



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

VICE-CHANCELLOR'S ADDRESS

The basis for our existence – today and tomorrow

SLU educates and conducts research into the sustainable use of biological natural resources where high production levels must be weighed against e.g. conserving biodiversity.

These days, the majority of Sweden's population lives in towns and often has no appreciable knowledge of work in the fields, the barn or the forest. Therefore SLU has an important part to play in the interface between rural areas and towns – we understand and can explain natural cycles, how raw materials are produced and how to achieve sustainable urban environments.

Several hundred million people around the world live on the verge of starvation, and even more will suffer if the climate continues to change. SLU's researchers and students are able to help by contributing their knowledge to various research projects and exchanges. What SLU does in the future is not just of concern for Sweden, it is also a matter of global survival.

“ SLU's activities concern the foundations of our existence: sustainable food production, good animal welfare, fibre and energy raw materials, clean water and a living countryside.”

Peter Högberg
Vice-Chancellor, SLU



SCIENCE AND EDUCATION **FOR SUSTAINABLE LIFE**

SLU educates and conducts research into biological natural resources and the sustainable development of both urban and rural areas. We strive for quality of life and well-being for humans and animals alike.

SLU is a Swedish university, but our actions and issues are part of a global context. We conduct world-class research in several fields. Our degree programmes lead to relevant jobs, and our competence benefits the sector and society as a whole.

We act today for the sake of tomorrow.



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SCIENCE AND EDUCATION
FOR SUSTAINABLE LIFE

ABOUT SLU

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Mission statement

SLU develops the understanding and sustainable use and management of biological natural resources.

This is achieved by research, education and environmental monitoring and assessment, in collaboration with the surrounding community.

Facts and figures

3,800 full-time equivalent students
3,300 million turnover (SEK)
2,900 full-time equivalent employees
700 doctoral students
240 professors
34 degree programmes
5 students per teacher

Locations

SLU's main campuses are:

- Alnarp
- Umeå
- Uppsala

Research, education, environmental monitoring and assessment and external collaboration are also pursued at many research stations, experimental forests and training centres throughout the country.

Faculties

- Landscape Architecture, Horticulture and Crop Production Science
- Natural Resources and Agricultural Sciences
- Forest Sciences
- Veterinary Medicine and Animal Science

History

SLU, the Swedish University of Agricultural Sciences, was founded in 1977 by merging the erstwhile Agricultural, Forestry and Veterinary University Colleges, the Veterinary School and the School for Forest Management.

www.slu.se



SWEDISH UNIVERSITY OF AGRICULTURAL SCIENCES

Sustainable use includes humankind

SLU is the only university in Sweden that possesses the collective knowledge about how to use natural, biological land and water resources in a sustainable manner. As producers, consumers and citizens, humankind forms parts of the entire chain.

SLU is research-intensive and home to leading-edge competence not just in natural sciences, but also in the humanities and social sciences. These disciplines, in research and education alike, are linked by issues that concern production, the environment, health and the quality of life.

SLU also bears special responsibility for environmental monitoring and assessment through its assignment to report

on environmental conditions to national authorities and international bodies.

New findings from SLU are in great demand from both trade and industry and society's decision-makers. SLU also works to meet global challenges such as food supply and climate change. In other words, SLU is a broad-based international university.



RESEARCH

GLOBAL CHALLENGES DEMAND NEW FINDINGS

At SLU, sound basic research is combined with more practical studies to solve concrete problems, especially global issues.

The university's scientific profile is reflected in its two main focuses that are in response to many of the major global social issues. Researchers often work in an interdisciplinary context, which means light is shed on problems from several directions.

- **A bio-based economy** covers the food supply chain, production systems and natural resources on land and in water; rural development, bio raw materials as fossil fuel replacements, and cycles between cities and rural areas.
- **Environment, health and quality of life** includes research on ecosystems, the climate, animals in human service and sustainable urban environments.

Among the top universities

SLU is a research-intensive university – 70 per cent of its budget goes to research and doctoral education. SLU's publications belong to the most cited in their scientific fields. SLU researchers contribute to around 1,400 scientific articles every year.

The university achieves very high standards in international comparisons. The National Taiwan University Ranking puts SLU in 9th place out of a total of 300 universities with similar programmes. SLU's research into plant and animal sciences, including forestry and veterinary medicine, is ranked in 5th place globally, while in ecology and environmental science, SLU is ranked number 16.

COLLABORATION

FOR THE BENEFIT OF SOCIETY

SLU maintains an ongoing dialogue with society's various stakeholders, especially within agricultural sciences, i.e. agriculture, livestock farming, horticulture, forestry, wildlife management, aquaculture and fisheries.

