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” As a doctoral student, it can feel difficult to assert your rights both practically and socially.

Carl Anderson Kronlid, Chair of the Doctoral Board, PAGE 5

“Place the focus on each individual student”

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DISTINGUISHED
TEACHING AWARD.
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PHOTO: MIKAEL WALLERSTEDT

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Preparations are underway for the Division of University-wide IT.

PHOTO: MAGNUS HJALMARSSON

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Tove Fall and Stellan Sandler are planning a new centre for diabetes research.

PHOTO: MIKAEL WALLERSTEDT

“The Division for Internationalisation should be a catalyst and cohesive force within our prioritised efforts to increase the University's internationalisation.

ERIKA DABHILKAR, PAGE 6

LEADER UNIVERSITY MANAGEMENT

FREE RESEARCH AND EDUCATION



IN LATE OCTOBER Uppsala University will submit its contribution to next year's research bill. At the time of writing, a draft is being discussed in the Academic Senate, while also being sent out for internal consideration. The core message of the draft being circulated is that the key words governing research and education policy should be quality, relevance and independence.

Free media, democratic freedoms and rights, an independent judiciary and independent universities are cornerstones of an open society. In a world where such institutions and values are being questioned in many places, it is more important than ever for Sweden to invest in free research and higher education of the best quality. The ability to find solutions to national and global challenges is predicated upon a free and scholarly exchange of opinions and a social climate in which different opinions can be expressed in an open and critical dialogue.

“Research policy as a whole must promote quality and international expertise.”



SUSTAINABLE SOCIETAL DEVELOPMENTS require both basic exploratory research and research that directly addresses societal challenges, of which collaboration with other parties is an integral part. Regardless of the relative balance between these two aspects, research policy as a whole must promote quality and international expertise.

For a small, open knowledge nation such as Sweden, investment in research and higher education is necessary to maintain and enhance our prosperity, competitiveness and standing in the world. Global prominence and highly ranked higher education institutions help make Sweden attractive, both in terms of talent and international investment.

Uppsala University has the critical mass and skills required to take national responsibility for infrastructure, provision of information and large-scale research investment. World-class higher education institutions contribute to the country's provision of expertise and represent a resource for all of Sweden.

For Sweden to be able to defend its position as a leading knowledge nation and tackle the challenges facing society globally and nationally, greater investment in research and education is required, along with higher education institutions obtaining the right conditions for their activities.

Eva Åkesson, Vice-Chancellor
Anders Malmberg, Deputy Vice-Chancellor



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IN BRIEF

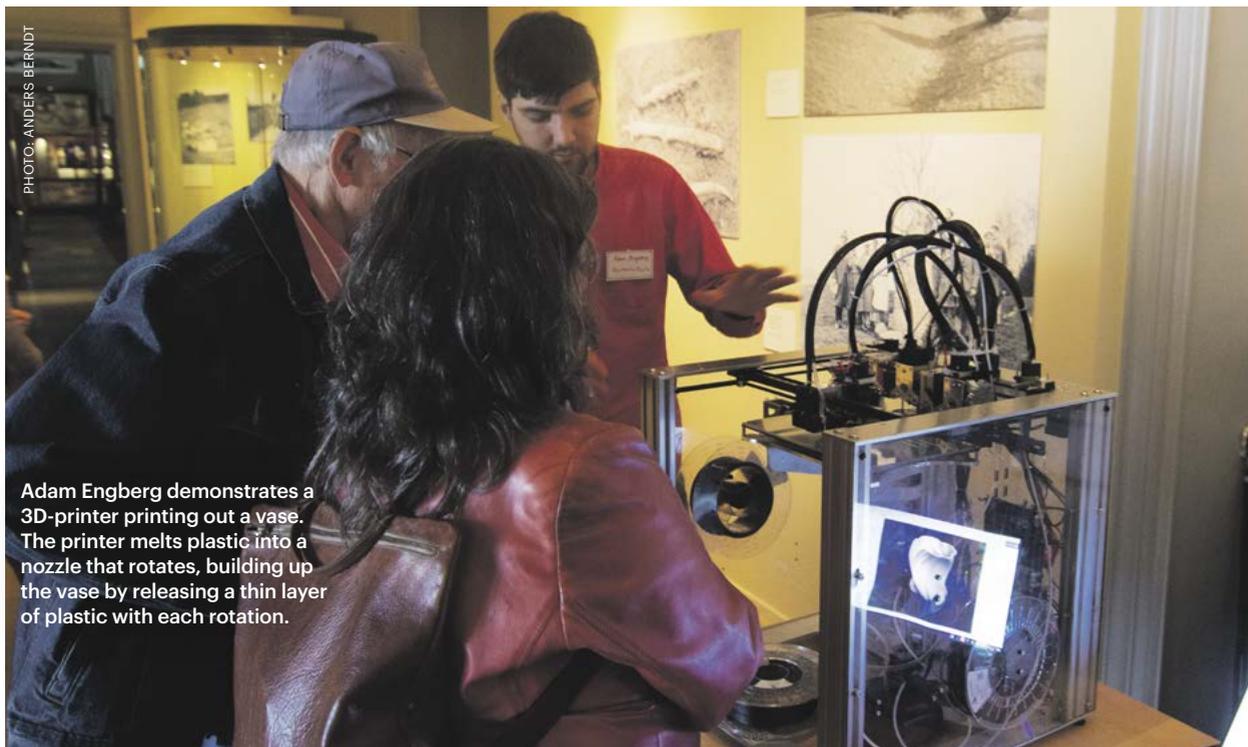


PHOTO: ANDERS BERNDT

Adam Engberg demonstrates a 3D-printer printing out a vase. The printer melts plastic into a nozzle that rotates, building up the vase by releasing a thin layer of plastic with each rotation.

3D printer an attraction at Uppsala Culture Night

Saturday 14 September saw the traditional Culture Night take place in Uppsala. At Museum Gustavianum, Culture Night was one of the final points on their programme before closing for renovation.

As usual, Uppsala University had a packed programme for Culture Night on 14 September at a range of different sites linked to the University. Among many other events was a Japanese theme

at the Botanical Garden with Japanese archery and Taiko, or Japanese percussion music. Carolina Rediviva showed off its newly renovated building, the Museum of Evolution converted natural objects into sculptures and the Museum of Medical History opened its exhibition "Livspusten – Den konstgjorda andningens historia" (Breath of life – The history of artificial respiration).

THERE WAS A physics theme at Museum Gustavianum with soap bubbles, mag-

netism, gyroscopes, gravitation, vacuums and much more. One activity that attracted many adults was the 3D printers.

"I am passionate about 3D printers," explained Adam Engberg, Research Engineer at the Department of Physics and Astronomy. "It is possible to quickly build a prototype of a research instrument, for example, in order to test an idea. 3D printers can also be used to print out anatomically correct model skeletons, which can be used for educational purposes."

MUSEUM GUSTAVIANUM closed for renovation on 29 September to improve the indoor climate in the building and increase exhibition space.

The museum building will be closed during the renovation, but the external storage houses will remain open to researchers and students.

Anders Berndt

Autumn 1624

On 31 August 1624, then King of Sweden Gustav II Adolf signed a deed of donation. Thanks to this deed of donation, Uppsala University became the owner of a large part of the King's private estates in Uppland and Västmanland. Around 300 estates changed owner thanks to this deed, with the University also receiving entitlement to the tithes of five parishes in Hälsingland and three in Västmanland.

This donation formed the financial basis of the University over many years.

Right up until the 1830s the donation accounted for all of the University's expenses in the form of salaries and other expenses, and interest on the donation continues to account for a significant amount of the University's budget even today.

The King was also keen for private individuals to follow his example and donate their own property to the University, but there was fear that the state would appropriate any donations. For this reason, on the same day that the King signed the deed of donation in autumn 1624, he also signed a charter stating that property given to the Univer-



sity is to belong to the University forever. This charter has been highly significant in terms of the University's ability to obtain donations.

