



Article from Prime Minister's Office

# Both incentives and motivation needed to ensure learning becomes reality in the workplace

Published 11 June 2018

Supplying skills to the labour market, and to society at large, has been a recurring issue since the Government's National Innovation Council started meeting in 2015. When the Council met on 28 May at Harpsund, the meeting opened with the issue of lifelong learning in the workplace.

Minister for Employment and Integration Ylva Johansson summarises the discussions from the meeting: "Sweden has a strong starting position. The Swedish model means that we encourage and facilitate labour market adjustment. Both central government and the social partners take considerable responsibility in this. However, digitalisation and globalisation place major demands on skills development and learning in the workplace."

## **What is important to consider in the work going forward?**

"The discussion emphasised the importance of business managers giving skills issues greater weight and of strengthening cooperation between working life and education providers. Both incentives and motivation are needed to ensure learning becomes reality in the workplace," says Ms Johansson.

## **What will the workplaces of the future look like?**

"New opportunities to acquire new skills must be available to more people, for example through using online courses or other flexible means of

customising and making education accessible for concrete needs. But to ensure that these new skills benefit both the individual and the workplace, a good, supportive learning environment is important," says Ms Johansson.

In the current public debate, there is considerable engagement and interest in the issue of learning, lifelong learning and skills supply. Increasingly greater demands are being made today on continuous learning throughout one's entire working life, but how is this need being addressed in the labour market and at individual workplaces? What characterises a learning workplace?

Minister for Higher Education and Research Helene Hellmark Knutsson, one of the government members of the National Innovation Council, explains more from the meeting.

**Could you give a brief summary of what the meeting concluded on this particular point? A concrete example to think about in the work going forward?**

"It was an exciting discussion, including many well-informed contributions and good, concrete proposals. Technological developments in digitalisation and automation are resulting in new demands on knowledge and skills in working life. The days when it sufficed to acquire an education at the start of one's career are gone," says Ms Hellmark Knutsson.

"It's clear that we need a holistic approach to education and learning, where every part is needed to ensure a good overall outcome. Continuous learning in the workplace needs to be developed and regarded more as the strategic issue it actually is.

**What is most important to ensure the success of lifelong learning?**

"From the perspective of higher education, I believe that collaboration between educational institutions and companies must improve. Close cooperation is required to develop the courses the business sector needs and help increase access to the courses currently offered. The development of courses for professionals, digital learning and skills validation opportunities are important parts of the overall picture. More people will need to change their career path or acquire new skills and knowledge throughout their working life. This is why opportunities to study at higher education institutions later in life must increase. We are now working in a coordinated way on a number of education-based reforms throughout the country and through all stages of life. One major reform is expanding higher education

throughout the country through resources equivalent to almost 25 000 new places by 2021.



Article from Ministry of Enterprise and Innovation

# Innovation partnership programmes impact Swedish innovative environments

Published 04 September 2017

The collaborations, initiatives and projects that have resulted so far from the five innovation partnership programmes were presented when the National Innovation Council met on Monday 28 August. Together, the project managers and the Council looked to the future and discussed critical success factors, goals and opportunities for developing these partnerships. The experiences of partnership working, where the business sector, academia and organisations work together strategically, were highlighted and discussed by the Council.

The innovation partnership programmes originated from the three social challenges that the National Innovation Council highlighted at the beginning of the electoral period: digitalisation, life sciences, and environmental and climate technologies. The Council has followed the work over the year and provided input, stressing for example the importance of joining forces to increase skills supply.

The innovation partnership programmes were launched on 1 June 2016. The partnership groups associated with the programmes focused on identifying challenges and opportunities for each programme and priority setting of important areas for joint action. Several working groups have been established and a number of concrete partnership projects have been

developed.

Within the framework of a partnership project, available public resources and co-financing from the business sector can be used jointly to meet specified priorities. Even so, the Government has provided additional funds for measures related to the innovation partnership programmes, including through the Research and Innovation Bill adopted by the Riksdag in early 2017. These funds are primarily channelled through programmes and calls for projects from the Swedish Agency for Innovation Systems, the Swedish Energy Agency and the Swedish Research Council Formas.



Article from Prime Minister's Office, Ministry of Education and Research

# “Space activities can and should contribute to a functioning society”

Published 23 November 2016 Updated 05 December 2016

Space is the focus of the National Innovation Council meeting on 24 November 2016. Minister Helene Hellmark Knutsson provides an update on the Government's work in the area of space. Space activities can and should contribute to a functioning society. They should also be a tool for development and innovation, leading to growth. These were the proposals of the Space Inquiry's report, which was presented to Minister for Higher Education and Research Helene Hellmark Knutsson in September 2015.

## What is the most important thing happening at the moment in the Government's work in the area of space?

The Research Bill is now ready for a government decision and will be presented on Monday 28 November. One important section of the Bill deals with space and its importance for environment and climate work, and how satellite data gives us better conditions to tackle the threat of climate change. On the basis of last year's Space Inquiry, we have tasked Jan Nygren with gathering knowledge about market needs and conditions for developing the Swedish space centre Eorange to be able to send small satellites into orbit. Less than a month ago, I received his internal report, which we will now analyse and also discuss in the Innovation Council.

There are several exciting projects under way in the area of space, in both

Sweden and Europe, where a few processes are ongoing that will be of major significance to Swedish and European space activities in the future. The Commission presented its Space Strategy for Europe a few weeks ago, and it will be discussed at the meeting of the Competitiveness Council next week and then dealt with in the Council in the spring. Sweden will play an active role to ensure that its implementation is efficient, within budget and effective. Parallel to this, intensive work is under way at the European Space Agency, and the first ministerial meeting in two years will take place in early December to determine the programme and budget priorities for several years to come.

**The Space Inquiry proposes that space activities should be 'a tool for development and innovations leading to growth'. Can you elaborate on this and give some concrete practical examples?**

There are many examples of how space activities contribute to development and innovations that are of interest to many other sectors. Development and innovations from the space sector are often tools or levers for other societal functions. Already today, we benefit from many space-related services in our everyday lives without even realising it. Let me mention perhaps the clearest growth opportunity, namely new services and companies that can grow by creating added value from the enormous amounts of satellite data that is generated and downloaded to earth day and night. Companies with advanced services for agriculture, banking, retail trade, crisis management and navigation, etc. have grown in recent years, and as it becomes possible to gather more kinds of data, new innovative and pioneering services will be created. Another example is that the research that is possible in the weightlessness of space can lead to new discoveries in material physics or medical research, for example, which in turn provide growth potential. The advanced technological and industrial development needed to design and produce space technology also benefits other sectors of society in the long run. Finally, the interest in technology and science that space inspires among young people means that more people in the long run will study engineering or enter research.