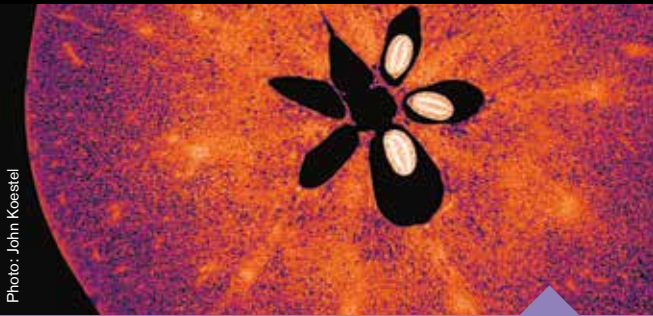
SLU's assignment as a sector university for these industries involves contributing new, sought-after knowledge and expertise. Stakeholders can also be found within the fields of veterinary medicine, natural resources and the environment, rural development and landscape architecture. SLU provides many meeting places for the exchange of knowledge.

Mats Söderström is one of SLU's collaborating lecturers. In addition to his research, this assignment is to collaborate with stakeholders within his subject field, precision agriculture.

Advanced infrastructure

SLU has an extensive infrastructure that researchers both within and outside SLU can make use of, ranging from field research installations and facilities for animal and plant research to advanced laboratory equipment, environmental monitoring data and quality-assured handling and storage of biological samples.

SLU also coordinates the two national research infrastructures *Swedish Lifewatch* and *Sites*, and is leading the procurement of a new Swedish ocean-going research vessel. The *University Animal Hospital* is one of the largest and most modern animal hospitals in Europe.



A cross-section of an apple seen in a CT scan at SLU.

In the Leiden ranking, SLU was the third-best Swedish higher education establishment in 2015. According to Times Higher Education, SLU is one of the world's 250 best universities.

SLU's researchers cooperate with industry on issues such as antibiotic resistance.

Photo: Medivir



Alnarp's rehabilitation gardens are one of SLU's innovations whose care team includes Frederik Tauchnitz and Lillian Lavesson.

International involvement is deeply rooted at the university – *SLU Global* supports and develops research and educational projects for the development of agriculture in low income countries. The *Global Challenges University Alliance* is an SLU initiative that brings together the world's most prominent universities around issues concerning food supply, bioenergy, sustainable urban development and the climate.

ENVIRONMENTAL ASSESSMENT

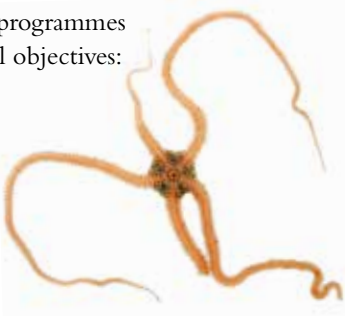
KEEPING TABS ON LIFE'S HABITATS

SLU monitors environmental conditions in Sweden.

Environmental analysts at SLU use multi-year series with data from environmental monitoring and surveys, e.g. the *Swedish National Forest Inventory*. Their analyses lead to scientifically sound data and findings as to how we should use our natural resources and what the environmental consequences will be. *Environmental monitoring and assessment* is closely linked to research and education at SLU.

Activities are divided across ten programmes linked to Swedish environmental objectives:

- Acidification
- Agricultural landscape
- Biodiversity
- Built environment
- Climate
- Coastal and sea areas
- Eutrophication
- Forest
- Lakes and watercourses
- Non-toxic environment



The Brittlestar, Amphilepis Norvegica, is a key species on deep, soft seabeds.

Foto: Johan Samuelsson

SLU also participates in Sweden's reporting according to EU directives and international conventions.

Leading-edge activities

SLU's environmental monitoring and assessment is the leader in Europe regarding the design of environmental monitoring programmes and a world leader in forest inventory methods. Its environmental analysts also actively participate in international collaborations and environmental fields such as biodiversity and fisheries.

SLU Holding helps researchers translate new knowledge into innovations and commercial services. Garden therapy to combat burnout, odour traps that lure pest insects, and vaccine adjuvants, that enhance the effect of vaccines, are a few examples.



Bild: Anders Råden

The Species Gateway (Artportalen) is a web forum where the general public can report its discoveries and contribute to environmental monitoring through so-called citizen science.

EDUCATION

SLU DEGREES LEAD TO JOBS

SLU is far advanced when it comes to students' establishment in their profession.

With only five students per teacher with a doctoral degree, the university resembles the most prominent US universities. But what is probably most important for students is that studies at SLU not only provide a basis for understanding tomorrow's major global issues, but also the ability to contribute to their solution.

SLU has national responsibility for many vocational programmes e.g. in the following fields:

- Agricultural science
- Animal science
- Forest science
- Horticultural science
- Landscape architecture
- Veterinary medicine

Other sought-after degree programmes are economics, biology and environmental science, civil engineering with a focus on various environmental subjects, plus sports and companion animals. There are also additional bachelor's and master's programmes in various subjects.

Excellent quality education

SLU came in among the three top universities overall in the Urank national rankings for educational quality in 2014, and as number one in natural sciences.

Louise Nybogård, agronomy student with a focus on food science.



SLU has interdisciplinary future platforms, where researchers can collaborate across science boundaries and with society's stakeholders. Working methods in e.g. *Future Agriculture* involve an active dialogue concerning topical problems and future challenges.