Anders Berndt

Universen – now also in English!

Thanks to a special initiative, Universen is now available in its entirety in English on Medarbetarportalen. In 2019-2020, four issues of Universen will be translated to increase internationalisation at home. This means that University employees who do not have Swedish as their mother tongue – around a third of the total – will be able to read the magazine digitally.

Universen in English can be read and downloaded at: mp.uu.se

8 kg

of CO₂ was emitted in connection with the University's domestic staff travel by train during the first six months of 2019. The corresponding distance by air would have led to emissions of 359,372 kg of CO₂, or 294,685 kg if it had been by car.



Prize goes to lecture hall

Ekonomikum's basement lecture hall has won the Swedish lighting prize for 2019. Both expertise and passion for study environments were important ingredients in the jury's citation for the award, and they also emphasised the achievement of transforming a windowless room into a quite unique ergonomic and innovative environment for study. There is much appreciation for the room among students, not least because they are able to regulate their personal lighting environment in the reading places.

"We have succeeded in showing that it is possible to create a high-quality reading environment, even in a windowless room," notes Peter Götlind, Facilities Manager at Ekonomikum. "We know that the aspect of lighting is much more important for concentration and well-being than we had considered in previous planning. This needs to be given more attention in future projects."

Some of the new doctoral students at the Department of Economics.



PHOTO: MIKAEL WALLERSTEDT

First year filled with courses

In the autumn semester of 2019, 11 new doctoral students from across the globe started at the Department of Economics. Universen met the new doctoral students to ask why they applied for doctoral education at Uppsala University.

"I didn't want to stop studying following my Bachelor's and Master's level studies. I wanted to continue developing," explains Malin Backman, doctoral student.

"I enjoy teaching and studying, so doctoral education was a natural next step," says Daniel Klug Nogueira, doctoral student from Brazil. I applied to Uppsala University because Sweden offers extremely good conditions for doctoral students, and the Department of Economics is internationally success-

ful within my field of research."

Two doctoral students from Asia offer slightly different reasons for ending up in Sweden:

"Sweden is one of the world's most equal societies, which is positive for my field. It is also a peaceful and calm country and I am a peaceful person too," notes Zunyuan Zheng from China.

"Indeed, it is not chaotic here. I come from India where the population is much larger. It is easier to concentrate here," adds Rinni Sharma from India.

"THE ENTIRE FIRST YEAR involves various courses, which is good as we all come from different backgrounds and it creates a common platform," explains Zheng.

"There is no room for anything other than the courses for the first year, but in the second year they can begin think-

ing about their dissertation subject," says Mikael Bask, Director of Studies of Doctoral Education at the Department of Economics.

Immediately following admission all doctoral students who are admitted are assigned a mentor from among the department's previous doctoral students.

"The department ensured a very well organised reception, and the doctoral students in particular were really inclusive," explains Malin Backman.

However, there are also aspects that could be improved during the initial period following admission.

"It would be good to have more examples of what happens after we defend our dissertations, such as examples of areas in which those who have defended their dissertations are working and how doctoral education impacts opportunities in the labour market," adds Backman.

IT HAS BEEN NOTED at the department that the visa process for doctoral students coming from countries outside the EU has become a greater problem.

"Sometimes the case officers at the Swedish Migration Agency are not satisfied with the documentation they re-

ceive, meaning we have had to send in additional documents or simply the same documents all over again. It has cost us a lot of time and frustration," notes Mikael Bask.

Many of the foreign doctoral students nod in recognition when Akib Khan from Bangladesh raises the issue of accommodation.

"It would be good to have better information and systems to find accommodation."

"Yes, a better queue system is needed, along with information as to whether we are going to get accommodation via Uppsala University Housing Office or not and where you can go instead to find accommodation," adds Daniel Klug Nogueira.

Anders Berndt

Housing agency

■ **Uppsala University Housing Office rents out furnished accommodation to doctoral students, visiting researchers and Master's students. However, only fee-paying Master's students are guaranteed accommodation via the Housing Office.**

Both student and employee

It is important for doctoral students to know that they have rights and that support is available if they experience work environment issues that cannot be solved within the working group.

There are just under 2,500 doctoral students at Uppsala University, making them the largest individual group of employees. Doctoral students are a group with varying conditions depending on how their education is funded. The dominant form of funding is by doctoral studentship. This means the doctoral student is employed in a fixed-term position with the benefits that go with being an employee, for example sickness compensation, holiday, wellness subsidy and parental leave.

Other forms include external funding or funding via scholarships. External funding means the doctoral student is employed by an external employer and is subject to the rights and conditions applicable to that employer.

Doctoral students who are funded by scholarships do not have the same benefits as employees, such as sick leave or holiday. Instead, doctoral students funded by grants have insurance from Kammarkollegiet to cover sickness or parental leave.

"We are part of both worlds but do not wholly fall into the category of either student or employee," notes Carl Anderson Kronlid, Chair of the Doctoral Board and Doctoral Student in Industrial Engineering and Management at the Department of Engineering Sciences.

THE DOCTORAL BOARD IS a collaboration between the various student unions.

"We primarily work to coordinate the doctoral student councils at faculty level and take decisions on doctoral student representatives in the various boards and bodies."

What advice do you have for new doctoral students?

Doctoral studentship most common

■ A doctoral studentship is the absolute most common form of funding for doctoral education at Uppsala University. The second most common form is "another University post or remunerated activity linked to doctoral education". Next is funding by scholarships and medical service.

"The most important thing is to know that doctoral students have rights and that support is available when things don't feel like they should."

If a problem occurs, the first step is obviously to try and work things out with supervisors and other staff in the department.

"As a doctoral student, it can feel as if you are at the bottom of the hierarchy and that it is difficult to assert your rights both practically and socially, so get in touch with the student unions' joint student and doctoral student ombudsmen. They are employed to offer help in individual cases when problems occur."

ONE PROBLEM CARL ANDERSON Kronlid has noted is that there is a difference in how expectations within doctoral education are viewed by doctoral students and supervisors.

"It is clear from surveys that supervisors to a far greater extent think that expectations of doctoral students are clear and obvious, while the doctoral students see them as relatively unclear."

A further problem is comp time for teaching.

"Doctoral students receive the same preparation time as a senior lecturer who has taken the course before, even if the doctoral student is holding the course for the first time. The first instance that someone does a course obviously takes more time, and it would thus be a positive thing if we could differentiate the comp time."

Anders Berndt

Doctoral education in brief

■ Doctoral students are students admitted to doctoral-level courses within a field of doctoral education. Doctoral education requires 240 credits, which corresponds to four years of full-time studies.

■ Uppsala University has around 2,500 doctoral students. By way of comparison, there are some 600 professors, less than 700 senior lecturers and some 2,000 technical or administrative staff.

■ Almost half of the doctoral students speak a language other than Swedish as their mother tongue.

■ Uppsala University has around 100 fields of doctoral education, with each field in turn containing various specialisations.

■ In contrast to studies at other levels, doctoral-level education is free in Sweden for all those admitted.

■ For example, doctoral students have the right to change supervisor, take parental leave, take courses in Swedish, take advantage of the occupational health service or take the academic teacher training course.

■ To gain insight into and participate in the management of the University's activities, doctoral students may jointly appoint members to departmental boards, faculty boards and disciplinary domain boards.

➔ [Read more about the conditions linked to doctoral education in the Doctoral Board's handbook: \[dn.uppsalastudentkar.se\]\(http://dn.uppsalastudentkar.se\)](#)

Revision of guidelines

A working group is busy producing a proposal for the revision of the University's guidelines governing doctoral education. The proposal is intended to be ready in December 2019.

"The guidelines need to be updated, not least to adapt them to new legislation. The doctoral grant has been removed, for example, and there are new provisions around scholarships," explains Torsten Blomkvist, Analyst at the Planning Division of the University Administration and working group convener.

