

Succession Ceremony, 18 December 2020

Inaugural Address by incoming Vice-Chancellor Anders Hagfeldt

Ladies and Gentlemen,

Let me take you back some 15 years. The place is Lima, Peru, and my two PhD exchange students Maria and Hugo from the International Science Programme are due to defend their doctoral theses. On my first day there, I am invited to listen in at a workshop. Being jetlagged, I am not at my most alert and during a lecture on the synthesis of nanoparticles I have a hard time keeping my eyes open. Then we come to a study of the effect of temperature on the size of particles and suddenly something happens. The lecturer presents a graph showing the temperature in degrees Celsius and size in Angstroms. The analysis is made using the Arrhenius equation. A lecturer I have never met on the other side of the planet is using the ‘Uppsala graph’ and I am filled with a sense of pride – of how special it is to come from Uppsala University.

For me, the University is a place where higher education and open international research meet and enrich one another. Here there is a tradition of learning combined with an indomitable drive to seek and develop new knowledge.

However, there is more to us than that. Our mission is not just to get on with what universities are good at, but also to work on what we are good for. Working for a better world means, for our part, strengthening the position of science and scholarship. To do this, we must interact with those around us: in society regionally, nationally and globally, and with business for entrepreneurship and industrialisation. Education cannot be an internal affair; it needs to be outward-looking.

I am convinced that universities have survived and evolved as institutions for nearly 1000 years because of their methodology and approach – the scientific model. We academics are curious – we want to know how things work. We observe what exists and desire to create something new. We get an idea, we come up with a hypothesis. At university, we have the privilege of working in academic freedom – of seeking knowledge freely and choosing our research freely. But on the other hand, we work under scientific constraints; we test our theses, check our premises. We analyse our results. Create methods and models. In open academic research, theories, findings and models are debated freely. Critical thinking plays a central role and the discussions generate new ideas and new hypotheses. This process of feedback is well expressed in English: we do re-search. So it is a matter of *re-thinking, re-flecting, thinking again*.

Perhaps that is what Thomas Thorild means by thinking rightly: “Thinking freely is great, but thinking freely and thinking again is greater”. The question of what is greatest remains moot.

I would say that doubt and constant reconsideration are crucial. Tage Danielsson puts it well: “Without doubt, no one is wise.” I believe this is the recipe against resistance to knowledge, fake news and populism. Our methodology and our approach to knowledge are perhaps the most important characteristics to communicate and explain in our encounters with the world around us.

Uppsala University is a broad or, if we prefer, a virtually complete university. We have experts on everything here. Subject knowledge is strong in all fields. At our Alma Mater, we have world-leading, pioneering research at all levels. We are outstanding in the individual disciplines, in our centres and in innovative interdisciplinary projects. However, we do not rest on our laurels. We need even more ideas about how to work both in depth and across disciplinary lines. We also need to know more about how to disseminate research productively and usefully.

Then, of course, we have an inspiring history of science and scholarship, we have music, choirs and cultural life. I believe our history deserves to be displayed around town far more than is now the case. For example, why not do something exciting with the Celsius

Building, lay out the periodic system in the pedestrian zone and tell the story of all the elements discovered around Uppsala and in Sweden?

I personally was attracted to Uppsala as a student because it was a genuine university town. You could study virtually any subject and then there was the student life, of course. As everyone knows, Uppsala University has a unique student scene, with great diversity, student influence, the students' unions, the nations, and the opportunity during your time as a student here to make new friends, find a partner, build relations that last a lifetime.

I look forward to discussing what sets us apart from other higher education institutions in our vicinity, in our country and globally. What are we best in the world at, and what do we have the potential to be best at? As a broad university, how are we to formulate our uniqueness so as to attract the best students and researchers?

In our discussions during the autumn, we have talked about the leadership succession as the passing of a baton. I think the *Mission, Goals and Strategies* document adopted almost exactly a year ago is excellent and I am happy to race on with that document after our handover. The overall objectives emerge out of a collegial process and are established for the University as a whole. However, the process of fleshing out the goals and designing strategies for achieving them

belongs to the faculties and departments. To quote incoming Deputy Vice-Chancellor Coco Norén: “The magic happens at the departments.”

