Research strategy 2017-2020

Introduction

The Department of People and Technology was established on 1 January 2016 through an integration of academic environments from the previous departments CBIT, ENSPAC and PAES.

The tension embodied in the name of the Department, between people and technology, is a key feature of the Department's research. People create technology and technology affects people's everyday life and subjectivity. Technology here is defined broadly as humans' practice and their knowledge-based transformation of nature, the man-made environment, social relationships and the individual's relationship to themselves.

The Department is characterized by the following main research orientations:

➢ Basic research and empirically research focused on the development of paradigms, theories and methods.
➢ Strategic efforts that, in selected areas, link the research to innovative and sustainable development processes in society, support people's empowerment and self-governance in everyday life through innovative and sustainable local change processes, and develop visionary ideas for social development.
➢ Constructive approaches to the design and the creation of new technology.
➢ Critical, reflexive research into discourses and knowledge production about society, people and technology.
➢ Use and further development of innovative, participatory and experimental approaches to research and cooperation with the outside world.
➢ Academic freedom

The Department places emphasis on both the societal implications of research, its importance in the world of research and its significance in relation to the education of the students.

The Department's strategic research profile

As the University's most interdisciplinary department, the Department of People and Technology is home to research groups of varying size, each with their own research priorities. In the following table, the number of primary members of the research groups is indicated in brackets. There are a total of 99 professors, associate professors and assistant professors with primary affiliation to the department's 12 different research groups.

- Programming, Logic and Intelligent Systems (PLIS), 9 members
- User-Driven IT Innovation (UDI), 5 members
- Environment, Energy, Transport - Regulation, Innovation, and Climate Policy, 11 members
- Space, Place, Mobility and Urban Studies, 17 members
- Health Promotion - 2 subgroups organized in centres, 11 members
- Working Life, 12 members
- Organizations, Ethics and Social Sustainability (OrgESS), 6 members
- Childhood, Youth and Family Research, 7 members
- Subject, Technology and Social Practice (STP), 11 members
- Education, Social Inclusion and Profession, 4 members
- Critical University Studies (CUS), 3 members
- Everyday Life, Gender, Ethnicity and Diversity, 3 members

The Department also provides the framework for a number of research centres, many of which are directly linked to the underlying research groups, while some are interdepartmental organisations at Roskilde University. The primary role of the research centres is to ensure that the research conducted at the Department has a profile as being orientated towards the outside world, and to establish a basis for an expanded research and research-practitioner collaboration.

The foundations for RUC's strategic ambitions are the so called fundamental narrative of the university. In terms of education and research, Roskilde University must be an experimental and innovative university that develops sustainable solutions to the major challenges we will face in the future, both nationally and globally, for example within areas such as the environment, inequality, democracy, health and cultural coexistence. A realization of this objective requires that RUC's research and educational activities are based on openness to the outside world, on cooperation, inclusiveness and knowledge sharing, and that the University provides space for free thinking, constructive dissent, democracy and tolerance.

Starting from RUC's fundamental narrative and the Department's research, the focus in the future will emphasise eight themes that are interdisciplinary relative to the research groups and research centres, all of which address the key societal challenges at the interface between people and technology, for example as they are expressed in the UN's Sustainable Development Goals. These are interdisciplinary themes that, in selected areas, link research to more comprehensive global and national innovative and sustainable processes of change, as well as innovative and sustainable local changes.

The research themes are:

- **Green transformation, circular economy, planning and sustainable urban development:** Interdisciplinary focus on sustainable development of consumption and production systems, prevention and adaptation to climate change, urban development and design, transport and tourism, and associated policy, regulation and planning.
- **Health and health strategies:** Interdisciplinary focus on equality, welfare and quality in health promotion, prevention and treatment, patient and citizen involvement, active living and sustainable development of new technologies, organizational structures, forms of collaboration and relationships in care and health activities.
- **Work, identity and learning:** Interdisciplinary focus on social and technological transformation processes that lead to precarious forms of work, shifts in relationships between subjects and professions, changes in demands for skills, qualifications and learning opportunities in the workplace, redefinition of boundaries between civic engagement, consumer roles and work,

creation of new relationships between working life and family life, changes in democratic and ethical aspects of work, and creation of new conditions for control and regulation.

