Answers to questions from the chat to the principal's webinar on 13 November 2020 about the process for an establishment in Science Village.

## Question

How does splitting the university campus in two parts strengthen the interdisciplinary collaborations?

## **Answer in English**

Strengthening of interdisciplinary collaborations doesn't come from the move in itself but that we, during the establishment in SV, create new constellations. By this we believe we can find new interesting research opportunities when different disciplines come together. LU has developed over 350 years and the area in Lund where university activities have been conducted has grown from the city centre towards the northeast along Sölvegatan and through the LTH area. This trail with university activities is called The Knowledge Highway in the university's campus plan. The ambition with the establishment in Science Village is to get an extension of The Knowledge Highway from the city centre to Science Village and the MAX IV and ESS facilities in the northeast.

In addition to Lund, there are university activities in Malmö (Faculty of Fine and Performing Arts and parts of the Faculty of Medicine), in Helsingborg (Campus Helsingborg, including education in Cultural Sciences, Engineering and Service Management) and in Ljungbyhed (School of Aviation). Distances are both important and unimportant, but the most important is the mental distance. There are mental distances on our current campus in Lund that need to become shorter, therefore the extended campus area to Brunnshög is required. We can benefit from spontaneous meetings in close proximity to each other, while ongoing collaborations work even if the physical distance is long. What we will create at Brunnshög, in a new and more integrated way, are opportunities for new collaborations. Maintaining collaborations between businesses that are further apart than they are today will require additional work during a transition period while the campus area is extended and we need to work with both of these challenges.

Is everybody (faculties and students) onboard when it comes to the vision? How ambitious (setting the prerequisites and funding)is it to get everybody onboard?

During the process to design the LU vision för an establishment at Science Village, there were several groups at the university level, at the faculty level and at the department level who discussed the vision. There were the different possible levels of ambition, and what the effect of this new campus will be on their department, teaching and research. The university leadership has been involved throughout the process. The vision is now well established, and will be a guiding vision for the work in the next few years. Employees and students have all contributed, and as such are on board, although everybody does not embrace it equally.

Would it not be more valuable to have other universities - Swedish as well as international - established at SVS, rather than moving LU faculties a couple of kilometres?

LU is very clear that we invite other universities to participate, and it is part of the vision to create good conditions for collaborations. But in order for other universities and departments to make decisions about establishing stations at SV, Lund University must clearly clarify its own intentions regarding establishment at SV. The strategic plan for Lund University states that Lund University will lead the complex development of MAX IV and be active in the development of ESS.

Moving to Brunnshög should lead to a lot of new construction. New construction is through a large use of concrete, among other things, a very large source of carbon dioxide emissions. Should not the university show greater consideration for the young generation and any future generations?

Lund University sets high standards for new buildings, striving to attain an environmental certification of the same level as Miljöbyggnad Guld. (If LU researchers are active in this process, we can make it a research question to see how a new district can be created from a sustainability perspective). The intention is to make sure that environmental considerations are taken into account throughout the whole building process, that pre-requisites for good resource management are ensured, and that care, operation and maintenance can be performed with the smallest possible environmental impact.

Is the establishment of Lund University at Science Village in agreement with the goal of sustainable development, with regard to farm land use and additional needs of transportation? According to the Environmental Code, agricultural land is only to be exploited for buildings or facilities in order to provide for public interests of great importance, which is the case given in the framework document "Ramprogram för Science Village" that the City of Lund has approved for Science Village. The document states that sustainability measures will be taken, for instance to build with high density, to treat

the soil with care and to avoid placing removed soil masses on landfill sites.

Question to Nfak: How could it be a benefit to LU (and the Faculty of Science) to only establish PARTS of Chemistry at Science Village? Would it not be better to make sure that the entire (future) Department of Chemistry is established at Science Village?

The decision is to establish part of physics (the Department of Physics, but not the Department of Astronomy and Theoretical Physics) and part of chemistry (part of the Department of Chemistry (KILU), but not the Departments of Chemical Engineering and of Food Technology, Engineering and Nutrition) in the first two stages. What is created at Brunnshög is something new that should transcend our current department boundaries. It is also important that the parts of chemistry that are not explicitly included in the plan now have a chance to make their case for how they envision their future. There is no coherent plan for KILU today and that needs to be put in place. That said, we do not see any obstacle to the whole of the chemistry organisation eventually establishing itself at Science Village.

Will there be plans for the development of the remaining campus along Sölvegatan?

Yes, plans will be developed by LU together with our landlord Akademiska Hus.

Is there any plan for the buildings and premises currently occupied by the Department of Physics and the Department of chemistry?

LU and the owner of the buildings Akademiska Hus will develop plans together.

Is there any plan to move the Faculty of Science offices to Brunnshög?

Currently there are no plans to move the Faculty of Science offices to Brunnshög.