One issue close to my heart is also at the core of the *Mission, Goals and Strategies*: education and research belong together. One highlight of my life personally and as a researcher was when I was invited for coffee and ice cream at the home of Nobel Laureate Rudy Marcus in Pasadena. At 90 plus, he was – and is – still passionately active and had many intricate questions about our solar cell research. When we took a well-deserved break, my wife Simone asked what motivated him. He answered, “Meeting the students.” He said that the students gave him energy and inspiration to continue with research. His attitude is an example to all of us who have the privilege of doing research at a university. The polar opposite, which I have always vehemently disliked, is the expression “buying out of teaching”.

External collaboration and engagement must be an integral part of our education and research. We are a strong force driving Sweden as an innovative country, but we can do a better job of communicating Uppsala’s image as a strong innovative region. My own experience is that basic research, applied research and commercialisation are often mutually enriching and generate new questions and ideas.

Collaboration is equally relevant to all parts of the University, no matter whether the external partner is a company, a government agency, a local authority or region, or some other organisation in society. All collaboration is predicated on respect for the integrity of science and an understanding that the University operates under different conditions and with different goals than companies and other collaboration partners. We need to keep several perspectives in our head at once and remember that the long-term perspective is key.

We can find concrete examples in the exciting range of courses and programmes we offer for lifelong learning, and in the opportunities for external organisations to come into contact, through us, with students who are eager to develop personally and to contribute to development. In addition, I see great potential for the alumni networks to strengthen our activities in all three of our main pillars: education, research and collaboration. We must be a university for the entire community and always uphold education, but also democracy and social debate.

We are currently extremely successful in attracting project funding from the Swedish Research Council and other sources. This gives us good opportunities for joint interdisciplinary endeavours across faculty boundaries. We need to be creative in finding organisational

forms to avoid situations where one participant merely provides service to another, so that the resources can spread horizontally and not just pass down vertically. We can develop methods for assessing how successful we are in interdisciplinary research, and that means bypassing simple and crude measuring tools like numbers of publications, citations and the h-index.

We already have splendid interdisciplinary centres and projects, but I would like to mention in particular one area that concerns everyone and is our greatest societal challenge – *sustainable development*. I want to discuss with all stakeholders how Uppsala University can become a place that the world listens to and wants to work with on climate change adaptation. Our research and education must set an example, and similarly, our internal application of the 2030 Agenda must be integrated in our activities in a way that inspires emulation.

Campus Gotland is unique. Here there is further potential for development and exciting conditions for trying out new paths in multi- and interdisciplinarity, including regional collaboration. Our activities on Gotland are growing and the unique setting in the Baltic Sea is in itself a means of attracting research projects and students. An exciting side of our future lies here.

Equal opportunities are another key issue for the future. Everyone, and I emphasise, everyone who works at or comes into contact with the

University has, and must always have, equal rights and opportunities. This goes without saying and is a quality issue for the University. We need to continue to work on gender equality, in particular at professorial level, where the ratio between women and men is still lopsided, at approximately 30/70. We can take better advantage of our varying backgrounds when appointing members of committees, councils and boards. I intend to continue to pursue Vice-Chancellor Åkesson's line of 'widening participation'. Equal opportunities must be just as much an integral part of all our activities as the 2030 Agenda. We must be an open and welcoming university.

We have high ambitions for our quality assurance and enhancement. We aspire constantly to improve. Regular analyses and discussions enable us to reconsider the direction of our activities and the issues we address, on the one hand, and our organisation and allocation of resources on the other hand. As Vice-Chancellor I will have the task, in 2021, to begin work on an upcoming research evaluation aimed at enhancing the quality and relevance of our research. I am aware of the existence of a certain evaluation fatigue, but we need a good awareness of where we stand in research terms to reinforce our self-confidence to continue our excellent research and provide inspiration for renewal. In this process we must draw on all the evaluations we receive from sources such as our research applications to funding bodies and foundations.

