

Vision for Lund University's establishment in Science Village

THE ASSIGNMENT | A vision to facilitate communication, discussion and involvement from all organisations at Lund University

Lund University's establishment of activities in Brunshög, within Science Village, includes opportunities to form an internationally outstanding centre for research, innovation and education and to become an important meeting-place for the research and development activities of various higher education institutions and companies. All parts of Lund University are affected, directly or indirectly, by the opportunities that the establishment entails. As the establishment is strategically significant for Lund University, an explicit vision is needed to facilitate communication, knowledgeable discussion and involvement from all organisations at Lund University.

The University decided to entrust Viktor Öwall (dean of LTH), Sven Lidin (dean of the Faculty of Science), Erik Renström (dean of the Faculty of Medicine), Peter Honeth (special investigator), Marianne Gullberg (director of the Humanities Laboratory), Olle Söderman (project manager Establishment Group) and the LUS president Gustav Ekström, under the management of deputy vice-chancellor Sylvia Schwaag Serger, with the development of a vision for Lund University's establishment of activities at Brunshög within Science Village. Project manager Carina Jarl assisted the deputy vice-chancellor in this work.

The working group would particularly like to thank the student representatives, all the faculty representatives and the communications officers from Lund University who took part in the process and reflected on the University's future in the light of the establishment of Science Village.

The next step is to design and communicate the vision so that it generates involvement within the University and among external parties, such as ESS, other universities and public authorities, funding bodies and stakeholders in business and industry.

The task of management at the University and faculty levels is to ensure clear leadership, inspiring communication, efficient platforms for continued work – as well as the resources required to realise the vision.

BACKGROUND | “This location offers a unique opportunity, based on the research facilities, to create an expansive interdisciplinary environment with strong international appeal.”

Until recently, Brunshög in northeastern Lund mainly consisted of fields. With the establishment of two world-leading research facilities – the synchrotron light accelerator MAX IV, inaugurated in 2016, and the neutron source ESS, which will be operational for research in 2023 – parts of the area will become a location for breakthrough research, cutting-edge technology and innovation in subjects including materials science and life science. This location offers a unique opportunity, based on the research facilities, to create an expansive interdisciplinary environment with strong international appeal.

In its entirety, Brunshög will become a city neighbourhood focused on sustainable urban development. Over time, up to 40 000 people will live and work in the area, which is already linked to central Lund by a tramline. The part of Brunshög made up of the research facilities and the area in between them is called Science Village. There are plans to make it a lively urban environment that will stimulate the senses, with branches of higher education institutions, student life, companies, a science centre, visitor accommodation, research institutes, gyms, restaurants and cafés.

As MAX IV and ESS expand, increasing numbers of researchers from all over the world will travel to Lund to use the facilities for shorter or longer periods of time. In Science Village, they will become part of a dynamic and international environment, where new scientific ideas and collaborations can emerge between the higher education institutions, business and industry and other sectors of society. Thanks to this environment, the world can look forward to more effective drugs, better exhaust purification systems and crops capable of feeding more people. Better knowledge can also be achieved concerning ancient patterns of migration, legally sustainable AI and human-centred digitisation, and on how to design climate safe and sustainable cities for the future.

The whole of Lund University is affected and needed as a driving force in Science Village. A leading role in the area is facilitated by the University physically locating some of its activities in Science Village. Presence generates positive synergies and enables spontaneous exchanges.

The establishment in Science Village entails one of the largest investments in Lund University's history and is to function as a motor for renewal. It will reinforce attractiveness, reputation, quality and societal benefits for the whole University.

YEAR 2040 | Lund University in Science Village – how the establishment has developed

Interacting environments. By 2040, Lund University is well established in Science Village with laboratories and premises for research and education. Parts of the faculties of engineering, science and medicine have thereby gained new contact interfaces – both among themselves and with wider society. The investment in integrating the historic environments in central Lund with the new ones in Science Village has been successful.

Renewal of the University. The establishment in Science Village has triggered renewal initiatives for the University as a whole, making the most of everyone's strengths in education, research, external engagement and support activities. It has also contributed to the improvement and development for future needs of organisational structures, forms of collaboration and intertwining of research and education.