**How can the National Innovation Council help space activities provide greater benefit for society?**

The members of the National Innovation Council have a great deal of

experience and expertise. They come from different backgrounds and areas of activity and have a good chance of seeing how opportunities created in one area – in this case space activities – can generate growth, innovation opportunities and jobs in other business sectors. The fact that the National Innovation Council has such firm political support from the Prime Minister and four ministers is a good indication that good ideas that come up during the meetings can be implemented more quickly and can contribute to Sweden's development and reindustrialisation. The National Innovation Council also receives a lot of media attention that can be focused on particularly interesting opportunities, which can have a knock-on effect and provide unexpected exchange of ideas and in the long run synergies.





Article from Ministry of Education and Research

# Research facility MAX IV in Lund inaugurated

Published 21 June 2016 Updated 21 June 2016

On 21 June, Prime Minister Stefan Löfven together with HM The King inaugurated synchrotron light source MAX IV in Lund.

MAX IV is a sort of microscope for studying the make-up, qualities and functions of various materials by means of intense X-rays (synchrotron light). The light used has an energy and intensity that is greater than at any other similar facility in the world. The laboratory is currently the world's most modern facility for synchrotron light. It is expected that 2 000 international researchers will come to MAX IV every year to conduct experiments in material and life sciences, which will benefit international research. In the laboratory, you can study atoms and molecules that are only a few tenths of a nanometre in diameter, which will provide completely new knowledge of the make-up and functioning of our world. The facility is expected to be used as a powerful research tool in biology, chemistry, physics, medicine and more. This research can later be used to produce new medicines, new smart materials, etc.

"Research ventures such as MAX IV are very important for Sweden and for the Government's ambition for Sweden to be one of the world's foremost research countries and a leading knowledge nation. Looking ahead, Max IV will provide a unique top-class research environment that can attract international researchers and also benefit Swedish research and innovation," says Minister for Higher Education and Research Helene Hellmark Knutsson.



Article from Ministry of Education and Research

# Visit from Japan and Canada

Published 15 December 2015 Updated 15 December 2015

Minister for Higher Education and Research Helene Hellmark Knutsson received ministers from Japan and Canada last Friday.

Dr Tsutomu Tomioka, Japan's State Minister of Education, Culture, Sports, Science and Technology was in Sweden in connection with the Nobel Prize; two of this year's laureates are Japanese.

The ministers discussed Japan's research successes, the fruitful research collaboration between Sweden and Japan and potential areas for future cooperation. Both countries are very positive about their collaboration, which they would like to see deepened and developed.

Japan and Sweden have had a technology and science cooperation agreement since 1999. Sweden and Japan are facing a number of common challenges, including an ageing population and the impact of globalisation, which require major research investments.

Canada's Minister of Science Kirsty Duncan also visited Ms Hellmark Knutsson. Ms Duncan was also in Sweden to celebrate this year's Canadian Nobel Prize laureate.

Ms Duncan took up her post in November after Canada's change of government. During the meeting with Ms Hellmark Knutsson, Ms Duncan spoke about the upcoming Swedish Research Bill, the role of science in decision-making and research collaboration.

The most timely area for research collaboration is polar research. Sweden and Canada have also entered into an Arctic research partnership through a joint expedition with Swedish research vessel Oden in mid-2016.



Government Offices of Sweden

Article from Ministry of Education and Research

# Helene Hellmark Knutsson to meet Bangladesh education minister

Published 10 September 2015 Updated 10 September 2015

Today, Minister for Higher Education and Research Helene Hellmark Knutsson will meet Bangladesh Minister for Education Nurul Islam Nahid for a meeting at the Ministry of Education and Research.

The ministers will discuss issues concerning education policy, Sweden-Bangladesh relations and education assistance.

While in Sweden, Mr Nahid will also take part in a panel debate at Stockholm University, and visit the Swedish International Development Cooperation Agency and Karlstad University.



Article from Prime Minister's Office, Ministry of Defence, Ministry of Education and Research, Ministry of Enterprise and Innovation, Ministry of the Environment, Ministry for Foreign Affairs

## Indian State Visit concluded

Published 04 June 2015 Updated 04 June 2015

On the evening of 2 June, India's President Shri Pranab Mukherjee left Sweden following a State Visit of three days. The President was in Sweden at the invitation of HM the King. The Government was represented, with the majority of ministers participating. The main themes of the visit were innovations and sustainable development, with a focus on urban development, science and research.

India is one of the leading countries in Asia, the world's fourth largest economy and an emerging global actor. The State Visit by the Indian President – the first ever – was therefore an important milestone in our bilateral relations.

The State Visit began on Sunday with the traditional welcoming ceremony at the Inner Courtyard of the Royal Palace. The King and the President inspected a guard of honour from the Life Guards and many members of the Government, as well as other Swedish public representatives, were present to welcome the President.

Monday began with a visit to the Riksdag, where the President was received by the Speaker of the Riksdag and met with Members of the Riksdag.

In the morning, Prime Minister Stefan Löfven also received the President for talks at Rosenbad. Mr Mukherjee and Mr Löfven discussed issues such as growing trade between Sweden and India and broad bilateral cooperation covering such areas as the environment, renewable energy and health. Minister for Climate and the Environment Åsa Romson, Minister for Foreign

Affairs Margot Wallström, Minister for Enterprise and Innovation Mikael Damberg, Minister for Defence Peter Hultqvist and Minister for Housing and Urban Development Mehmet Kaplan also took part in the talks.

In connection with the meeting at Rosenbad, a number of agreements between India and Sweden were signed, including a memorandum of understanding on sustainable urban development. The aim of the memorandum of understanding is to promote cooperation on matters concerning sustainable and integrated urban planning and land use, waste management, sustainable transport systems, water and sanitation.

Minister for Housing and Urban Development Mehmet Kaplan joined the President and the King later in the afternoon for a boat tour of Hammarby Sjöstad. During the boat tour, a roundtable discussion was held with business representatives on how cities can be built in more sustainable and environmentally friendly ways.

Sustainable cities in focus during the Indian State Visit

Helene Hellmark Knutsson, Minister for Higher Education and Research, was present at the Ministry for Foreign Affairs, when a number of cooperation agreements were signed between Indian and Swedish higher education institutions.

On Monday evening, the King and Queen hosted a gala dinner for the President.

## Visit to Karolinska Institutet and Uppsala University

The theme on Tuesday, the final day of the visit, was mainly research and science. Minister Helene Hellmark Knutsson was in attendance when the President and the King and Queen visited Karolinska Institutet. The focus lay on scientific cooperation, and included visits to Nobel Forum and Aula Medica. The President was also given a presentation of Nya Karolinska Solna (NKS) and Hagastaden.

Before lunch, Minister for Enterprise and Innovation Mikael Damberg took part in a roundtable discussion between representatives of the Swedish and Indian business sectors. The President and the King were also present.

Mr Damberg gave a speech entitled *India-Sweden Partnership – Co-creating a Brighter Future*.

In connection with the business forum, the President announced that Swedish passport holders will now be granted an 'eTourist visa' when visiting India, leading to more expedient visa handling for Swedish citizens.

In the afternoon, the President visited Uppsala University together with Crown Princess Victoria, Prince Daniel and Minister for Foreign Affairs Margot Wallström. Ms Wallström gave the opening address and the President held a lecture on the theme 'Tagore and Gandhi: Do they have contemporary relevance for Global Peace?'