➢ **Sustainable social development:** Interdisciplinary focus on ethical and sustainable aspects of social life, social justice, social inclusion, participation opportunities, human dignity, social equality and human rights. The theme area includes an empirical focus on organising and learning in socio-economic initiatives, social entrepreneurship, and social interventions for vulnerable communities.

➢ **Migration and cultural coexistence:** Interdisciplinary focus on urban development, migration, transnationalism and the ability to live with diversity, as well as organizational and institutional challenges, psychosocial changes and challenges in family life.

➢ **Families, children and adolescents:** Interdisciplinary focus on the development of family forms, children and young people's everyday life in and across families, institutions and leisure, professional knowledge and practice, interdisciplinary and sectoral cooperation in relation to children and youth, educational participation and drop-out, digital development's impact on professions and private life, political governance and management of institutions, and professional practice.

➢ **Technology that promotes welfare and sustainable development:** Interdisciplinary focus on establishing new partnerships for sustainable development, and the introduction and use of new technologies in specific contexts.

➢ **Critical university studies:** Interdisciplinary focus on new management regimes, profession changes, changed teaching paradigms, the impact of digitization for research and teaching, new forms of integration between research and teaching, and altered study conditions and study identities.

As interdisciplinary action areas in relation to the work of the research groups, the Department will also give priority to further developing a common focus on design and learning, as well as innovative, participatory and experimental approaches to research and cooperation with the outside world.

The Department's research in the fields of computer science and informatics will participate in interdisciplinary collaborations in relation to the individual focus areas and contribute knowledge about e.g. algorithms, big data, information searches, decision support, robots and sensors, production, consumptions and welfare technology, participatory systems and digital support for collaboration and learning.

The Department will strive to involve FabLab, OpenMediaLab and ExperienceLab actively in the research.

In order to support the research strategy, the Department will link international researchers to the research themes for both short and long periods.

The impact of the research

The science-internal dimension of research's impact
The research groups at the Department of People and Technology have different strategies in relation to scientific publishing and communication. The research groups in the field of computer science and informatics follow the publishing practices in their respective disciplines largely by publishing in proceedings from national and international conferences. The members of the two research groups also publish through books, anthologies and high-level international journals. The other research groups combine two different strategies:

• Some research groups have a predominant orientation towards high-level international journals.

- The majority of the research groups have a more diversified publishing practice, where articles, books and anthologies are published that are aimed at an academic public both nationally and internationally, with a more unequivocal focus on high level journals.

The department's strategic objective is to continue the multi-faceted strategy for research's scientific impact, which can vary between research groups. Some research groups will therefore continue to focus primarily on high-level international journals, while other groups will have more diversified publishing objectives. All research groups will work to develop their international research cooperation. It is an objective for the Department and the research groups at the Department to support both the high publishing ambitions of the research groups and researchers, and also that all researchers will meet the university's individual publication targets concerning publications.

The impact of research on society
The research groups at the Department of People and Technology are committed to strengthening the impact of research on society:

➢ Interdisciplinary collaborations are established with the outside world in areas where the Department's research can make a difference.
➢ Relevant actors are involved in the research process, including through action research, multi-actor approaches, participatory and dialogue-based research and through projects that experiment with new forms of participant involvement. The participatory research is generally characterized by being closely associated with and supportive in relation to social changes and supportive in relation to social learning processes.
➢ There is cooperation with private companies, public companies and institutions, private organizations, the labour market partners, organizations and actors in civil society actors, private-public partnerships, regional and municipal authorities.
➢ Researcher-practitioner networks, clusters and alumni networks are founded and developed.
➢ The establishment of co-financed PhD scholarship, business grants and business post docs represent a particular variant of the cooperation with the outside world.
➢ Societal impact is also achieved through the scientists' involvement in research councils, boards, committees of experts and think-tanks, as well as through individual researchers' consulting services to businesses and authorities.
➢ Many scientists are engaged in more traditional research dissemination through statements and contributions to newspapers, journals, radio and TV, as well as through lectures and presentations in different practitioner contexts.
➢ Textbook dissemination ensures that the latest research knowledge is disseminated to teachers, pupils and students in educational institutions.
➢ Continuing and further education and training of various professional groups through courses, master degrees and diploma courses, research workshops etc. ensure that research knowledge is disseminated to a variety of professionals.