Research progress for many. Lund University and a number of other stakeholders in Science Village have made progress within areas that are linked to the major research facilities – such as improved methods for preserving cultural heritage, new materials for aeroplanes and packaging, more effective drugs and new methods for water purification. These results are of crucial significance for future scientific and industrial development.

Interdisciplinary strength. The establishment in Science Village has also opened opportunities for strong interdisciplinary collaboration, both within the University and with business and industry, organisations and other higher education institutions in Sweden and around the world. The creative and intellectual environment is renowned and attracts the world's foremost researchers to Lund.

Inspiring study environments – and a rich student life. Lund University has worked actively on innovative and functional study environments, both in the premises at Science Village and in the parts of the University that have been remodelled. Together with the student organisations, environments have been created that highlight and make space for a multifaceted student life. The combination of a continued rich student social life and generous spaces for studies has provided major advantages in recruitment. The continuous Knowledge Highway gives the students the best of both worlds, combining the traditional academic atmosphere with a new knowledge ecosystem of international significance.

New study programmes. In addition, the University's presence in Science Village has opened opportunities for new cross-faculty forms of education through digitally adapted premises and innovative interdisciplinary study programmes based on materials science and life sciences research combined with other disciplines at the University. Together with investments in teaching and learning and good learning environments, this leads to students from all over the world wanting to apply to Lund University.

For innovative knowledge environments – and answers to the questions of the future

Lund University makes the most of the opportunities offered by MAX IV and ESS to reinforce the whole University's education, research and societal contacts for the future. In Science Village, Lund University creates new, creative and knowledge-intensive environments – and contributes to research progress which benefits wider society.

The presence in Science Village reinforces and renews the whole University's attractiveness, research, education and societal contacts – and ensures that, also in future, the University will live up to its vision to be a “world-class university that understands, explains and improves our world and the human condition”.

Through the establishment in Science Village, Lund University creates new, creative and knowledge-intensive environments. Interdisciplinary environments are broadened, while new study programmes are established to meet future needs. New contact interfaces arise between different subject areas and disciplines, between education and research and in relation to other societal stakeholders.

When the University makes the most of the opportunities offered by MAX IV and ESS, it contributes to international success for the various activities in Science Village. This leads to research successes and innovations in sectors such as medicine, mechanical engineering, electronics, food and community building – for improved living conditions and new, curious questions.

SEVEN REASONS | Lund University's establishment in Science Village

1. **Making the most of the potential in MAX IV, ESS and Science Village.** By being a leading agent and working close to the major research facilities, Lund University is to contribute to the facilities' success and to a strong and lively environment for research and innovation.
2. **More research breakthroughs.** A close interaction and exchange with the organisations that use MAX IV and ESS offer more favourable conditions for research breakthroughs and new creative research collaborations.
3. **Preparing the way for others.** Through its presence and its involvement in Science Village, Lund University contributes to offering the best possible conditions for research and development of other organisations as well, and for more stakeholders, both within and outside academia, to invest and engage in the area.
4. **Collaborations that strengthen the whole University.** Nationally and internationally, Lund University connects more closely to other higher education institutions that conduct research in Lund. This creates a hotbed for new collaborations – both within academia and with business and industry and other societal stakeholders – which benefits the University's education and research. Protected spaces, that enable concentrated collaboration for a limited time, contribute to innovative collaborations.
5. **Promoting interdisciplinarity.** Lund University builds bridges to promote collaboration between materials science, life science and other research fields, subject areas and disciplines. Progress in engineering, medicine and science is linked to and integrated with issues in the social sciences, humanities and arts. This breadth is necessary to meet societal challenges of various kinds.
6. **Reinforcing the link between education and research.** The change work entailed by the establishment boosts the intertwining of the University's education and research. This gives rise to a review of organisational structures to ensure that they are functional for the organisation, students and staff.
7. **Creating environments for the future.** The changes that accompany the University's establishment in Science Village provide opportunities to create a number of new, attractive physical environments for students and student welfare activities. Similarly, there is a chance to design new and attractive environments for researchers, doctoral students and administrative staff. When organisations move to till Science Village from their current premises, the latter can be adapted or converted – making them fit for purpose and contributing to quality within other parts of the University.