

DECISION

Reg. no STYR 2022/1880

Date 19 November 2022

University Board

Research Strategy for Lund University 2023-2026

Lund University is a university rich in tradition with a broad range of subjects, excellent research and top-class research infrastructure. At a time of challenges that require global cooperation, and when competition within research is tougher than ever, Lund University excels as one of the world's leading research universities. At the same time, our research maintains clear and important connections within Sweden. Lund University is a campus university that is well integrated into the cityscape of Lund and benefits from the specific strengths in Malmö, Helsingborg and Ljungbyhed.

The aims of our research – what we want to achieve:

- Research of the highest international quality with the goal to understand, explain and improve our world and the human condition.
- Excellence and renewal through complete research environments that utilise the University's breadth and cuttingedge expertise within specific fields of research.
- Creative exchange between research and education in collaboration with the wider society as a means to increase the quality, impact and relevance of research.
- Courses and programmes based on research questions, methods and results, and in which students enrich, and are enriched by, research.

The core values of our research – what we stand for:

- Academic freedom through safeguarding our independence in relation to states, businesses and research funders. The freedom of all researchers to choose their research question and methods, and to freely publish their results. We stand up for the integrity of research and support researchers when faced with threats and harassment.
- Good research practice with an approach based on research ethics and active dialogue.
- Reliable knowledge and understanding based on research. The University's knowledge generation and dissemination role is particularly important at a time when democratic values are disregarded and when disinformation and propaganda are spread.
- Openness through active participation in academic and public debates. We ensure that our publications, data and methods are as open as possible and as closed as necessary to protect sensitive data and comply with laws and regulations.

Key conditions for our research – what we need:

- Initiatives to recruit the best researchers and to provide professional development as key parts of cohesive and strategic operations planning. Our starting point is that researchers and teachers at the University are engaged in both research and teaching.
- Continuous work for a stimulating and safe work environment supported by good leadership and access to support functions of the highest standard, which relieve researches and can be adapted as new needs arise.
- User-friendly and secure systems for utilising and storing research data as well as future-proofed digital solutions that facilitate research and the communication of research.
- Coordinated strategic investments in local, national and international research infrastructures characterised by openness, resource-efficiency and accessibility. The

- investments are to be based on the potential of the research, the size of the user base and the needs of the different disciplines.
- Strong research funding by stimulating and supporting applications for national and international research funding, in particular from Horizon Europe, which has untapped potential.

In order for us to achieve our aims, stand up for our values and create favourable conditions for research at Lund University, we will focus particularly on the following prioritised issues:

Academic freedom, research ethics and integrity as a basis for research

A dynamic and active approach to academic freedom and ethics is important for promoting good research practice, for avoiding what could damage trust in the researchers, research and the University, and for creating a good work environment. Such an approach in turn sets a requirement for continuous professional development, a high level of commitment and open discussions.

Lund University is to ensure that everyone is well versed with the principles and procedures for good research practice and academic freedom, and that appropriate support in the ethical review process is easily accessible. We will provide forums for active discussions and exchange of experiences that engage our researchers on a broad front.

When researchers are subjected to threats and harassment, they should be able to count on concrete support from both the University and the research community. We will foster and safeguard an environment in which researchers are willing to try different paths and feel comfortable to present controversial research results that may lead to strong reactions.

Initiatives for profiling and developing strong research environments for excellence

In certain areas, international excellence and research breakthroughs require focusing and pulling resources together in order to achieve dynamic and complete environments involving research, education and external engagement. Such research environments also help to achieve increased visibility and broader opportunities to meet complex societal challenges, and they may facilitate recruitment of excellence. Lund University will therefore develop interdisciplinary profile areas and support existing strategic research areas and other strong research environments.

In the period 2022 to 2030, the following interdisciplinary profile areas will be developed at Lund University:

- Human Rights
- Light and Materials
- Natural and Artificial Cognition
- Proactive Ageing
- Nature-based Future Solutions

These five current profile areas will be complemented with some additional profile areas. The profile areas are to constitute a natural part of the work carried out by the faculties and departments.

In parallel with the profile areas, Lund University will continue its work to highlight, develop and renew our strategic research areas (SRA).

While Lund University's work involves strong complete research environments, the majority of our research will continue to be conducted by researchers and teachers who are not part of these environments. Excellent individual researchers need to be made visible and given the best conditions for producing internationally leading research.

Impact through visibility and external engagement

For research at Lund University to help us to understand, explain and improve our world and the human condition, it must be noticed and recognised by other researchers, by actors beyond academia and by

the general public. The aim to be a world-class university requires increased international visibility and strategic collaborations.

Research-based knowledge is now competing with other information and less well-founded claims that spread fast and widely through channels such as the internet and social media. Lund University, its faculties and individual researchers will therefore actively work together to improve the dissemination of our research and research results. Our work will be adapted to target groups and use various channels, and we will increase our focus on international communication.

We will continue to strengthen our interaction with industry, the public sector and civil society to further promote the importance of research for humanity and sustainable development. Furthermore, we will in different ways help in the conversion of research into innovations and community building, with a special focus on a green and digital transition.

Our students are the principal channel for societal impacts of research, as they bring knowledge and critical thinking skills into the workplace and various community engagements. Continued efforts to intertwine research and education are therefore essential.