The Doctoral Board is permitted to appoint a doctoral student to the working group, with the rest of the group consisting of three people appointed by each disciplinary domain.

The guidelines need to be adapted to a change in the Higher Education Ordinance which concerns doctoral students funded by scholarships, for example; upon application they should be appointed no later than when three years of education remains.

"However, the Ordinance contains exceptions and we need to interpret those within the proposal for the guidelines to ensure that the handling of individual cases at the University is based on the same conditions."

The exceptions in the Ordinance are not particularly clear, however, and can be interpreted in different ways.

The aim is for the guidelines to provide support when interpreting different provisions in individual cases, while also giving as much autonomy as possible to the disciplinary domains in terms of how the guidelines can be most effectively implemented locally.

"We need to find a balance between the University-wide regulations and local QA and QE."

The proposal for new guidelines governing doctoral education is to be submitted to the University Director in December 2019.

Anders Berndt



Get in touch with the student unions' doctoral student ombudsmen if you encounter issues as a doctoral student, urges Carl Anderson Kronlid.

Better conditions?

At the time of writing, the government is proposing better conditions for foreign citizens conducting research or studying in Sweden. However, there is nothing in the proposal referred to the Council on Legislation to say that doctoral students should be able to apply for a residence permit for their entire doctoral education. Residence permits are currently only given for up to two years.

On 1 October Caroline Sjöberg took up her role of University Director at Uppsala University.



PHOTO: MATTIAS PETTERSSON

“Wonderful to re-establish contact”

Caroline Sjöberg is new to her role as University Director, but not new to Uppsala University. She was Head of Human Resources at the beginning of the 2000s and is pleased to be reestablishing contact.

“It is an exciting and fantastic higher education institution in my opinion, but then I am a little biased,” she says with a laugh.

Caroline Sjöberg spent the weeks after her holiday preparing for her new role, while also completing her final weeks as University Director at Umeå University.

“I received a lot of material from the Planning Division. I also went along to the expanded Management Council’s overnight conference in Sigtuna in August. It was really rewarding to meet my new management colleagues and discuss future challenges and opportunities together with them.”

Several years have passed since Sjöberg was Head of Human Resources at Uppsala University between 2001-2003. She is now looking forward to coming back.

“That was one of the reasons why I

was interested in the role. Even though a lot has no doubt changed in the time I’ve been away, it will be really fun to reestablish contact with Uppsala.”

SINCE HER TIME AT Uppsala University, Sjöberg has remained within the higher education sector, including at the Swedish Council for Higher Education and most recently as University Director at Umeå University. She has the same professional role now she has moved to Uppsala, but also many new things to adapt to.

“Uppsala University is bigger than Umeå University, and of course all universities have their own characters and function differently. That said, there are many similar aspects too. We exist in the same world, with the same issues and challenges that face Swedish higher education, so I believe I will feel at home while also being introduced to lots of new and exciting aspects.”

How would you describe your leadership style?

“I hope I am clear, but also someone who listens – I believe that to be an extremely important combination. It’s also something I like to see among my own managers – that they can have a clear

direction and vision in whatever way they want, while also being receptive, absorbing what others think and incorporating that into the decision-making process. Of course, communication is extremely important and something I think we are all consistently working to improve.”

Is there anything in particular you would like to achieve at Uppsala University?

“It is far too early to say. I got some information at the management conference about aspects that those around me believe are important to tackle. There are plenty of exciting challenges, but I need to get a feel for how to approach them and in which order first. And of course I have many people left to meet, so I would like to have a slightly broader basis before I launch myself into answering that question.”

ONE THING IS CERTAIN, and that is that Caroline Sjöberg has solid experience and feels at home in the world of academia.

“It is an exciting institution where something is always happening and a place where I feel very happy.”

Annica Hulth



PHOTO: ANDERS BERNDT

HELLO

ERIKA DABHILKAR,

who from 1 July 2019 has been Head of the Division for Internationalisation at the University Administration.

New division for greater internationalisation

1 You were previously Head of Unit for the International Office at the Student Affairs and Academic Registry Division. Why is this reorganisation being carried out?

“We hope that it will become clearer how the University Administration could support the departments with regard to internationalisation, not just in terms of education but also research and collaboration. The Division for Internationalisation should be an obvious point of contact both internally and externally for questions connected to internationalisation.”

2 Are there not any other divisions within the Administration working on internationalisation?

“Absolutely, just like quality or sustainable development, for example, internationalisation is a shared responsibility that many people must – and will be working on. The Division for Internationalisation should be a catalyst and cohesive force within our prioritised efforts to increase the University’s internationalisation.”

3 Can you describe the task?

“As well as continuing to support the University via concrete measures that increase internationalisation, for example through exchanges and professional development, the division will also coordinate and support work on University-wide networks, strategic partnerships.”

4 What kind of support will departments be able to receive?

“We will expand the support we already offer today. In concrete terms, this refers to expertise, advice and administrative support to departments that either want to launch internationalisation efforts or develop existing activities. This could mean internationalisation at home, mobility programmes for students or staff (including doctoral students) or making international contacts by way of established networks and platforms.”

Anders Berndt



We will soon be carrying out up to 12 exams per week using the new Inspera tool for digital exams, explains Magnus Widqvist.



Most types of exam can be digitised to allow examinations using keyboards instead of pens.

Ready for digital examination

It will soon be possible for the entire University to make use of the new digital examination tool, Inspera. A small group of students has already tested taking an exam using a keyboard instead of a pen.

“This gave us a head start with positive results, all the participants were very satisfied,” explains Magnus Widqvist at the Administrative Timetable Support and Examination Coordination Unit of the Buildings Division.

“We chose Inspera following an extensive procurement process and I am

entirely satisfied with our choice. We have now begun training course administrators and teachers and both we and the system have received a very positive response. We must be flexible and avoid changing too many aspects of their current working methods, but, to put it simply, most of those who work in the system are very satisfied,” adds Widqvist.

NO ONE NEEDS TO move boxes full of paper exams anymore, and the marking process will also be smoother. The invigilators still need to check that it is the right student taking an exam, but they do not

need to call on everyone to put down their pens when the time is up as the system will just turn off when it is time.

“It is not possible to digitise everything, for example laboratory exams, but in terms of mathematical formulae, for example, it is perfectly possible to use Latex code if the student wants to. The drawing tool is sadly the Achilles’ heel of every system on the market, as it is difficult to draw chemical structures for example, but development is constantly ongoing and we look forward to a solution in that field in time.”

The rooms at Bergsbrunnagatan have space for a total of 440 people and are equipped with computers and excellent screens.

“It is a question of fairness. Everyone should have the same conditions so we chose to equip the halls with good technology. We will soon be carrying out up to twelve exams per week. It feels a little nerve-racking, but in a good way,” says Widqvist.

Birgitta Sinder Wilén



The examination rooms at Bergsbrunnagatan have been equipped with computers and screens for digital examinations.

In Katia Cejie's view, the Distinguished Teaching Award is the greatest recognition anyone can receive as a university teacher.

PHOTO: MIKAEL WALLERSTEDT



“It feels indescribably wonderful”

“Receiving the Free Distinguished Teaching Award feels indescribably wonderful. It is the greatest recognition anyone can receive,” thinks Katia Cejie, Senior Lecturer at the Department of Law.

Cejie has been awarded the 2019 Free Distinguished Teaching Award under the theme “Teaching contributions to equality and equal opportunities.” The award citation specifies, that “She creates a positive climate for learning and ensures all students feel noticed, dare to develop their learning and have fun.”

“To be honest I was a little surprised when I won the award, since equality and equal opportunities are not areas I have worked actively on. But when I thought about it again, I realised that it is quite a natural part of who I am.”

KATIA CEJIE DESCRIBES her childhood with siblings and parents who were mindful of equal treatment.