I fail to understand the reasoning for which cramming basic education and a bunch of departments onto a small of patch of land will improve the research environment as in the points listed by the vice-chancellor in the vision.

If we want wider society (including companies) to invest in and commit to Science Village, we have to show that we are also willing to invest in and commit to Science Village. This can be done in different ways (funding, physical presence, strong research and education links to and integration with the research infrastructures). Establishing a physical presence in Brunnshög is one part of this, and we should be doing this as and when we think it will benefit our research and teaching. From what I understand, this is precisely why the faculties of science and engineering have decided to establish a physical presence at Brunnshög (moving some of their departments and other activities). It is not a question of cramming basic education and a bunch of departments onto a small patch of land (although many universities and academic environments could be defined in that way). Science Village offers the opportunity of creating an entirely new environment for education and research, in entirely new buildings and in entirely new constellations of activities. There is plenty of space for doing so at Science Village; for example, what is planned right now fills up less than one fifth of the available floor area at SV.

If nothing else, it will cause bitterness among the subjects forced to share such a small space and simply fragmentation between those who ""are there"" and those who "are not" as either way it will not be possible to move the whole University up there. Is there any clarification about this? I read this as simple hopes based on no evidence. Where am I wrong? And why should we make such a big event of this?

It is not possible or even desirable to move the entire University to SVS, nor would it be a constructive development of the campus.

In the 1960s, LTH was established far away from the LU Campus. This was controversial, but it also paved the way for a new, strong Faculty of Engineering that has its own profile and visibility. Today this is an indisputable part of the LU campus. Uppsala University established a new campus, Polacksbacken and Ångströmlaboratory, when old buildings were deemed to be outdated and in need of physical renovation, but were basically unsuitable for modern research and teaching. The kernel of that transition was a reorganisation of previously separate research units within chemistry, physics, and engineering. Today, the Angströmlaboratory, hosts all of physics, mathematics, much of chemistry, photonics and electrical engineering and materials science. It provides fantastic premises for students, for teaching and for research. These have a common area where all can meet, and modern facilities including restaurants, cafes, meeting spaces and lecture halls.

If we see the University as a static unit, with its roots in a few traditional subjects, then this view is valid. But if we instead see the University as a constantly evolving landscape which must respond to opportunities and challenges, and which must balance safe decisions with those involving higher risk, then it is obvious that piece by piece the University patchwork changes, moving in new directions. Certain key decisions are going to make huge impressions on future university profiling, strengths and weaknesses.

It is a big event just because it is not just a building, but a new constellation of researchers and a visible investment in the future University. We embrace the possibility, while acknowledging that it is a huge challenge requiring some sacrifice, but that we believe is an opportunity that will move the University forward. And yes, the image of the University is reflected in its buildings, how we work together and how we take advantage of new opportunities.

Also, I see no real change in this transition. It is quite clear it's just a plain move of some departments.

Again where am I wrong?

If one sees a building as a matrix of rooms with scientists in them, then this is true. If one sees a building as a place where teachers and researchers work, interact with each other, and with students, a place where there is a community of creativity and new ideas that forms a backdrop to the official business of research and teaching, collaboration and PhD education, development of future leaders and scientists, then who is sitting together and in what kind of environment is fundamental to the outcome.

For the Department of Physics, the quality and accessibility of the labs is important. The labs today, with a couple of exceptions, are in short supply, laboratories are not built to modern standards and are very costly to upgrade to those standards. Many researchers have labs in other buildings, most are underground with no windows or natural light, and in some cases, such as chemistry, safety issues often arise from the building limitations.

What are the current plans and thoughts for the presence of LU life science departments at Science Village, beyond the Comparative Medicine Unit? At present a few groups have expressed a tentative interest in relocating to Science Village, partly or entirely. The Faculty of Medicine has a positive attitude to this and will do its best to accommodate these wishes. In addition, public healthcare is currently exploring the Brunnshög area as a potential site for a new hospital. If so, this will increase the presence of life science in Science Village long-term.

How do we guarantee that the establishment in Science Village does not become an expense that destroys the finances of LU's research and education?

There will be major costs, and these investments will definitely affect the finances of the faculties and departments that will move in the short term. But in the long run the better lab spaces, new lecture halls, new environment and proximity to the rest of SVS should lead to a payoff in terms of attractiveness, new personnel, new research grants and better education and research in new facilities.

We also predict that the new research fields to become established will lead to expansive activity which will help to cover increased rental costs. Is LU ready to move from decentralised services to centralised services?

The management team members who participated in the webinar want to see clear change work to develop LU and especially the establishment of Science Village. So what does this mean?

Today, the central administration and the faculties with their own service organisations build this up differently within their offices. It means that we run the same service areas both within the faculties/departments and the central administration. Does LU strategically want to change this or do we want to continue working with a decentralised service or do we want to build up a centralised service in the future? Does LU want to offer students, teaching staff and researchers a common service level structure/organisation? These are questions for the management teams, centrally and at the faculties, to decide.