Speech by Margot Wallström at Uppsala University

On Tuesday evening, Ms Wallström was in attendance when Crown Princess Victoria and Prince Daniel bid farewell to the President at Arlanda airport.



Article from Prime Minister's Office, Ministry for Foreign Affairs

# Historic State Visit from India

Published 28 May 2015 Updated 28 May 2015

The President of India, Shri Pranab Mukherjee, will pay a State Visit to Sweden from 31 May to 2 June 2015 at the invitation of His Majesty the King. The Government will be represented, with the majority of ministers participating. The main themes of the visit are innovations and sustainable development, with a focus on urban development, science and research.

India is one of the leading countries in Asia, the world's fourth largest economy and an emerging global actor. The State Visit by the Indian President – the first ever – is an important milestone in our bilateral relations.

## Focus of the State Visit

The focus of the State Visit will be on creating conditions for greater exchange in the areas of trade and science, and strengthening Sweden's presence in the Indian market.

There is growing demand in India concerning issues such as innovation, urban development and sustainable development. The State Visit will provide the opportunity to promote potential business opportunities in these areas in both directions.

Sweden already has broad cooperation with India in a number of areas: environment, renewable energy, research, health, etc. This cooperation will be deepened further in connection with the visit, which will include the signing of a number of cooperation agreements.

## Programme points

India's President will land in Stockholm on Sunday afternoon and will be welcomed at Arlanda Airport by Crown Princess Victoria and Prince Daniel. The King and Queen will receive the President at the Royal Mews for a horse-drawn cortège to the Royal Palace, where the traditional welcoming ceremony will take place. Representatives of the Riksdag and the Government will be present.

Monday's programme will begin with a visit to the Riksdag and a meeting with Speaker of the Riksdag Urban Ahlin. Prime Minister Stefan Löfven will then welcome the President at Rosenbad. Stockholm City will host a lunch at Stockholm City Hall, during which sustainable urban development will be the focus of discussions. The afternoon programme will continue along the same theme with a visit to Hammarby Sjöstad. Minister for Housing and Urban Development Mehmet Kaplan will take part. In the evening, the King and Queen will host a banquet at the Palace.

The theme for Tuesday will be research and science, with a visit to Karolinska Institutet, with Minister for Higher Education and Research Helène Hellmark Knutsson in attendance. This will be followed by seminars and meetings with Swedish and Indian business representatives. Minister for Enterprise and Innovation Mikael Damberg will also take part in the programme.

The programme will continue in the afternoon in Uppsala, where the President will deliver a speech at Uppsala University. Crown Princess Victoria, Prince Daniel and Minister for Foreign Affairs Margot Wallström will be present.

The State Visit will conclude late on Tuesday afternoon.

Follow the visit on social media: use #sweindia2015





Government Offices of Sweden

Article from Ministry of Education and Research

# Helene Hellmark Knutsson to meet Cambodia's education minister

Published 25 May 2015 Updated 25 May 2015

Today, Minister for Higher Education and Research Helene Hellmark Knutsson will meet Cambodia's Minister of Education, Youth and Sport Dr Hang Chuon Naron. They will meet at the Swedish Ministry of Education and Research to discuss higher education and research.

Since the 1980s, Sweden has provided support to programmes for increased access to high-quality primary education for poor children. We have been one of the largest donors and have played a major role in the area of education in Cambodia. In the current strategy, Sweden has decided to increase its support to include upper secondary and higher education.

Dr Naron is visiting Sweden on 25–26 May along with a delegation from the Cambodian Ministry of Education, Youth and Sport.



Government Offices of Sweden

Article from Ministry of Education and Research

# New research agreement between Sweden and the United States

Published 20 May 2015 Updated 21 May 2015

Today, Sweden - via the Swedish Polar Research Secretariat - is signing a new research agreement with the United States. The agreement will result in two major joint research expeditions to the Arctic and positive synergies for Swedish polar and climate research.

"Our collaboration means that we will get more research for our money. If more countries use the Swedish icebreaker Oden, it can do polar expeditions at more frequent intervals, more measurements can be carried out and the researchers can form new partnerships. This will benefit research and the climate, and create jobs," says Ms Hellmark Knutsson.



Government Offices of Sweden

Press release from Ministry of Education and Research, Ministry of Enterprise and Innovation

# Government invests in space – Estrange to have testbed

Published 09 July 2018

The Estrange Space Centre should remain a strategic resource for national and international research, and the Government and the Swedish Space Corporation (SSC) are therefore investing SEK 80 million in a new test facility at the centre in Kiruna.

"Estrange has enormous expertise and 50 years' experience working with sounding rockets and research balloons – naturally we must be involved in these rapid technological developments and try to attract high-tech activities to Sweden from both commercial and institutional actors around the world," says Minister for Higher Education and Research Helene Hellmark Knutsson.

It is not currently possible to test and develop reusable rockets in Europe. The market for launching small satellites is expanding, and demand for developed rocket technology is increasing.

This is why the Government and the SSC are now investing in a testbed for the development of in-demand technologies: reusable launch technology for small and large rockets, more environmentally friendly engines, test flights and satellite technology. It will also be possible to use the facility to demonstrate new components for space applications, for example.

"The launch of small satellites is a growing market with good prospects of creating new jobs and businesses. The Government is now investing SEK 60 million in the production of new technologies to allow rockets to be reused and launched several times," says Minister for Enterprise and Innovation

Mikael Damberg.

The investment is in line with the Government's space strategy presented earlier this year, and will consist of SEK 60 million from central government and SEK 20 million from the SSC. The project will begin immediately, with a view to starting operational testing in the summer of 2019.

Sweden is prominent in space research and this, coupled with Eorange's geographical location in Kiruna, means that the facility can compete in the growing global market. A number of major projects on specific space technology areas in which Eorange's capacity could prove unique and significant are currently ongoing in Europe.

"Space activities are necessary for public services that use satellite data: weather forecasting, communication and navigation. They also contribute to knowledge and measures on the environment, climate change, forestry and agriculture, navigation, the state of the seas, and natural disasters. By investing in space, we can better understand the Earth," says Ms Hellmark Knutsson.

Government financing is regulated by the EU's state aid rules. The project is therefore dependent on state aid approval from the European Commission.



Press release from Ministry of Education and Research

# New procedure for handling alleged research misconduct

Published 25 June 2018

Alleged research misconduct should not be investigated by research organisations themselves, but rather by the new independent Research Misconduct Board. This is the Government's proposal referred for consideration to the Council on Legislation.

"No one should ever need to doubt Swedish research, and no patient should ever risk being subjected to treatments that are the result of research fraud. The system we now propose involves creating greater clarity and legal certainty," says Minister for Higher Education and Research Helene Hellmark Knutsson.

The background to the proposal is the need for uniform rules to handle alleged research misconduct. It has also proven problematic for higher education institutions to investigate themselves while also protecting their own reputation. Even if such an investigation is conducted impeccably, the clash of interests may result in reduced confidence in both the investigation and the higher education institution.