Uppsala University must continue to be, and advance its standing as, a world-leading broad university. So how do we know that we are a world-leading university? I think university rankings should be taken with a pinch of salt. We should have a critical discussion on how they are produced and used, and should develop alternative indicators as measures of a university's success and importance. But we must not shy away from the rankings either. I look forward to discussing our attitude towards rankings, how we can improve and how we can use the rankings.

However, what is most important is to be attractive to international researchers, teachers and students at all levels. Uppsala is home to the world; here we can learn from diversity and create global networks. We must continue to enhance our reception and integration of foreign Bachelor's, Master's and PhD students and staff. By making it easier for our own staff and students to spend time at other universities, I hope even more of us will take advantage of the opportunities offered by a stay abroad. We have several interesting international networks that we can all benefit from and contribute to.

The University Library has always had a broad educational and cultural mission. These days it has an additional role as well. While the Library retains its position as a hub of the University's activities, the digital revolution has had an enormous impact on the search for knowledge. Digitisation is a force for democracy that we welcome and

that benefits researchers and students the world over. At the same time, digitisation demands substantial resources at the local level. This is a fact we have to take into account. The role of libraries is changing, but in their new incarnation they are more important than ever, as nodes but also access points to the world's archive of knowledge.

We all have a responsibility to be aware of our work environment and to endeavour constantly to develop and improve it. A good environment should be safe, open, respectful, stimulating and challenging. The COVID-19 pandemic has required major efforts and I hope we can all play our part by staying in touch and establishing new contacts, particularly with newcomers to Uppsala. We are discovering new virtual forms for group meetings, seminars and dinners with friends and colleagues.

Research infrastructure is a prioritised area where we are making intensive efforts to find structures and processes for prioritisation, long-term funding and governance, internally at the University, nationally and in the EU. Here I look forward to Uppsala University playing a prominent and proactive role.

Top quality support and talent management will continue to be provided at all levels. All teaching and research staff must have resources and opportunities to realise their potential to the full. Having recruited excellent young researchers, we must give them resources

and opportunities to build up their research groups, develop courses, write applications and everything else involved in university life.

We must be able to provide the best possible conditions for studying at Uppsala University, with modern teaching premises and study spaces, and readily accessible and robust technology for online meetings. Heads of department bear a heavy responsibility. Can they be given better support?

If we take our *Mission, Goals and Strategies* a step further – what will be doing at Uppsala University in 10, 20 or 30 years? How can we maintain and improve our world-leading status in the face of intensifying competition and when other parts of the world have considerably greater resources?

As an old table tennis enthusiast, I draw an analogy to how Sweden managed to defeat China 5-0 in the team world championships in 1989. The ratio between the numbers of professional players in the two countries was about 1 to 100,000. Sweden had a long tradition in table tennis and a broad group of established players performing at a high level. The Swedish Table Tennis Association developed a long-term strategy to give a unique generation of young talents like Waldner, Persson and Appelgren the chance to develop freely, to challenge one another and to undertake international exchanges with

China, among others, so as to meet the best players there and benefit from new training methods.

I believe it is a good strategy for Uppsala University too to look 10–20 years ahead: with our deep subject knowledge and cross-disciplinary breadth, I hope we can obtain additional resources to actively recruit the best young researchers, to give them good resources and opportunities to develop their research at the highest international level. To enable them together to establish successful research environments, which in turn attract new talented researchers and students.

How will Uppsala, with its two universities, develop? What does the future look like for Visby as a university town? Development Plan 2050 provides very interesting reading and offers a framework for the University's spatial structure and its integration in both our cities. I envisage a vibrant student and nation scene with young people attracted to study, to benefit from a complete spectrum of knowledge and courses, to be in surroundings full of innovative research and to meet people from every corner of the globe. What will they be studying and what sort of research will be done? Perhaps it would be interesting to develop activities associated with long-term future studies.

The Vice-Chancellor's chain of office symbolises the University's unity. Our broad University, with its nine faculties and strong position in the global academic landscape, gives us together opportunities to take on the great issues of today and tomorrow with self-confidence and creativity. I take up my new position as a link in the chain with humility and curiosity. I look forward to exciting cooperative projects and to continuing together to develop and create Uppsala University.