“And I now live in a family with five people who have many different kinds of ability. To me this is something positive – it has enriched my life a lot. It feels both natural and necessary to me to see each individual in terms of their personal situation and to assist them using the tools required to ensure they

can flourish.”

Katia Cejie believes that students are best able to manage their challenges if they feel secure and stress-free and take an active role in seminars.

“For example, I try to create a very open atmosphere by opening up myself to a large extent. I am also fairly non-hierarchical in the way I act. My basic view is that everyone’s opinions hold equal value and are genuinely interesting.”

She attempts to coax those who tend not to talk spontaneously and trains the students in oral production.

“If you continuously practise oral production and have the benefit of following a student over a period of time, it gives you an amazing kick to see their development. Often, after a student has received feedback on the first occasion, an entirely different person emerges the second time.”

To reduce stress among her students, Cejie reduced the amount of time allowed for home exams. From previously having 24 hours of time, she reduced this to eight.

“If the law students are given 24

“I try to create a very open atmosphere.”

Katia Cejie

hours, they will use that entire time. The time is now structured like a working day and I usually encourage the students to both eat and take a walk during it.”

IN ADDITION TO the award itself, the recipients also receive SEK 20,000 in prize money. Cejie plans to use the prize money to take a coaching course in stress management.

“Stress is a major problem among both law students and working lawyers, and I want to help the law students in a way that gives them more tools to manage stress in the future.”

What drives you in your work?

“Challenges and making improvements. I think it’s fun to create and constantly try to develop and see your work leading to positive results. This not only applies to me as a person, but also to my research and teaching.

However, I myself should also – of course – get better at stopping and feeling satisfied when a project is done instead of immediately moving on to the next one.”

What do you say to other teachers who want to work more on equality and equal opportunities?

“Try to focus on each individual student but avoid shepherding them.”

Anders Berndt

SURVEY

What is the greatest challenge as a teacher?

Universen put questions to the four recipients of the Distinguished Teaching Award in specified subject areas.



Lars M Andersson, Senior Lecturer at the Department of History, awarded the Teaching Award for

Theology, Humanities and Educational Sciences.

“The shifting prior education and skills within the student body. It is a major challenge to teach in a way that suits the shifting levels of prior education – it is hard to avoid students either becoming bored or failing to keep up. A part of the solution is for us teachers to systematically adapt teaching to the individual, but this requires more work from our side.”



Anja Sandström, Senior Lecturer at the Department of Medicinal Chemistry, awarded the Teaching

Award for Medicine and Pharmacy.

“Meeting, teaching and examining an increasingly heterogeneous student body. For example, some student do not take part in non-obligatory – yet so important and well thought-out – teaching components. We also risk losing out on efforts to challenge the genuinely interested and motivated students.



Isak Svensson, Professor at the Department of Peace and Conflict Research, awarded the Teaching Award

for Law and Social Sciences.

“It is to be clear about expectations; both what I expect from the students as a teacher, but also listening to what the students expect of me. Thinking explicitly about expectations forms the fundamental basis of a good course.



Tobias Wrigstad, Senior Lecturer at the Department of Information Technology, awarded the Teaching

Award in Mathematics, Natural Sciences and Technology.

“The consistently recurring problem of succeeding in challenging students who are at totally different levels on the same course and who learn in different ways. This led me to experiment breaking down course objectives into individual “achievements” that can be examined in different combinations.

PHOTO: MIKAEL WALLERSTEDT, ANDERS BERNDT, PRIVATE

As part of the process to establish a joint IT organisation, all employees who work with IT at the University gathered to discuss the reorganisation. The image is from a workshop in May 2019.

PHOTO: MIKAEL WALLERSTEDT



University-wide IT soon to be in place

Efforts to amalgamate the University's IT activities into one organisation will soon be complete, but it will still be a short while before everything is in place. Employees need to be put in place and the funding model calculated.



Lisbet Holmberg Stark

Lisbet Holmberg Stark took up her role as IT Director in April, when the University-wide IT project had already been under way for over six months.

"It felt great to join mid-way through a project, as the division of responsibilities between the project manager, Therese Ivey Gardell, and me was clear. I got the chance to focus on getting to know the organisation and its various IT activities," explains Holmberg Stark.

The reorganisation means that all of those who work with IT have been amalgamated into one single organisation,

without reducing operational IT support. Support from the project's steering committee has been vital, in which the disciplinary domains, University Library and University Administration were all represented.

THE NEW DIVISION FOR University-wide IT consists of employees who were previously employed at different campus areas, departments, the Uppsala University Library and the administration's IT Division – in total some 200 people. The new division is divided into six units: enterprise architecture and integration solutions, application management and development, infrastructure and operations, service and support, administration, and customer relations management.

"When it comes to implementing projects as large as this, it is particularly important to have clear goals and tasks so that all employees feel secure in their role, even if they are somewhat removed from their head of unit. Everyone must get the support they need, as well as

a clear mandate," explains Holmberg Stark.

CERTAIN ASPECTS HAVE NOT yet been resolved, for example the employees' placement within the units – something the new heads of unit are working on.

"The new division will be launched in October, but there will not be any revolutionary changes right in the beginning. The last three months of the year will be a period of coexistence – old and new structures need to function together simultaneously, not least administratively and financially. Even after this we will need to work out any details that are not entirely resolved," adds Holmberg Stark.

The new funding model – about which the University Board has taken a decision – will not take effect until January 2020. IT activities will be financed by University-wide funds together with an IT levy, the size of which will be determined by the Vice-Chancellor during the autumn.

"There are currently no expressed savings requirements, but the idea is, of course, for IT activities to become more cost-effective. On the other hand, we live in a time of gradually increasing digitisation requirements, which leads us to need to review and refresh the tools and systems we have to make way for new ones. It is important to be able to deliver the support that is required and to remain at the forefront," she adds.

Birgitta Sinder Wilén



Housing initiative in Uppsala

■ An initiative is now being taken to improve the housing market for students in Uppsala. The Uppsala studentbostadsforum initiative (Uppsala Student Housing Forum), aims to create the conditions for new student housing on campus and in the city. The forum is a platform for dialogue that aims to facilitate the construction of student housing in attractive locations as well as the creation of new types of accommodation for students.

Uppsala University, Akademiska Hus, Uppsala Municipality and the nations' housing foundations all form part of the Uppsala Student Housing Forum.



... meanwhile in Visby

■ The Swedish National Union of Students has black-marked Visby on account of the difficulty of finding student accommodation there. One problem is that many students can only find accommodation for ten months, with landlords wanting to rent out to others during the summer months. However, Svenska Studenthus is now planning to build around 350 new student accommodation units in Visby.

Sweden: research nation

■ The Swedish Research Council has released its annual Research Barometer that highlights Sweden's comparative international standing as a research nation. In terms of five key indicators, Sweden is at the same or almost the same level as the five best OECD countries for each key indicator. For the sixth key indicator, however – citation impact – we are a little way behind. Sweden is ranked 13th among countries with the highest levels of citation impact. This means it has a lower citation impact than countries such as Switzerland, the Netherlands and Denmark.

➤ The 2019 Research Barometer report can be found on the Council's website: vr.se

EXERCISE AT WORK

Sitting still is not good for your health, as research has shown. But what should you do if you have an office job where a large portion of the day is spent in front of a computer?

“Making time for daily exercise is largely a question of approach,” explains Mats Bratteby.

If you replace thirty minutes of sitting still per day with some daily activity, the risk of dying from cardiovascular disease is reduced by 24%, according to a study by Karolinska Institutet published in the magazine *Clinical Epidemiology* in 2018.

This is just one of many research findings pointing towards the same conclusion. This is nothing new to most of us, but how do we shift from thought to action? Universen met Mats Bratteby, someone who has succeeded in fitting in some daily exercise to his working day.

He is Internship Coordinator at the Office for Humanities and Social Sciences at the University Administration. He has previously worked as a teacher of PE students, and has been interested in sport his entire life.