This is why the Government is now proposing that a new national agency, the Research Misconduct Board, investigate when research misconduct – in the form of fabrication, falsification or plagiarism – is suspected. Investigations will be conducted in accordance with a clear regulatory framework.

Under the new act, researchers will be required to follow good scientific practice and the research organisation will be required to oversee this. The system will include public higher education institutions, central government

agencies, municipalities, county councils and private education providers.

The new act is based on the inquiry 'New procedures for promoting good practice and handling research misconduct' (SOU 2017:10). It is proposed that the act enter into force on 1 September 2019.



Government Offices of Sweden

Press release from Ministry of Education and Research, Ministry of the Environment, Ministry for Foreign Affairs

# Government wants to welcome US guest environment and climate researchers

Published 23 May 2018

Climate change is one of the Government's top-three issues, alongside jobs and education. The Government has adopted a guest researcher programme under which US environment and climate researchers can be invited to conduct research in Sweden for a period of up to three years.

"The Government gives high priority to climate change, and is concerned at the reduced importance of climate- and environment-related research in the US. Research is needed to chart the impact of climate change on society, develop adaptation measures, find effective measures to reduce emissions, and transition to a fossil-free circular economy," says Isabella Lövin, Minister for International Development Cooperation and Climate.

"This programme can help strengthen our cooperation with the US in an area that we are seeing is growing. Sweden already conducts prominent research in this area, but through this programme we can bring in more highly competent researchers," says Helene Hellmark Knutsson, Minister for Higher Education and Research.

The research policy bill, presented in the second half of last year, earmarked funds to tackle various societal challenges. One of these is climate change and the environment. The programme is not just a Swedish contribution to international environment and climate research – it will also boost Swedish research in this area. Marshalling resources and expertise through

international research cooperation is often an effective way to produce results and obtain a good overview of an area.





Press release from Ministry of Education and Research

# How ESS will lead the research community – the Government launches a new strategy for the Lund facility

Published 17 May 2018

“Advanced research in materials and life sciences is essential for tackling our major social challenges. ESS and MAX IV in Lund are two internationally unique research infrastructure facilities. But to become an internationally leading centre, we need clearer objectives, more efficient coordination and an overarching vision. This is why the Government has drawn up an ESS strategy,” says Minister for Higher Education and Research Helene Hellmark Knutsson.

Energy, food, pharmaceutical products and packaging are some of the important fields of research in which the European Spallation Source (ESS) and MAX IV could provide scientific breakthroughs. In a written communication to the Riksdag, the Government has now presented a national strategy for Sweden's work at the research facilities. The strategy will strengthen action, increase and broaden engagement, and create long-term conditions for relevant actors – higher education institutions, research funders and the business sector. The Government will follow up the strategy through instructions to relevant government agencies.

## What the Government wants:

- Research at ESS and MAX IV will help us tackle our major societal and

environmental challenges.

- ESS will be a climate-smart facility for world-leading materials research.
- ESS and MAX IV efforts should be coordinated to ensure increased synergy effects.
- Knowledge-building and skills supply will be reinforced in fields that are relevant for ESS and MAX IV.
- An ESS Secretariat and a strategic council (advising the Government) will be established for better national coordination of Swedish efforts.
- Increased participation from the business sector in ESS and MAX IV.
- ESS and MAX IV will help to increase interest in educational programmes in natural sciences and technology.
- ESS and MAX IV will help promote Sweden as a knowledge nation.

The strategy is based on the Government's research policy objectives. The ambition is to strengthen independent research while linking research policy to the global social challenges that are relevant to our society – the climate and environment, health and increasing digital transformation.



Press release from Ministry of Education and Research

# Government launches new space strategy

Published 09 May 2018

“Swedish aerospace activities have a strong position in the world, thanks to research excellence and successful industry. We will continue on this path. Investment in space activities is ultimately an investment in our planet,” says Minister for Higher Education and Research Helene Hellmark Knutsson.

The Government is now presenting a national strategy to strengthen Sweden's space activities, centred on benefits for society.

## Space research

Swedish space research is outstanding. For this to remain true, funds need to be used effectively. Collaboration between the Swedish National Space Board, the Swedish Research Council, the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning and Vinnova must therefore increase in space research, climate and environment research and innovation in the business sector. The Swedish National Space Board and the Swedish Research Council will also work together to spread information about space research so as to increase the recruitment of women and men to science and technology.

Activities at Esrange will continue to be modernised to serve as a strategic resource for national and international research, development, demonstration, test activities and other space-related activities. The facility also has the potential to develop into a rocket launch test facility.

Space researchers should have access to appropriate infrastructure, such as

large-scale measuring instruments, either in space or on the ground.

## Space technology

Large amounts of data are received from the many satellites in orbit around Earth. Space data can contribute to the achievement of the 2030 Agenda and the Global Goals, for example, by detecting plastic waste in the ocean, or assessing the extent of damage caused by war or natural disasters, or of crop failures. Through international cooperation, Swedish space activities will contribute to global environmental and climate monitoring.

Sweden's expanded presence in space requires tailored regulations. The Government will therefore review the Space Activities Act.

## Space industry

The high functionality required of space industry products in the extreme conditions of space pushes the boundaries of innovation and manufacturing. Knowledge acquired can then be used in other areas, such as the aerospace and automotive industry, digitalisation, automation and materials technology, which in turn will strengthen Sweden's competitiveness.

The high cost of space systems infrastructure necessitates international cooperation. The Government therefore aims for Swedish participation in major international space projects and ESA's space activities.

## Why the Government is investing in space

Swedish space activities are a strategic asset for the development of the knowledge society. It is important that they be conducted in a way that promotes research, development and innovation, and contributes to the creation of high-tech jobs. This will increase Sweden's competitiveness.



Government Offices of Sweden

Press release from Ministry of Education and Research

# Minister presents new space strategy at a press briefing in Solna

Published 08 May 2018

Helene Hellmark Knutsson will present the Government's strategy for Swedish space activities at a press briefing at the Swedish National Space Board in Solna. Media representatives are welcome to attend.

**Tid:** 9 maj 2018 at 11:00 to 12:00

**Plats:** Swedish National Space Board, Hemvärnsgatan 15, Solna

Please contact Sam Assadi if you wish to attend the press briefing.



Government Offices of Sweden

Press release from Ministry of Education and Research

# Research minister to take part in Swedish-American life science conference in Washington DC

Published 10 April 2018

On 11–12 April, Minister for Higher Education and Research Helene Hellmark Knutsson will be in the US to take part in the Swedish-American Life Science Summit (SALSS).

At the conference, Ms Knutsson will deliver a speech on the importance of education for life science.

SALSS is a network and an annual conference that brings together Swedish and American researchers, business leaders and financiers in the life science sector. The aim is to stimulate entrepreneurship and facilitate research and innovation through investments, exchanges of knowledge and partnership between Sweden and the US.

The conference will be held at House of Sweden in Washington DC.



