovation characteristics of formal manufacturing firms in Uganda", African Journal of Science, Technology, Innovation and Development, Routledge, Volume 6, Issue 5, p. 415-423.

Tomas Kjellqvist (2014) "Could Aid donor agencies support innovation? Lessons from Swedish aid politics and practices" in Birgitta Rydhagen, Lena Trojer (eds.) The role of Universities in inclusive innovation. Cluster development in East Africa, publisher Nelson Mandela African Institute of Science and Technology, Arusha.

Tomas Kjellqvist (2014) "Forskning i Öst och Väst, Nord och Syd, i Hela Vetenskapen – 15 forskare om integrerad forskning, Vetenskapsrådet.

Tomas Kjellqvist, Birgitta Rydhagen, Lena Trojer (2014) "Inclusive Innovation Processes – experiences from Uganda and Tanzania", African Journal of Science, Technology, Innovation and Development, Volume 6, Issue 5, p. 425-438.

Linda Paxling (2014) "Science Fiction as Feminist Utopia", Conference proceedings, Intergender konferens, Linköping University

Rana, J., Kristiansson, J. & **Kåre Synnes**, (2014), "The strength of social strength: an evaluation study of algorithmic versus user-defined ranking", Proceedings of the ACM Symposium on Applied Computing. New York: ACM, s. 658-659 2 s.

Kikhia, B., Gomez Simon, M., Jimenez, L. L., Hallberg, J., Karvonen, N. & **Kåre Synnes**, K. (2014) "Analyzing Body Movements within the Laban Effort Framework using a Single Accelerometer" i : Sensors. 14, 3, s. 5725-41 17 s.

Sakib, M. S. R., Quyum, A., Andersson, **Kåre Synnes**, K. & Körner, U. (2014), "Improving Wi-Fi based Indoor Positioning using Particle Filter based on Signal Strength", IEEE ISSNIP 2014: 2014 IEEE 9th International Conference on Intelligent Sensors, Sensor Networks and Information Processing, Conference Proceedings. Piscataway, NJ: IEEE, 6 s. 6827597

Kikhia, B., Boytsov, A., Hallberg, J., ul Hussain Sani, Z., Jonsson, H. & **Kåre Synnes** (2014), "Structuring and Presenting Lifelogs based on Location Data", Revised Selected Papers. Cipresso, P., Matic, A. & Lopez, G. (red.). Cham: Springer, s. 133-144 11 s. (Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering; Nr 100).

Birgitta Rydhagen, Lena Trojer (eds.) (2014) *The role of Universities in inclusive innovation. Cluster development in East Africa*, publisher Nelson Mandela African Institute of Science and Technology, Arusha.

Jonsson, A.C., **Birgitta Rydhagen**,, Wilk, J., Feroz, R.A., Rani, A. and Kumar, A. "Climate Change Adaptation in Urban India. An Approach for Inclusive Formulation of Local Adaptation Strategies", Global NEST Journal. In press (available online 20141219).

Wilk, J., Hjerpe, M., **Birgitta Rydhagen** (2014) "Adaptation Spinoffs from Technological and Socio-economic Changes", in Inderberg, T.H., Eriksen, S., O'Brien, K. and Sygna, L. (eds) Climate Change Adaptation and Development: Transforming Paradigms and Practices. London: Routledge.

Lena Trojer (2014) "The Relevance of Disciplinary and Transdisciplinary Research in Cluster Contexts of Low Income Countries", in Birgitta Rydhagen, Lena Trojer (eds.) *The role of Universities in inclusive innovation. Cluster development in East Africa*, publisher Nelson Mandela African Institute of Science and Technology, Arusha.

Media Coverage

BTH research magazine, Forskning på BTH 2014, "TEKNOVETENSKAPLIGA STUDIER, Teknik och relevant innovationsförmåga" (Technoscience Studies, Technology and relevant innovation capacity)

20140309 **Linda Paxling**, Swedish Radio P4, interview plus at Swedish Radio web, "Studie utmanar könsnormer inom spelbranschen" /Study chalallanges gender norms in digital game industry).

20141001 **Linda Paxling**, A presentation of the project Norm critical game design at the recognized game blog Northlandsquare.com, www.northlandsquare.com/2014/10/an-introduction-to-a-norm-critical-game-culture/

Commissions

Below is a presentation of commissions the staff members at the Division of Technoscience Studies had during the year, both at BTH and elsewhere. A conclusion to be drawn from the list of commissions as well as what is presented above, is that the collected expertise found at ToS is relevant in numerous important contexts.

Peter Ekdahl

- Co-supervisor for the PhD student Anders Falk
- Head of Department 2014 –
- Board member of NetPort.Karlshamn, 2014 –
- Faculty Programme Director for the Media Technology Cluster
- Member of BTH board of education.

Pirjo Elovaara

- Board member of the National Graduate School InterGender, 2008 –
- Committee member for IADIS ICT, Society and Human Beings conference and Participatory Design Conference 2014

Peter Giger

- Member of the planning committee for the culture house, Östra Piren, Karlshamn
- Member of the research network "Digital Art and Culture in the Age of Pervasive Computing'
- Editor and technical developer of International Journal of Feminist Technoscience
- Supervisor for Anders Falk in his PhD project "The digitizing of rituals; aesthetics in digital media"
- Supervisor for Linda Paxling in her PhD project "The reality producing dynamics of the mobile artefact in East Africa"
- Supervisor for Paul Carlsson in his PhD project "Creativity, innovation and motivation in Swedish higher Education, with focus on media technology graduate educations."

Tomas Kjellqvist

- Vice-Chair of the Swedish National Commission for UNESCO
- Member of the scientific expert group for UNESCO, coordinated by the Swedish Research Council

Linda Paxling

- Editor of Technoscience.se
- Moderator of editorial team, International Journal of Technoscience and Development (IJTD)
- Member, The Swedish Faculty for Design Research and Research Education, 2014-
- PhD representative, National Graduate School InterGender , 2014-
- Project Leader, Vinnova-financed pre-study A norm-critical game culture, 2014-2015
- Project member, Genislab EU-project, 2011-2014
- Representative at BTH node for the SPIDER network

Birgitta Rydhagen

- Member of the national research network Gender and Development studies (GADNET)
- Supervisor to PhD students Carlos Acevedo.
- Reviewer for International Conference on Engineering and Meta-Engineering (ICEME)
- Reviewer for the European Journal of Engineering Education (EJEE)
- Reviewer for Tidskrift för Genusvetenskap, www.tegeve.se

Lena Trojer

- Adjunct professor at Nelson Mandela African Institute of Science and Technology, Arusha, Tanzania, 2012 -
- Board member of the National Graduate School InterGender, 2008 - 2014
- Member of the National Steering Committee of PACF-Tanzania 2006 -
- Member of PACF Council 2010 –
- Director of Scandinavian Institute for Collaboration and Development (SICD), DITE, BTH, 2008 -
- Board member of the Savings Bank's Foundation of Karlshamn Bank, 2002 – 2014
- Board member of NetPort.Karlshamn, 2004 – 2014
- Board member of the Swedish Faculty for Design Research and Research Education 2014 -
- Reviewer of application for a position as professor (biträdande professor) at Linköping University
- Reviewer of application for a position as senior lecturer, KTH
- Reviewer of application for a position as lecturer (biträdande lector), Stockholm University
- Reviewer of paper for Gender, Technology and Development Journal, Sage publications
- Reviewer of applications for The Foundation for Baltic and East European Studies (Östersjöstiftelsen)
- Reviewer of applications for VINNOVA, STRIM program
- Reviewer of book for Springer SBM, Netrherlands.