7 good habits

1. Cycle to and from work or when moving around during the working day. Make use of rental bikes if available.
2. Take the stairs. Walk backwards if you want to stretch out the calves.
3. Instead of emailing colleagues, go and talk to them.
4. Alternate between standing and sitting.
5. Take a break to do some exercises. Toe-raises can be done easily when standing and working. Picking pretend-apples high above your head is a good way to stretch. Shoulder rolls and stretching the neck to the side are also good exercises during a break.
6. Talk to colleagues, go along to coffee breaks and other joint activities.
7. Keep the door to your office ajar to aid social interaction.

What do you do to keep active throughout the day?

“I cycle to and from work, I move around and never sit still for too long at my desk. Instead I try to break up the work by going and asking colleagues things instead of sending an email”, explains Bratteby.

HE HAS BOTH A standing desk and a lower desk in his office, meaning he can alternate between standing and sitting. Another good trick is to always take the stairs up to the coffee room.

“In general I try to remember that it is not a disadvantage for things to take a little time when needing to move around. I think it is important to have that approach: seeing movement as an investment and not as a cost.”

Many people aim to take a walk at lunch, but it is far from certain that it will actually happen. It is therefore easier to move away from your desk two or three times to go and talk to a colleague. From a movement perspective, it is equally effective to move a small amount several times as once for a longer time.

Mats Bratteby emphasises that mental health at the office is just as important, so it is not only a question of making time for exercise, but also taking time to be social.

“There are other components that are important here, such as having coffee together, taking your breaks, greeting each other when arriving each morning and taking part in joint activities.”

IN THE SPRING HE arranged a day out in the open air for his colleagues, and it was structured in a way that meant everyone could participate.

“We made it very simple, taking a walk in Stadsskogen where we had a guided tour. We then regrouped and

“See movement as an investment.”

Mats Bratteby

baked bread over a fire. We incorporated the social aspect, exercise, fresh air and got some sunlight.”

He personally has a great interest in sport, enjoying swimming, running and skiing. His office bears a collection of medals from various races in which he has taken part. However, he emphasises that daily exercise is all about finding your own level.

“You will succeed at things you enjoy. There is also the fact that establishing a new habit can take 60 days, so you must have realistic goals. You can’t jump into everything simultaneously if you have never done anything before.”

HE DEMONSTRATES A FEW simple everyday exercises anyone can do at their desk to ease a static working posture, including toe-raises, picking pretend-apples high above your head and shoulder rolls.

Bratteby not only takes the stairs – at times he even goes backwards.

“Tightness in the calves is relatively common after standing for a long time, and this can be reduced by walking backwards up or down stairs. That said, this is obviously not something you want to do when it’s crowded,” he adds with a laugh.

One final tip is to use the rental bikes available on several campuses, for example here at Blåsenhus.

“Some people are already doing this, but I believe many more could be taking advantage of this option. This is also a case of establishing a habit; making time for exercise in a convenient manner is vital for its success.

Annica Hulth

Instead of emailing colleagues, go and talk to them, Mats Bratteby encourages.

PHOTO: MIKAEL WALLERSTEDT OCH ANDERS BERNDT



Mats Bratteby always takes the stairs up to the coffee room – a simple way of getting some daily exercise.



Joint plank exercise strengthens employees

“The plank is an effective and fun way to get going and become more active, as well as kick-start the brain that little bit extra,” explains Kerstin Strandberg Wilbrand, who has started the initiative to do the plank jointly with others at the Unit for Contract Education at the University Administration.

ROUGHLY ONCE A week, employees at the Unit for Contract Education gather together to do the physical exercise known as the ‘plank’. Even employees working from home usually join in and do the exercise with the others via Skype. The goal is to do the plank for two minutes.

THE PLANK IS a static exercise whereby you rest on your forearms and toes with a straight back and try to maintain that position for as long as possible. The exercise strengthens the muscles in the abdomen, back and shoulders.

“Doing the plank together is a fun, shared challenge. I started the initiative because I was used to doing the plank with others at my previous workplace. It’s simple, requires no equipment or change of clothes and everyone can take part in line with their own ability. If you get tired, you can go down onto your knees or straighten out your arms.”

Anders Berndt



The door to the office is always open, so colleagues can pop in and have a chat.



Toe-raises can be done easily when standing and working.

Tove Fall and Stellan Sandler want to establish a centre for diabetes research at Uppsala University.

PHOTO: MIKAEL WALLERSTEDT



Greater collaboration vital for diabetes research

Through the New Horizons in Diabetes Research international symposium and a planned new centre, Uppsala University hopes to pave the way for greater expertise about one of our fastest growing common diseases.

In September several of the world's leading diabetes researchers gathered at Uppsala University for the New Horizons in Diabetes Research symposium. The meeting, arranged in collaboration with the Göran Gustafsson Foundation, sparked major interest within both academia and industry.

"Diabetes is a global and rapidly escalating public health issue which is causing serious suffering and consuming an increasingly large share of the world's resources. Technological progress has

made it easier to live with the disease, but there is still no known cure. An important step for diabetes research is thus greater collaboration, between researchers but also in wider society," explains Tove Fall, Professor of Molecular Epidemiology at the Department of Medical Sciences.

THE NUMBER OF people developing diabetes is rising everywhere. Type 2 diabetes – which is linked to lifestyle and excess weight – has historically developed later in life, but now the average age is falling

"We can see clear opportunities for synergies by coordinating our strengths at home."

Tove Fall

and there are even reports from the US of three-years-olds developing the disease. Cases of the less common Type 1 diabetes, whereby our immune system attacks our insulin-producing cells, have doubled over the past 30 years. Finland is the worst affected, but Sweden is only just behind in the statistics.

"The research is pursuing several parallel paths. Many researchers focusing on Type 1 diabetes are searching for ways to detect it earlier. For example, if we can identify a triggering factor then it is entirely reasonable that we could also develop a vaccine. Others, such as in my own team, are looking for methods to reverse the course of the disease. Right now we are researching a potential treatment that is showing beneficial results for blood sugar levels in mice suffering from diabetes, but before we consider

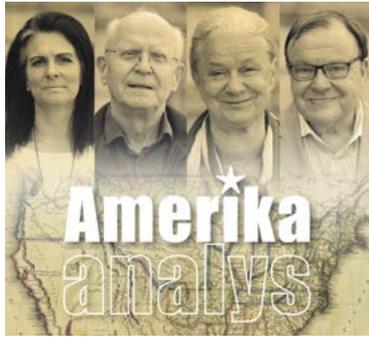
using it within healthcare we obviously need to know what effect such therapy could have on the human immune system," explains Stellan Sandler, Professor of Medical Cell Biology at the Department of Medical Cell Biology.

SWEDISH DIABETES RESEARCH has long been limited by restrictive financial frameworks, but as the disease is becoming more widespread, so too is attention from financiers. A major step was taken in 2010 via the government-funded EX-ODIAB initiative, which with its base divided between Uppsala and Lund University has provided the country's diabetes researchers with a common platform. Less than a decade later, diabetes researchers at Uppsala University are now also compiling an application detailing the conditions for establishing a local centre.

"We are pursuing many successful national and international collaborations, but can see clear opportunities for synergies by coordinating our strengths at home, too. The symposium gave us a fantastic opportunity to display our expertise to world-leading researchers, but it was also an opportunity to show off our breadth internally. Our aim is to turn the symposium into a recurring forum, but even this first event represented a highly significant step in terms of taking Uppsala's long tradition of high-quality diabetes research to the next level," notes Tove Fall.

Magnus Alsne

IMAGE: TORBJÖRN GOZZI



New podcast to promote understanding of US

■ The new podcast Amerikaanalys (Analysis of America) targets those who truly want to understand what is happening and why in American politics and society. The discussions in the podcast are held by researchers Frida Stranne at Halmstad University, Dag Blanck and Erik Åsard at Uppsala University as well as the journalist and author Karin Henriks-son from Washington, D.C.