Government Offices of Sweden

Press release from Ministry of Education and Research

# Brexit in focus when Helene Hellmark Knutsson visits the UK

Published 19 March 2018

On 19–20 March, Minister for Higher Education and Research Helene Hellmark Knutsson will visit Oxford and London. The purpose of her visit is to meet UK Minister of State for Universities, Science, Research and Innovation Sam Gyimah to discuss forms of future research collaboration and exchanges in the life sciences and other research infrastructure in the shadow of Brexit.

In addition to discussions with UK government representatives, Ms Hellmark Knutsson will visit the Francis Crick Institute, a world-leading centre of biomedical research. She will also visit Oxford University, where she will meet Swedish students to discuss strategic issues concerning collaboration between UK and Swedish higher education institutions.

## Programme

### **Monday 19 March**

Visit to the Harwell Campus, an innovation centre south of Oxford

Meeting with Vice-Chancellor of Oxford University Louise Richardson and meeting with Swedish students studying at Oxford University

### **Tuesday 20 March**

Visit to the Francis Crick Institute and meeting with the Director of the Francis Crick Institute, Paul Nurse

Meeting with Mr Sam Gyimah, Minister of State for Universities, Science,  
Research and Innovation





Government Offices of Sweden

Press release from Ministry of Education and Research

# European Space Agency visit focuses on Sweden's space industry

Published 30 November 2017

The focus will be on the Swedish space industry as State Secretary Karin Röding and a Swedish business delegation visit the European Space Agency (ESA) in the Netherlands on Thursday 7 December.

The aim of the visit is to meet ESA representatives, study the facilities, gather information about planned research programmes and discuss business and cooperation opportunities for Swedish businesses in the space industry. In connection with the visit, Ms Röding will also meet Franco Ongaro, Head of the European Space Research and Technology Centre (ESTEC).

"The space industry is very important to Sweden, and we have huge expertise in this area. Naturally, we want to strengthen our cooperation and form closer contacts with the ESA so as to identify future cooperation opportunities for Sweden's space industry. The visit is also an important opportunity to see and learn more about current space research, and to highlight the contribution that Swedish research can make," says Ms Röding.

This visit is part of a broader initiative on the theme Capturing European Space Opportunities being pursued in 2017 by Business Sweden and the Embassy of Sweden in the Netherlands, along with ESA Business Incubation Centre Sweden, the Swedish National Space Board, Arctic Business Incubator, Uppsala Innovation Centre, Innovatum and the ESA. The visit was preceded by a number of information activities in Sweden about the ESA and the opportunities available to Swedish businesses in the space industry. The initiative is also intended to link up the Swedish space industry

with key European actors in the space sector to discuss future cooperation, business and innovation funding opportunities.



Government Offices of Sweden

Press release from Ministry of Education and Research

# Helene Hellmark Knutsson visits the United States

Published 23 November 2017

Urban planning, life sciences, top-class higher education institutions and a meeting with a Nobel laureate – several interesting topics will be on the agenda when Helene Hellmark Knutsson, Minister for Higher Education and Research, travels to the United States on 27–29 November.

The purpose of the visit is to gather knowledge and inspiration from the major universities MIT and Harvard in Cambridge, but also to highlight Sweden as an interested party for exchange and cooperation in research and higher education.

Ms Hellmark Knutsson will visit the Broad Institute of MIT and Harvard to exchange experiences on research in the life sciences area. There will also be a presentation of research on smart cities at Senseable City Lab – a MIT centre that focuses on urban planning and social innovation.

The agenda also includes a meeting with Michael Rosbash, who was awarded the Nobel Prize in Physiology or Medicine this year for the discovery of the biological clock that plants and animals use to control their daily rhythm.

In New York, Ms Hellmark Knutsson will participate in a panel discussion at a lunch seminar at Columbia University, with the aim of attracting more US students to Sweden.

The delegation includes representatives from KTH Royal Institute of Technology and Stockholm Chamber of Commerce.

Please contact Jens Petersen for more information.

## Programme

### Monday 27 November: Boston

09.00–10.30 Meeting with Broad Institute of MIT and Harvard on life sciences

11.00–11.30 Presentation of MIT and the cooperation with Sweden

11.30–12.00 Architecture and urban planning: MIT and KTH

12.00–14.00 Education, research and future cities: MIT and KTH

14.00–14.45 Interdisciplinary education and research, Science and Artificial Intelligence Laboratory (CSAIL)

15.00–16.00 Discussion on cooperation and joint projects, International Science and Engineering Initiative (MISTI)

### Tuesday 28 November: Boston

08.30–10.00 Meeting with Swedish students and researchers from MIT, and round tour of the campus

13.30–14.30 Historical round tour of Harvard campus

15.00–15.30 Meeting with Brandeis Professor Michael Rosbash, Nobel Laureate, Physiology or Medicine, 2017

### Wednesday 29 November: New York

09.00 Meeting with Ellis Rubinstein, President and Chief Executive Officer of New York Academy of Sciences

12.00 Seminar at Columbia University to attract more US students to study in Sweden



Government Offices of Sweden

Press release from Ministry of Education and Research

# Helene Hellmark Knutsson to visit Indonesia and Singapore

Published 03 October 2017

International cooperation between higher education institutions and world-class teacher training programmes are the focus as Minister for Higher Education and Research Helene Hellmark Knutsson travels to Indonesia and Singapore on 3–6 October.

In Indonesia, Ms Hellmark Knutsson will meet Minister for Technology, Research and Higher Education Muhammad Nasir to discuss international cooperation on higher education and research. She will also visit a university, and meet students and representatives of the Indonesian Academy of Sciences and other actors in research and innovation. The trip is a follow-up of the State Visit in May 2017.

Singapore's teacher training programmes are outstanding, and the country tops international assessments of student achievement. Ms Hellmark Knutsson will meet Minister for Education Ong Ye Kung and visit the National Institute of Education to learn about Singapore's work on teacher recruitment and lifelong learning, and the reform efforts behind these. She will also meet the Science Council of Singapore and visit the prominent Nanyang Technological University, where Swede Professor Bertil Andersson is President.

Ms Hellmark Knutsson will travel with a delegation consisting of the Swedish Research Council and representatives of six Swedish higher education institutions.

Please contact Helena Paues for more information.



Government Offices of Sweden

Press release from Prime Minister's Office, Ministry of Education and Research, Ministry of the Environment

# Research cooperation the focus as Helene Hellmark Knutsson receives China's research minister

Published 31 August 2017

On Thursday 31 August, Minister for Higher Education and Research, Helene Hellmark Knutsson, is hosting a meeting with Wan Gang, Chinese Minister of Science and Technology. A cooperation agreement on research will be signed during the meeting.

Sweden has considerable research cooperation with China, and is one of the most attractive countries for Chinese students who want to study abroad. The aim of the meeting is to review Swedish-Chinese research cooperation in areas including technology and renewable energy. The agenda also includes discussions on future cooperation in, for example, life sciences.