Open science – the norm for credibility, utilisation and quality

Lund University will work proactively nationally and at the European level to develop open science in a way that promotes research and society's utilisation of research.

In the next few years, Lund University, following the principle of *as open as possible and as closed as necessary*, will help researchers to make publications, research data and source code openly accessible. Furthermore, the public and more stakeholders need to be involved in research.

An area of top priority in the coming years is finding easy ways to make the handling of research data FAIR (Findable, Accessible, Interoperable, Reusable).

To store and share research data efficiently and securely is particularly important at a time when Big Data, artificial intelligence and machine learning are rapidly changing both research and society. The aim is for all research data for which there are no legal or ethical impediments to be made accessible in accordance with the FAIR principles. Data produced by our researchers is to be simple to access and easy to use for other researchers, companies, organisations and the public.

In order to achieve this, Lund University needs to take an overall approach that covers digital infrastructure including hardware, guidelines and support adapted for researchers.

Strategic recruitment and career development as the foundations for future research

The most important resources for research are the people – teachers, researchers and doctoral students – who work with research at Lund University. Our employees' opportunities for professional development, as well as who we recruit, create the most important conditions for the University's long-term success.

Based on strategic considerations at the faculties, positions that involve research are to be advertised openly, broadly and internationally. It is also important that all faculties work to attract and recruit researchers with experience from outside Lund University.

Successful recruitment and career development depends on the competences and merits that are assessed and the way in which they are assessed. Extensive work is being carried out in Europe, in Sweden and at Lund University on a review of the assessment of competences and merits. The work aims to broaden the merits that are recognised, as well as to design a less quantitative and more qualitative assessment of merit and expertise. Merits linked to research, education, external engagement, contributions to open

science, leadership abilities, as well as the capability to contribute to a good work and learning environment that takes equal opportunities into consideration, are all aspects should be recognised and assessed.

Campus development and strategic initiatives for research infrastructures

To be able to conduct world-class research Lund University needs campus development that provides optimal conditions for research, education and external engagement. Lund University is to take an overall approach through a campus development plan for all sites where the University conducts activities.

A strong research infrastructure is of increasing strategic significance for all branches of science, and besides hardware includes databases, registers, biobanks and software, as well library and museum activities.

Research infrastructure of many different types, and the technical experts linked to them, are therefore central for the entire University. MAX IV and ESS are two large and unique research infrastructures that affect the research landscape in Lund, Sweden and Europe, and whose enormous potential Lund University is to fully utilise. The establishment of activities in Science Village is an important element in these efforts. At the same time, we will support other higher education institutions and companies in benefitting from these facilities, not least regarding MAX IV, for which Lund University is the host.

Much of our research success is reliant on large research infrastructures located elsewhere, such as the international CERN laboratory and the national SciLifeLab. The best possible utilisation of such external research infrastructures requires not only improved coordination and increased information initiatives, but also good local conditions for utilising the facilities remotely. Lund University also participates, as a host or partner, in a large number of the Swedish Research Council's national research infrastructures. This is very positive for Lund University and should be further stimulated.

Local research infrastructures can offer particularly good conditions for conducting ground-breaking studies in many scientific fields. Lund University will work to coordinate and develop the local infrastructures and to increase their utilisation. This requires better information about our infrastructures as well as initiatives that can offer new and inexperienced users the necessary support and training.

Lund University is preparing a policy for the categorisation of research infrastructures that includes accessibility, user fees and procedures for decommissioning. Our strategic initiatives for research infrastructures are to be based on the scientific potential of the research, the size of the user base and the needs of the research. In order to ensure broad and resource-efficient usage, there is a need to develop support for those who build, lead and manage our infrastructure platforms.

Increased research funding

Lund University works actively to secure increased direct government funding for research. The University's direct government funding for research is to be allocated and used in a transparent and dynamic way that reflects and strengthens the quality of research and supports the development of tomorrow's strong research domains. Our ability to continue conducting research of the highest international quality requires that we become even more successful in obtaining external funding in the coming years.

Our ambition is to strengthen the University's participation in the EU's framework programme for research and innovation in terms of the number of projects and awarded grants, with the aim of becoming Sweden's leading participant. This will increase opportunities for excellent research, deepen international collaborations, influence the European research agenda and contribute to enhancing the University's reputation internationally. We are also striving to obtain a greater proportion of the grants from the large research councils nationally by systematically analysing outcomes and sharing good examples.

Development of research through quality assurance and evaluations

Lund University is to develop research based on the outcome of evaluations and follow-ups, and by ensuring that quality assurance works at all levels and in all research environments. We will therefore establish a systematic, resource-efficient and cohesive quality system for research that highlights and utilises existing practice.

Research at Lund University is regularly analysed through well-established forms of quality assurance and review. To a large extent, these are based on peer review, and include assessments of individual researchers and teachers, as well as assessments of project applications and peer reviews of publications. This also covers assessment of the University's research quality via the Research Quality Evaluation process (the latest was RQ20).

For quality enhancement, it is particularly important to fully utilise the lessons from RQ20. Lund University will therefore focus principally on recruitment and career paths, research infrastructure, interdisciplinary research, profiling and strong research environments. Systematic quality enhancement also requires the drawing up and use of indicators that show the development of research in different areas.