▶ Listen to the podcast: amerika-analys.podbean.com

Link between abdominal fat and diabetes and cardiovascular disease

■ A new study shows that abdominal fat is a major contributory cause of diabetes and cardiovascular disease. The study also shows that abdominal obesity is a larger risk factor for women than men.

“We were surprised that abdominal obesity among women was so much more strongly linked to the risk of disease than in men,” says one of the authors, Åsa Johansson, Senior Lecturer in Molecular Epidemiology at the Department of Immunology, Genetics and Pathology, SciLifeLab.

PHOTO: ALBERT MIHRANYAN



Water purification for Bangladesh

■ In large parts of Bangladesh, getting hold of safe drinking water is a constant challenge. A research group from Uppsala University and the University of Dhaka in Bangladesh have hit upon a possible solution. Using locally growing algae, they have created a paper filter that has proved highly effective in removing viruses and bacteria both in the lab and in real-life tests.

Albert Mihranyan, Professor at the Department of Engineering Sciences and leader of the study, believes that further development could mean the paper filter, could become an affordable and effective way to prevent water-borne life-threatening infections.

Give yourself time to recharge

A study published in Scientific Reports shows that if a person spends at least two hours out in nature per week, they will experience an improvement in both physical and mental health.

The study, “Spending at least 120 minutes a week in nature is associated with good health and well-being”, was carried out in the UK based on nearly 20,000 people. They were able to note from the study that two hours per week leads to a greater feeling of well-being both physically and mentally. Those hours do not need to be continuous, but could be divided up over several occasions.

TERRY HARTIG, PROFESSOR of Environmental Psychology at the Institute for Housing and Urban Research, as well as co-author of the study, emphasises that the two hour recommendation should not be interpreted to mean that less cannot have a positive effect. The wellness hour, for example, could be used beneficially for a refreshing walk in nature.

“A one-hour walk in nature is better than no walk at all. We were only able to measure certain specific results in the study, but there are many results or levels of result that we were not able to study.”

What does ‘nature’ actually entail?



PHOTO: DAVID NAYLOR

Terry Hartig, Professor of Environmental Psychology, in particular Housing Environment Issues, at the Department of Psychology and the Institute for Housing and Urban Research.

“Nature could mean very different things to different people. In terms of recharging, I usually say that it is important for a person to go from one thing to another, and in particular that they go to something that engages them. For example, leave the digital world and work tasks that you have been busy with and do something physical that you enjoy. For many people, making this change involves getting out the door and walk-

ing in a park or forest, that is, out in nature. The important part is that you can feel engaged in the experience,” explains Hartig, before continuing:

“Applicable environments can vary. For someone who works in the forest or out in the fields, nature might represent the workplace and so a fine restaurant in the city might work better for recharging.”

Anders Berndt

4 QUESTIONS TO CASPER DE LICHTENBERG,

visiting doctoral student at the Department of Chemistry, who took part in the Lindau meetings on 30 June – 5 July together with Nobel Laureates in southern Germany.

“Fantastic to meet Nobel Laureates”

1 What was the meeting like?

“It was a fantastic experience to meet people who have meant so much and have the chance to listen to and discuss with Nobel Laureates. The Lindau meetings are an opportunity for students, doctoral students and postdocs from across the globe to meet previous Nobel Laureates.”

2 What have you taken away from the meetings?

“What strikes me most is that the Laureates were also mere students once. They weren’t looking to win the Nobel Prize, but were simply one of many researchers who worked hard in a field they love. The Laureates were the ones who were awarded the prize, but there are so many others who also

contributed their hard work but are not visible in the same way. That puts things into perspective.”

3 How are the meetings structured?

“There are a range of activities in which you can participate; everything from lectures held by the Laureates to more intimate lunches and seminars with them. 39 Laureates took part, mostly from the field of physics as this year’s theme was physics. The theme varies between medicine/physiology, physics and chemistry. In addition, every third year is dedicated to economics. This year around 600 students and doctoral students participated from some 80 countries.”



PHOTO: DAVID NAYLOR

Casper de Lichtenberg got the opportunity to meet previous Nobel Laureates.

4 Why were you able to attend the Lindau meetings?

“The Ragnar Söderberg Foundation nominated me after I applied via the Royal Swedish Academy of Sciences in autumn 2018. You have to describe in the application your academic merits and what you have done in your life, as well as write a letter explaining why you should be able to attend.”

Anders Berndt

FINALLY

NAMES IN THE NEWS

■ **Anita Johansson**, Deputy Director-General, and **Anders Hallberg**, Professor Emeritus, have been appointed by the government to draw up proposals for external board members of the Board of Uppsala University.

■ **Elisabet Nihlfors**, Professor of Pedagogy at Uppsala University, has become a new member of the government's National Research Committee.

■ **Maria Grahn-Farley**, Associate Professor of Public Law and Senior Lecturer at the Department of Law, has won the 2019 Studentlitteratur kurslitteraturpris (Student Literature Prize) for her book "Barnkonventionen – en kommentar" (The Rights of the Child – a commentary). The book was commended for tackling complicated legal issues in an educational and accessible manner.

■ **Vassilios Kapaklis**, Senior Lecturer at the Department of Physics and Astronomy, **Hans Lennernäs**, Professor at the Department of Pharmacy, **Ingela Nilsson**, Professor at the Department of Linguistics and Philology, and **Emily Holmes**, Professor at the Department of Psychology, have all been awarded the Thuréus prize by the Royal Society of Sciences at Uppsala. The prize money amounts to SEK 100,000 per person.

■ **Alkistis Skalkidou**, Professor at the Department of Women's and Children's Health, has been awarded the Eric K. Fernström Swedish prize of SEK 100,000.

■ **Lars Lannfelt**, Professor of Geriatrics, has been awarded the AAIC Lifetime Achievement Award 2019 – one of the world's most prestigious awards within Alzheimer's research.

■ **Folke Tersman**, Professor of Practical Philosophy, has been elected to the Royal Swedish Academy of Sciences.

■ **Maria Strömme**, Professor of Nanotechnology, and **Håkan Engkvist**, Professor of Applied Materials Science, have been recognised by the Swedish Foundation for Strategic Research for working with significant dedication to ensure their research is of practical use in society.

■ **Lina Bergman**, Doctoral Student at the Department of Women's and Children's Health, **Anahita Hamidi**, Researcher at the Department of Medical Biochemistry and Microbiology, **Henrik Isackson**, Department of Medical Cell Biology, **Mark Richards**, Post-Doctoral Researcher at the Department of Immunology, Genetics and Pathology, **Gull Rukh**, Post-Doctoral Researcher at the Department of Neuroscience, **Xiao Tan**, Post-Doctoral Researcher at the Department of Neuroscience and **Johan Virhammar**, ST Doctor at the Department of Neuroscience, have all been awarded scholarships by the Swedish Society for Medical Research for research by young, particularly promising researchers.

ON THE AGENDA

10/10 50 years of Uppsala Biomedical Centre (BMC): the march of RNA
In connection with the 50th

Annual Disa Prize goes to Lars Lambert

Lars Lambert is receiving the prize for his book "Uppsala kring 1900. Staden och människorna i Alfred Dahlgrens bilder" (Uppsala around 1900. The city and its people through the images of Alfred Dahlgren).

The prize citation reads as follows: "This year's Disa Prize is awarded to Lars Lambert for his book 'Uppsala kring 1900. Staden och människorna i Alfred Dahlgrens bilder'. Through a wonderful combination of photography and both cultural and historical texts, the book paints a gripping and sensitive picture of people, buildings and locations in an Uppsala gone by."