During the meeting, the ministers will witness the signing of a cooperation agreement between the Swedish agency for innovation, Vinnova, and the Chinese Ministry of Science and Technology. The agreement concerns research cooperation on, for example, traffic safety, life sciences, ageing and climate change. The visit follows Ms Hellmark Knutsson's visit to China in June.

Later in the day, Minister Wan will meet with Ibrahim Baylan, Minister for Policy Coordination and Energy, for a presentation of Swedish system solutions in the area of environmental and energy technology. The presentation will take place at Smart City Sweden in Hammarby Sjöstad, Stockholm.



Press release from Ministry of Education and Research

# Helene Hellmark Knutsson to lead higher education delegation to China

Published 09 June 2017

Minister for Higher Education and Research Helene Hellmark Knutsson will visit Beijing and Shanghai in China on 11–16 June. The aim of the visit is to highlight Sweden as a nation of education and research, and to promote the internationalisation of higher education and research.

Ms Hellmark Knutsson and a Swedish delegation representing the higher education sector will have bilateral meetings with China's Minister of Education, Chen Baosheng, and Minister of Science and Technology, Wan Gang. A memorandum of understanding on education and research will be signed during the visit.

"China is the Asian country that sends most students to Sweden, and we enjoy research cooperation with China at many different levels. The memorandum of understanding is an important step in further strengthening relations and stimulating mobility between our two countries. International exchange is also extremely important for an innovative and export-dependent country such as Sweden, as well as to strengthen the quality of higher education and research," says Ms Hellmark Knutsson.

Sweden is a world leader in research and innovation linked to the life sciences. To spread awareness in China of the Swedish life science sector, Ms Hellmark Knutsson will hold a press conference and a speech at the China-Sweden Health Forum 2017, on the theme of health care and cooperation in that area.

The programme in Beijing also includes meetings with the Chinese Academy of Medical Sciences, the Peking Union Medical College, the National Natural Science Foundation of China and the Chinese Academy of Engineering. The visit will conclude in Shanghai, where Ms Hellmark Knutsson and the delegation will meet researchers and students at Fudan University and visit the Nordic Centre, which works to promote cooperation between researchers and students from the Nordic region and China. The minister and delegation will also meet representatives of Tongji University and Shanghai Jiao Tong University.





Press release from Ministry of Education and Research

# Focus on space industry when Helene Hellmark Knutsson visits US

Published 19 May 2017

On 21–25 May, Minister for Higher Education and Research Helene Hellmark Knutsson will travel to California, USA, to visit world-leading actors in research and industry in the field of space. The aim is to learn about the latest developments in the space sector and collect knowledge for the Government's work to produce a Swedish space strategy. During her trip, Ms Hellmark Knutsson will also visit NASA's Ames Research Centre and the Mojave Air and Space Port.

"I think it's important that we have an innovation and research capability in this area. The Swedish State invests some SEK 1.7 billion per year in space activities and work is now being started to produce a Swedish space strategy. The aim is to get a holistic view of the social benefit for Sweden and to explore the potential for Swedish research and innovation capacity," says Ms Hellmark Knutsson.

Space is an important arena for research on climate and environmental issues, as well as more technically oriented research and medical research. Space applications and space-based systems also have a key role in various public services and business sector activities, such as navigation, weather forecasts, communications, financial services, agriculture and forestry, environmental monitoring, materials development and transport.

Work is also under way in Sweden to investigate the possibilities of

expanding the capability of the Swedish Esrange Space Centre outside Kiruna so that it is able to launch small satellites into orbit. During her visit to the US, Ms Hellmark Knutsson will therefore visit several leading actors in the field, including Millennium Space Systems, Boeing and Planet, where there will be a guided tour of the area where the CubSat mini-satellite is constructed.

During her trip, Ms Knutsson will visit:

- Nasa Ames Research Centre
- Mojave Air and Space Port
- Millennium Space Systems
- Boeing Satellite Development Centre
- Planet
- The Aerospace Corporation
- A lunch seminar at the Nordic Innovation House
- Institute for the Future
- Stanford University



Press release from Ministry of Education and Research

# Collaborating for knowledge – for society’s challenges and strengthened competitiveness

Published 28 November 2016 Updated 28 November 2016

The Government today presented the research policy bill ‘Collaborating for knowledge – for society’s challenges and strengthened competitiveness’ to the Riksdag. The bill presents the Government’s view on the direction of research policy with a ten-year perspective, focusing in particular on measures in 2017–2020. Important cornerstones of the bill include increased basic appropriations to higher education institutions, initiatives in research linked to global societal challenges and increased resources to strengthen Sweden’s innovative capacity.

"The name of the bill attempts to capture the direction the Government wants to see. It's a matter of increased collaboration among higher education institutions, the business sector and society as a whole with the aim of meeting our major societal challenges and strengthening our competitiveness. There has previously been overconfidence in political ability to identify leading research to produce quick results. The Government instead considers that it is important to create good and long-term conditions for researchers, and research, to develop the foremost research," says Minister for Higher Education and Research Helene Hellmark Knutsson.

The goal for research policy is for Sweden to be one of the world's foremost research and innovation countries and a leading knowledge nation, where

high quality research, higher education and innovation leads to society's development and welfare, the business sector's competitiveness and responds to the societal challenges we face, both in Sweden and around the world.

In the autumn budget, the Government announced an increase in the appropriations for research and innovation of over SEK 3 billion until 2020. The Government is continuing to strengthen Sweden as a knowledge nation by means of the measures proposed in the research policy bill.

One starting point of the bill is to safeguard free research, at the same time as research policy is linked to global and national societal challenges that are relevant to our society. Research on climate, health and life sciences, as well as digitalisation, will therefore be prioritised in the future.

The Swedish Research Council's research appropriation will be increased to focus on research in the humanities and social sciences, and special initiatives will be made to increase quality in schools through practically based research and an increased scientific foundation in teacher and preschool teacher education programmes.

To enable higher education institutions throughout the country to take greater and long-term responsibility for the development of research, the Government intends to gradually increase the basic appropriations to research and third-cycle education. Distribution of the increase in basic appropriations will take account of collaboration aspects.

The Government is strengthening gender equality with a number of measures, including new and more ambitious recruitment targets for professors. Conditions for young researchers will be improved and career paths more clearly defined to promote mobility. Career development positions will become more uniform and be advertised in open competition at national level and, where possible, also at international level.

"All Swedish higher education institutions must have reasonable conditions for conducting higher education on scientific grounds and building strong, research environments with distinctive profiles. By increasing the basic appropriations, the Government expects higher education institutions to take clearer responsibility and at the same time strengthen cooperation with the rest of society, improve the career paths for young researchers and link research and higher education more closely," says Ms Hellmark Knutsson.

To lay the groundwork for new, long-term and deeper interdisciplinary

cooperation and strengthened innovative capacity, the Government is also presenting a strengthening of strategic innovation areas, research institutions and testing and demonstration environments.

Also presented in the bill are a number of measures to give researchers, the business sector and the public sector as much access as possible to the best research infrastructure.