The Department's strategic objective is to pursue and develop this ambitious and multifaceted practice in relation to societal impact. The Department will work to ensure that a similar development of practice is also reflected in the University's overall research strategy.

Research impact through teaching
Basic research in the Department, including empirically grounded basic research, provides a solid research-based foundation for the Department's bachelor, master, part-time master and PhD programmes, as well as for educating graduates with relevant skills in relation to societal needs.

In most cases, the individual research groups provide the research foundation for multiple programmes at bachelor and master level. Additionally, most bachelor and master programmes are based on research from researchers who are attached to multiple research groups. As the teaching programmes are interdisciplinary, and must be research-based, the Department keeps track of the proportion of the teaching done by each research group.

The Department's strategic goal is to continue to develop and enhance the quality of the research basis of its educational programmes, both through the research groups' initiatives and through initiatives from the education programmes, which are then coordinated by the Department's research and educational committees. The research-basis may include taking into account that a sufficient number of researchers handle and are responsible for planning the teaching, that part-time academic staff are associated with research groups, that experience and examples from their our own research projects are included in the teaching and that the students are involved in connection with research projects.

Research funding

Members of all research groups at the Department of People and Technology have long experience of obtaining external research funds. The majority of externally funded projects have a strategic or development-oriented character. This applies for example to projects financed by the Danish government agencies, government funds, organizations, municipalities and regions, and for regional funding from the EU. This also applies to projects funded by Innovation Fund Denmark, NordForsk and the EU Horizon programme. Funding for basic research is obtained primarily from Danish and Nordic research councils and to a lessor degree from the human sciences area of the VELUX Foundation.

The Department's strategic objective continues to be to obtain external projects from various sources and to cooperate both internally within the Department and with the University's research department in connection with targeted fund-raising. The Department will also collaborate with other departments at the University and with other national and international research environments on major joint applications. The Department's research profile also supports a position of strength in relation to generating external funding at the local, regional and national level.

PhD programmes

The newly established Doctoral School of People and Technology brings together several well-established doctoral schools and PhD programmes. The Doctoral School is now organized into five PhD programmes: Learning, Working Life and Social Innovation, Society, Space and Technology, Health and Society, the Social Psychology of Everyday Life and Information Technology. The Doctoral School has about 120 PhD students and 45 active PhD supervisors and is thus the University's largest doctoral school. The PhD programme represents a significant contribution to the Department's research profile through its focus on the production of new research knowledge, theory and methodology. The Doctoral School has extensive research collaboration with external private, public and civil partners, with international universities and researchers and with research councils, agencies and ministries that are all included as partners in various forms of PhD financing and PhD programmes.

The Doctoral School of the Department of People and Technology will work according to the following strategic objectives and initiatives:

> ➢ Continue to develop and maintain the volume, breadth and depth of the Department's PhD programme

- Strengthen and expand a broad interface with private, public and civil partners, who can fully finance or co-finance PhD scholarships, which are positioned centrally in relation to the Department's prioritised research strategies
- Work towards a balanced practice in relation to PhD positions, where open PhD scholarships can be given priority relative to the Department's research strategy
- Ensure co-ownership and active involvement of research groups in relation to research affiliation, forms of funding, supervisor environment and course activities broadly at the Department
- Develop influence, ownership and dialogue with the PhD students in programmes and at the Doctoral School
- Develop a good working relationship, interdisciplinary utilization of resources, synergy and quality assurance in the Doctoral School and on the PhD programmes