The Disa Prize was established by Uppsala University and Studentbokhandeln in Uppsala to promote popular scientific publications, and was first awarded in 2001.

anniversary of BMC, you are invited to a series of popular science lectures throughout autumn 2019. At 19.00 on 10 October Gerhart Wagner will hold a lecture on Ribonucleic acid (RNA) which can be found in all living organisms. Remaining lectures in the series: 17 October and 24 October.

➔ mp.uu.se/web/info/kalendarium



15/10 Day of the book

Six current authors present their books: Torbjörn Flygt, Monika Fagerholm, Jonas Bonnier, Ulrika Knutson, Karolina Ramqvist, and Niklas Natt och Dag. The Grand Auditorium, 18:30-21:00.

17/10 Scientific jokes – on humour and norms within the natural sciences

Thursday seminar at the Centre for Gender Research, 13:15-15:00.

➔ web/info/kalendarium

18/10 Rudbeck Day

The theme for this year's Rudbeck Day: "When the immune system cannot distinguish friend from foe." Grönwallsalen, Uppsala University Hospital, 09:00-15:45.

22/10 On the ballet Petrushka

Ahead of the Royal Academic Orchestra's concerts for Stravinsky's Petrushka, Stefan Karpe, director musices, talks about the plot and music in this legendary ballet that was first

performed in Paris in 1911 by the Ballets Russes. Musicum, 19:00.

25/10 Staff party

The annual staff party at Uppsala Castle.

26/10 The Royal Academic Orchestra: Petrushka

The Royal Academic Orchestra performs Stravinsky's Petrushka at Gottsunda centrum and in the Grand Auditorium.

➔ kalendarium.uu.se

28/10 Sustainability and internationalisation

How can internationalisation and sustainability efforts support each other? Workshop aiming to find ways to move forward.

➔ kalendarium.uu.se

10 November Museum Day

Museum day is celebrated with the theme of "taste". Go on a voyage of discovery among plants from the South. Special opening hours for the Tropical Greenhouse. Free entry to all of Uppsala's museums.

➔ uppsalasmuseer.se/english/engindex.html

21/11 Grants Day

Meet financiers, the University's Research Support Division and inspiring research role models.

➔ mp.uu.se/web/info/kalendarium



Strong women the theme of "TeA" day

■ On 23 October the network for technical and administrative staff (the TeA network) is organising a day under the theme of "Strong women throughout time".

The programme (all lectures in Swedish)

- Charlotte Hedenstierna-Jonson: The warrior grave belonging to a woman
 - Lisbeth Holmberg Stark: New IT Director
 - Karin S. Lindelöf & Annie Woube: In the footsteps of girls - for future victories. On girls' races and conditions of female recreational sport
 - Sofia Ling: The art of providing for yourself – women's work in Stockholm 1650-1750
 - Anna Nordlund: Selma Lagerlöf – Sweden's most modern woman
 - Moderator Margaretha Fahlgren: Love or loves. Power and emotions in political biographies
- The day will be held at Polacksbackens auditorium, Hus 6, Lagerhyddsvägen 2.

23/11 IT and the brain

The Department of Information Technology is turning 20 and inviting people to its popular science lectures on IT and the brain. Siegbahnsalen, Ångström 13:15-14:15.

25/11 Orthodox theology and human rights

Elena Namli, Professor of Theological Ethics, will hold a lecture on orthodox theology and human rights. English Park Campus, Hus 22, Lecture Room 22-1017, 15:00-17:00.

14/12 Christmas concert

The Royal Academic Orchestra is providing Christmas cheer in the Grand Auditorium at 15:00.

➔ Kalendarium.uu.se

OTHER INFORMATION

Printing grants

Grants from the Vilhelm Ekman University Fund and grants for printing scientific works in AUU's series.

Applications to be sent to: annika.windahlponten@ub.uu.se by 1 November at the latest. Grants are normally only awarded for part of the cost and given as advance support (not for doctoral theses).

➔ ub.uu.se



Lars Lambert has been awarded the Disa Prize 2019.

PHOTO: KERSTIN LUNDQVIST

“Check supervisors’ competence more carefully. Also give them better opportunities to develop their supervising skills – then the quality of doctoral education can be raised and made more equal.”

These were the words written by FRIDA PALM, KAJSA ARKELIUS, MARCUS LOCKOWANDT and SELVI CELIK on 28 August on tidningencurie.se. All four are doctoral student representatives on the Doctoral Board of the Faculty of Medicine at Lund University.

When he became the new Secretary of the Royal Society of Sciences at Uppsala, Hans Ellegren started to read about the Society’s history, for example the systematic collection of weather data started by Erik Burman in 1722 and published in the Society’s magazine.



PHOTO: MIKAEL WALLERSTEDT

When natural sciences came to Uppsala

The story of the rise of Sweden’s oldest scientific academy, the Royal Society of Sciences at Uppsala, is also the story of how research into natural sciences came to Uppsala.

In the newly released book “Hvad nytt och nyttigt–tillkomsten av landets första lärda sällskap: Kungl. Vetenskaps-Societeten i Uppsala” (New and useful – the arrival of the country’s first scholarly society: the Royal Society of Sciences at Uppsala), Ellegren recounts the history of the rise of the Society and how natural sciences arrived in Uppsala. Hans Ellegren is Secretary of the Royal Society of Sciences at Uppsala and Professor of Evolutionary Biology at Uppsala University.

AT THE TURN OF the 17th century, Uppsala University was primarily an educational establishment for clergymen and civil servants.

“At that time, new influences were flowing in from the continent. However, the new and experimental natural sciences had difficulty gaining acceptance at our University,” explains Ellegren.

The University did not actually have any infrastructure to support new research. This is when the Society gained

an important role in supporting the growing natural sciences. For example, it invested all of its operating capital into sending Carl Linnaeus on his voyage to Lapland in 1732.

“In doing so, the Society launched Linnaeus’s career and helped him become extremely renowned.”

Why did you write the book?

“As the new secretary of the Society in 2013, I became interested in the history of both the Society and the University. I started going through old documents from our archive. When you see the signature A. Celsius on a record, it gets you thinking: Anders Celsius sat there as a secretary in front of this piece of paper, just like I am today. It presents a visual connection to all that extensive history and gives us a responsibility to pass the baton on.

QUITE SOON AFTER THE Royal Society of Sciences at Uppsala was established in 1728, ideas were raised that the Society and research should be of more ob-

vious use to wider society.

“The new member Mårten Triewald advocated that the Society should publish its magazine in Swedish instead of in Latin, as well as move to Stockholm, closer to the corridors of power, and help the state apparatus rebuild society following the period of the Swedish Empire. However, those ideas were not quite as popular among us here in Uppsala. We wanted to seek out knowledge for its own sake and spread it internationally.”

As a response to the resistance to change in Uppsala, the Royal Swedish Academy of Sciences was established in Stockholm in 1739.

“We can always play around with the idea of what would have happened if the Society had begun publishing in Swedish – would the Nobel Prize have been awarded in Uppsala in that case?” Ellegren ponders.

Anders Berndt

↳ full: diva-portal.org.

The Society in brief

■ The Royal Society of Sciences at Uppsala is Sweden’s oldest scientific academy. It was established in 1728 by King Fredrik I, but traces its origins to Collegium Curiosorum from 1710. The Royal Society of Sciences in Uppsala has no connection to Uppsala University. The members of the Royal Society of Sciences are elected on the basis of their scientific merits. The Society’s premises are located on S:t Larsgatan 1 in Uppsala, where 60-70 members meet once a month to discuss new scientific research.



PHOTO: MIKAEL WALLERSTEDT

HELLO
HELENA DANIELSON,
Professor of Biochemistry and this year’s recipient of the Uppsala University Innovation Prize ‘Hjärnäpplet’.

Good conditions for innovation

1 The award citation states that you have been highly successful in combining research and academic leadership with entrepreneurship and innovation. How do you personally think you accomplished that?