Government Offices of Sweden

Press release from Ministry of Education and Research, Ministry of Enterprise and Innovation

# The Government and Stockholm City to invest SEK 180 million in Nobel Center

Published 25 November 2016 Updated 25 November 2016

The central government will contribute SEK 40 million per year to the Nobel Center's operations from the day it opens and the following three years. In all, with increased support from Stockholm City, the Center will receive SEK 60 million per year over a three-year period. This amounts to SEK 180 million the first three years. This was announced today by Minister for Enterprise and Innovation Mikael Damberg, Minister for Higher Education and Research Helene Hellmark Knutsson and Stockholm's Commissioner of the City Planning and Culture Division, Roger Mogert.

In December 2011, the Nobel Foundation and Stockholm City signed an agreement in principle to work for the establishment of a Nobel Center on city-owned land in Stockholm. The idea is for this Center to house an expanded, modernised Nobel museum with premises for symposiums, seminars, school activities etc., and to form the base of a broad international operation.

The Government expects the Nobel Center to assume a significant role and have a positive impact on research and education throughout Sweden. The Center can also be expected to fulfil a central function for culture and science. A new building for the Nobel Center will provide better

opportunities to develop the museum's activities, represent an important tourist attraction and can be a national and international meeting place where focus is on science, humanism, literature and peace, in the spirit of Alfred Nobel. It is expected that activities conducted by new Nobel Center will be considerably more extensive than at present.

Activities conducted by the Nobel Center are of national interest and the Government therefore intends to increase its share of co-financing. In all, with increased contributions from Stockholm City, the Center will receive SEK 60 million per year over a three-year period. This amounts to SEK 180 million the first three years.

"The Nobel Prize plays a vital role in the image of Sweden as a leading research nation and the Nobel Center will be the base for the outward-looking activities, where the importance of research and innovation is highlighted," says Minister for Higher Education and Research Helene Hellmark Knutsson.

"The Government takes a positive view of contributing to operations, together with Stockholm City, at a new and prominent Nobel Center. Sweden should make better use of the Nobel Prize. Here the main focus is on the festivities in December, while the rest of the world concentrates on the prize winners. A Nobel Center can be a huge asset in helping Sweden attract investments, visitors and talent," says Minister for Enterprise and Innovation Mikael Damberg.

"The Nobel Foundation and the Nobel Prize are among Sweden's and Stockholm's most important institutions. A Nobel Center, with a museum and the opportunity to present lectures and receive school visits, will be a great asset to Stockholm and its citizens," says Stockholm's Commissioner of the City Planning and Culture Division, Roger Mogert.



Government Offices of Sweden

Press release from Ministry of Education and Research

# Helene Hellmark Knutsson to Washington to sign bilateral agreement on cancer research cooperation and take part in White House Arctic Science Ministerial

Published 26 September 2016 Updated 26 September 2016

On Tuesday 27 September, Minister for Higher Education and Research Helene Hellmark Knutsson will sign an agreement on bilateral cancer research cooperation between the United States and Sweden in Washington DC.

In connection with the agreement, discussions will be held with Professor Greg Simon, appointed by Vice President Joe Biden to lead US work on President Barack Obama's Cancer Moonshot initiative. After the signing, Ms Hellmark Knutsson will also visit the National Cancer Institute, part of the National Institutes of Health, to discuss how cancer research can be advanced in the United States and Sweden through the partnership now being initiated.

"Sweden and the US are world leaders in medical research. Sweden is world-leading in several cancer research areas and the US has therefore been eager to increase cooperation with us. This is an opportunity for Swedish cancer research to forge even closer links with the US. The new agreement is extremely valuable in further strengthening the close cooperation between our countries," says Ms Hellmark Knutsson.

On Wednesday, Ms Hellmark Knutsson will take part in the White House



Arctic Science Ministerial, to be held in the White House under the leadership of President Obama's science adviser John Holdren. Research ministers from 24 countries will take part in the Arctic Science Ministerial, together with representatives of the Arctic indigenous peoples, to discuss how research on climate change impact on the Arctic can be augmented.

"Climate change is the defining issue of our time and is most evident in the polar regions. More research is crucial to tackle the threat of climate change. Sweden is therefore prepared to accept the US Government's call to increase focus on Arctic research cooperation."

Ms Hellmark Knutsson is in Washington on 26–28 September.



Government Offices of Sweden

Press release from Ministry of Education and Research

# Helene Hellmark Knutsson travels to New York for talks on bilateral cancer research cooperation with US Vice President Joe Biden

Published 19 September 2016 Updated 19 September 2016

Minister for Higher Education and Research Helene Hellmark Knutsson is travelling to New York for discussions with US Vice President Joe Biden about an agreement on bilateral cancer research cooperation between the United States and Sweden.

During her visit to New York, Ms Hellmark Knutsson will also take part in the UN conference 'Coordinating Global Brain Projects' and the launch of the UN's 'International Brain Initiative'.

On Tuesday, Ms Hellmark Knutsson will visit the Memorial Sloan Kettering Cancer Center and the Sloan Kettering Institute to discuss how cancer research cooperation can be promoted using the cancer research agreement between the US and Sweden.

Ms Hellmark Knutsson will be in New York between 18 and 21 September.



Press release from Ministry of Education and Research

# Helene Hellmark Knutsson in Capri

Published 14 June 2016 Updated 14 June 2016

Today, Tuesday 14 June, Minister for Higher Education and Research Helene Hellmark Knutsson is on the Italian island of Capri to visit the Swedish culture institute, Villa San Michele, and the Castello Barbarossa. The purpose of the visit is to gain deeper insight into the activities of the San Michele Foundation, and its importance for Swedish research in the humanities.

"One of the major tasks of the Swedish research institutes in the Mediterranean region is linked, in fact, to their location – in Athens, Istanbul, Rome and Capri. Not least the sharp increase in migration and its causes around the Mediterranean Sea increase the need for the Swedish research institutes in the Mediterranean region," says Ms Hellmark Knutsson.

The San Michele Foundation was founded in 1950. The aim was to administer the property donated to the Swedish State by writer and doctor Axel Munthe. Villa San Michele, located on the island of Capri in Italy, acts as a guest house for scholarship recipients, and aims to promote cultural links between Sweden and Italy. Staffan de Mistura is the current director of the San Michele Foundation.

"Staffan de Mistura's different roles as UN Special Envoy to Syria and director of the San Michele Foundation are, in many ways, two sides of the same coin. On the one hand, a task to create peace and stability in the catastrophic situation in Syria, and on the other hand, a task to seek cultural

understanding and promote humanistic values in the long term through the activities at Villa San Michele," says Ms Hellmark Knutsson.

## Programme Tuesday

- A guided tour of Villa San Michele and its garden.
- Lunch with Mayor of Anacapri Francesco Cerrotta, university representatives, and others.
- A walk up to the ornithological station at the Castello Barbarossa.



Press release from Ministry of Education and Research

# Helene Hellmark Knutsson in Rome

Published 13 June 2016 Updated 13 June 2016

Today, Monday 13 June, Minister for Higher Education and Research Helene Hellmark Knutsson is in the Italian capital, Rome, to visit the Swedish Institute in Rome's archaeological excavations in the Etruscan town of Acquarossa. The purpose of the visit is to gain deeper insight into the activities of the Swedish Institute in Rome, and its importance to Swedish research in the humanities.