As we all know personal meetings are a core in vital and developing institutions and operations. Merging departments and people together does not automatically mean that we meet and start talking, exchanging ideas and starting fruitful cooperations. For this we might need the help of experts in behavioural sciences to find out how and where such meeting points - physical as well as digital - should be invented and used. My question is: do we involve these kind of experts in this?

It is an important part of the vision to involve the great expertise available within LU, both with regards to this question but also in many other respects. It is important that we design the processes in such a way as to enable this.

Is there any commitment from the City of Lund to make the area that 24/7 lively environment that we hope for?

You will find more information about Brunnshög and what is planned at https://www.lund.se/en/brunnshog/
One main objective is that Science Village will develop into a dynamic, creative and sustainable city district that will not only stimulate world-class research but also provide a forum for interaction with wider

society.

How will the university work to make sure that the facilities and expertise at the national and international research infrastructures (MAX IV and ESS) will be optimally used in undergraduate and graduate education?

MAX IV and ESS are research facilities, which means that doctoral students use (or will use) the facilities within the framework of their doctoral student projects. While MAX IV is a national facility that is a unit within LU, ESS is a European facility that is a legal entity according to EU legislation (European Research Infrastructure Consortium, ERIC). This means that LU has less influence over the use of facilities in undergraduate education when it comes to ESS. There are already some Bachelor's and Master's courses that provide knowledge and skills regarding MAX IV and also ESS (https://www.maxiv.lu.se/educationtraining/max-faculty-of-science/education-foruniversity-students /). The board of MAX IV decided that 2% of the radiation time may be used in first and second cycle education. In order to be able to use ESS in teaching, the opportunity is already being used to co-opt researchers from ESS to units at LU. More possibilities will be discussed in consultation with the ESS/ MAX IV office, which has coordination responsibility from the Swedish Research Council and Vinnova to promote Swedish use of MAX IV / ESS.

How come the message from the Faculty of Science is much more concrete than that from LTH?

The Faculty of Science needs a higher degree of concretisation since the plans of LTH are much further advanced. The first stage of the establishment concerns Lund Nano Lab and Lund Laser Centre and these are largely LTH activities. This means that LTH in reality are much more concrete than we are.

If the physical distance is not important, why is it then important to move physically to Science Village?

Distances are both important and unimportant and the important distances are the mental ones. There are many long mental distances on our present campus and these need to be shortened; this will also be true for the extended campus that reaches Brunnshög. Chance encounters are favoured by short physical distances but planned and ongoing collaborations function well even if the physical distance is a bit longer. Forging new bonds will be helped by establishing things in an integrated fashion at Brunnshög, and maintaining existing connctions will require work and care over time for activities that will be further apart after the campus is extended. We need to work on both challenges. Furthermore, our present facilities are in many places old and worn out and not adequately designed for today's conditions for research and education. Of course we can renovate

the current premises but it will be expensive as well and we will be very limited by the current structures. Therefore, it is better to start from scratch and for that SV is ideal as a greenfield site.

We also have the issue that some of our activities are not ideal to have close to neighbourhoods where people are living. This is also effectively taken care of if moving to SV.

Contracting free transport between the campuses will give a huge positive boost in getting many more onboard, especially students.

It would be a huge advantage to be able to offer cheap transport within our extended campus and also to Campus H-borg, Malmö and Ljungbyhed. However, to be able to work on the situation, we have to identify which students should have free transport on which lines since free transport for all is probably not feasible. It is certainly an important task for the coming leadership of Lund University to address this.

Do we know yet how Kemicentrum will be affected if the new hospital moves to Smörlyckan?

We do not know this and we do not know whether the new hospital will be there (or when). We do know that the area around KC is subject to a lot of different projects and ideas such as the new hospital and different housing projects.

social sciences involved in the work?

Are the faculties of humanities and During the process to design the LU vision for an establishment at Science Village, all faculties contributed, having representatives and students involved.

I think that the establishment of Chemistry at Science Village could be really sucessful if we (chemists) can trust that Step 3 of the project includes the rest of Chemistry. Maybe it is asking for too much that there is such trust? Trust is something you earn when you deserve it.

The move of the rest of KILU is subject to a decision from KILU to do so. At the moment there is no coherent picture from KILU about this, but KILU will arrive at a decision that is best for KILU and for Lund University.

Will Physics move if Chemistry does not? Just a hypothetical question...

To create an even greater engagement from the entire University, you could perhaps invite researchers from several disciplines when designing the new campus? From disciplines such as environmental science, architecture, behavioural science et cetera. It would be great to utilise the in-house expertise of our University.

Physics will probably move without chemistry, but physics would or should not move entirely alone. One of the strong arguments in favour of moving is the impetus to create new constellations.

It is interesting to discuss with our future landlord how we can integrate and use the knowledge and ongoing research from Lund University in the process of designing our premises/buildings.