“We have a number of advantages compared to my international colleagues. As researchers and teachers at a Swedish university, we enjoy both the ‘professor’s privilege’ and secondary employment as an option, which means that I can actually dedicate myself to such kinds of activities on the side. We also have an incredibly strong innovation environment at Uppsala, which has helped me enormously. The primary focus is not on money but on advice, courses and experts who can be consulted.”

2 What are you currently working on in terms of innovation?

“We are collaborating with a Chinese company that wants to conduct innovative research into biopharmaceuticals and medical technology products. They themselves say they need to do this in Sweden instead of China as we have the right approach and skills.”

3 What is your advice to other researchers who want to work with innovation?

“Get to know people who work in the industry and find out what problems they are having – that is one way. There is no risk in collaborating with industry, but it could prove advantageous. If you have your own ideas that you want to develop, you should take advantage of the skills and wealth of experience that can be found here at Uppsala.

Annica Hulth

PROFILE

/KARIN SCHÖNNING

Senior Lecturer in Particle Physics

- Family: 11-year-old son and non-cohabiting partner.
- Enjoys in free time: Spending time with my son and singing in both a choir and a band with nuclear physicists. We mostly perform at various physics events at the University.
- Hidden talent: Memory for faces. Can walk quietly in high heels!
- Reads: Every night and on every journey. Particularly Margaret Atwood, Moa Martinsson and Joyce Carol Oates, but also detective novels and academic literature.
- Would like to do more: Take the train instead of flying. From this year I will be taking the train to Germany (four times so far) but it's less easy to get to China...
- If I hadn't become a researcher: I would love to be part of committee that sits and takes decisions about applications from people who want to have specific last names.

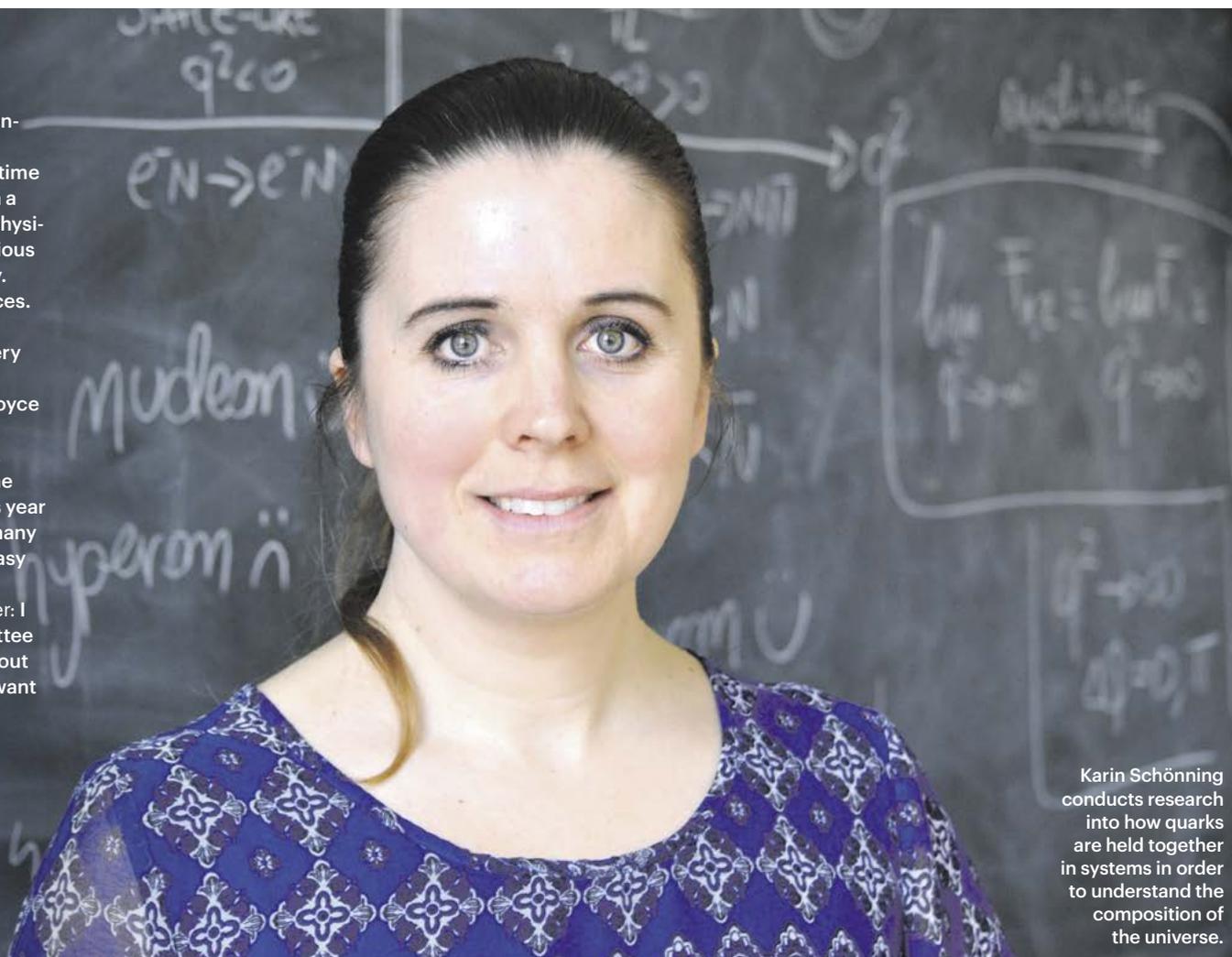


PHOTO: MATS KAMSTEN

Karin Schönning conducts research into how quarks are held together in systems in order to understand the composition of the universe.

“Environmentally aware parents lit a fire within me”

Karin Schönning's role as researcher in nuclear physics leads her to examine the composition of the universe. Last year she was awarded the Thalénska award for her contributions to particle physics experiments.

AS A CHILD, Karin Schönning would never have imagined that she would go on to become a nuclear physicist – an archaeologist seemed more likely.

“If you don't come from an academic household, archaeology is probably the first scientific profession you come into contact with. To stretch a point, you could say that particle and nuclear physicists are types of archaeologist, but we do not limit ourselves to examining human history on earth; we look at the history of matter in the universe,” she explains.

Her childhood was spent in the village of Lingbo in Hälsingland with her parents, who were interested in

the environment and anti-nuclear power. At junior secondary school, Schönning wanted to learn more about nuclear power, which she associated with something evil. She gradually revised her opinion, but above all she was fascinated by things that were so small they were invisible to the naked eye.

“Having environmentally aware parents lit a fire within me to learn more about energy and how we can produce better energy sources, but I didn't pursue that pathway any further.”

INSTEAD, DURING HER civil engineering degree in engi-

neering physics at Uppsala, it became clear that her great passion was for basic research. As part of her dissertation project at the CERN laboratory for particle physics in Switzerland, she was able to analyse signals from particles composed of strange quarks. This sparked her interest in how quarks are held together within systems, known as hadrons. It is a great mystery to researchers, as is how the enormous power generates 99% of all mass in the universe.

“To find an answer about how these systems work, my research team and I are investigating what are known as hyperons. These are compound three-quark systems, just like protons and neutrons, but where light quarks have been replaced by heavier quarks.”

THE MOST SUITABLE FACILITY for studying the structure of hyperons is currently BES III in Beijing, where Karin Schönning is coordinator of one of the facility's research groups.

“Major focus is placed on preparations to ensure the experiments work. We also gather huge amounts of data using complex patterns, which is a major challenge with respect to making calculations. Part of my job is to read reports and draw conclusions as to how we can produce better analyses.”

Her greatest research success to date is the first complete, quantitative description of what is known as the lambda-hyperons' internal structure. Her next goal is to investigate the energy dependency of this structure and to take equivalent measurements of other hyperons. However, these are merely milestones in the overall goal of understanding their immense power.

“These questions are obviously not something that can be solved in a day or even a year, more something to which I imagine I'll dedicate my life as a researcher.”

Anneli Björkman