"Many of the major questions that relate to the development of society typically touch on many different areas of knowledge; they are embedded in political, cultural and social circumstances. The Swedish Institute in Rome can therefore contribute to ongoing development towards an important and much-needed internationalisation of research in the humanities, not least linked to the major global challenges in society that we are facing," says Ms Hellmark Knutsson.

The Swedish Institute in Rome is a foundation established in 1926 with the objective of spreading knowledge in Swedish cultural life about classical culture in the Mediterranean region. The aim of the Institute is also to promote Swedish research in the humanities and teaching, mainly in classical scholarship, classical languages, history, history of art, architecture and conservation.

## Programme Monday

- A tour of the exhibition on the Swedish Institute in Rome's

archaeological excavations in Etruria at the National Etruscan Museum in Viterbo.

- A visit to Mayor of Viterbo Leonardo Michelini.
- A tour of the Swedish Institute in Rome's excavation site at Acquarossa.



Press release from Ministry of Education and Research

# Helene Hellmark Knutsson to visit Swedish research institutes in Italy

Published 10 June 2016 Updated 10 June 2016

On 12–15 June, Minister for Higher Education and Research Helene Hellmark Knutsson will visit Italy to visit the Swedish Institute in Rome and the San Michele Foundation in Capri.

In Rome, Ms Hellmark Knutsson will visit the Roman Forum, pay a study visit to the Swedish Institute in Rome's archaeological excavations in the Etruscan town of Acquarossa, and receive a presentation by Kristian Göransson, Director of the Institute, of the Swedish Institute in Rome's activities. During her visit to Capri, the Minister's agenda will include visiting the Swedish culture institute Villa San Michele, where she will meet the Director of Villa San Michele, Staffan de Mistura.

"In 2016, the Swedish Institute in Rome marks its 90th anniversary. Both the Swedish Institute in Rome and the San Michele Foundation play an important role in Swedish research in the humanities and in promoting cultural exchange between Sweden and Italy. At the Institute, not least young researchers are given the opportunity to develop their research in a completely new research environment and in a new country, and meet colleagues from around the world," says Ms Hellmark Knutsson.

The Swedish Institute in Rome is a foundation established in 1926 with the objective of spreading knowledge in Swedish cultural life about classical culture in the Mediterranean region. The aim of the Institute is also to promote Swedish research in the humanities and teaching, mainly in classical scholarship, classical languages, history, history of art, architecture and conservation. The San Michele Foundation was founded in 1950. The aim was to administer the property donated to the Swedish State by writer and

doctor Axel Munthe. Villa San Michele, located on the island of Capri in Italy, acts as a guest house for scholarship recipients, and aims to promote cultural links between Sweden and Italy.





Government Offices of Sweden

Press release from Ministry of Education and Research

# Minister for Higher Education and Research Helene Hellmark Knutsson visits Saudi Arabia, Oman and Qatar

Published 22 February 2016 Updated 22 February 2016

On 22–25 February, Ms Hellmark Knutsson will visit Saudi Arabia, Oman and Qatar to meet representatives of higher education and research in the three countries.

She will also meet representatives from politics, academia and the business sector in the region during her visit with the aim of exchanging experiences and improving cooperation.



Government Offices of Sweden

Press release from Ministry of Education and Research

# The 6th Japan-Sweden Joint Committee on Cooperation in Science and Technology Joint Press Release

Published 12 February 2016 Updated 12 February 2016

On February 12, 2016 in Tokyo, H.E. Makoto Katsura, Ambassador for Science and Technology Cooperation of the Ministry of Foreign Affairs (MOFA) of Japan, and Dr. Jonas Björck, Director, Division for Research Policy, Ministry of Education and Research (MER) of the Kingdom of Sweden, co-chaired the 6th Japan-Sweden Joint Committee on Cooperation in Science and Technology, organized under the Agreement between the Government of Japan and the Government of Sweden on Cooperation in Science and Technology, which entered into force in 1999.

The Joint Committee Meeting (JCM) was held with participation of high-level representatives from a wide range of ministries, funding agencies and research institutions from both countries and the Embassy of the Sweden in Japan (EOS), prior to the visit of the Swedish Royal Technology Mission led by H.M. King Carl XVI Gustaf to Japan from February 16 to 20.

In the JCM, both sides introduced current situation and exchanged views on the recent development of science, technology and innovation (STI) policies and key thematic areas of cooperation such as "Life Science (focusing on anti-microbial resistance)", "Aging Society", "Environment/Agriculture,

Forestry and Climate Change" and "Polar Research"; and "Framework for STI Cooperation" as well as specific agenda "Public & Academic Outreach"

In the discussion on the Science Technology Innovation (STI) policies, both sides emphasized the importance of STI policies as a backbone to realize sustainable growth and highlighted high ambitions of governments for innovation performance in both countries.

Regarding Life Science, Japan Agency for Medical Research and Development (AMED) and Swedish Research Council (SRC) brought forward the issue of anti-microbial resistance (AMR), on which a European initiative is currently on-going. Both sides emphasized the importance of research on this matter and will keep contributing in this field through this initiative, taking into account the international attention on this theme.

In the area of Aging Society, both sides welcomed the progress made by Japan Science and Technology Agency (JST) and The Swedish Governmental Agency for Innovation Systems (Vinnova) where they are preparing new joint calls based on MOU aiming at tackling the issues of our aging societies by combining expertise and resources of academia and industry in both countries in order to stimulate innovations with the potential to make community design and services better adapted to the needs of elderly people.

Environment/Agriculture, Forestry and Climate Change is a continuing agenda from past JCMs, and in concord with the broad scope of interests represented by the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas), Japanese Ministry of Agriculture, Forestry and Fisheries (MAFF), Forestry and Forest Products Research Institute (FFPRI) and National Institute for Environmental Studies (NIES), both sides shared insights on their research policies, statistics and researches on biomass utilization and proposed potential areas of cooperation. Both sides also took note of the potentials in the areas of forest ecosystem research and smart city design for low carbon society toward the future.

On the agenda item of Polar Research, both sides appreciated collaborative activities between the National Institute of Polar Research (NIPR) and SRC with a particular focus on plasma physics in arctic atmosphere and geospace environment observation promoted by the European Incoherent Scatter Scientific Association (EISCAT). A consensus was reached to continue cooperation toward realizing the upgraded EISCAT\_3D (The Next Generation European Incoherent Scatter Radar System) based on the great

interests of scientists in both countries. The possibility of utilizing the Swedish research vessel icebreaker "Oden" was also proposed for the dialogue for the future cooperation by SRC.

Under the session on Cooperation Frameworks, both sides encouraged continuation of utilizing the programmes for the researcher exchange and international joint research projects based on the MOU provided by the Japan Society for the Promotion of Science (JSPS) and the Swedish Foundation for International Cooperation in Research and Higher Education (STINT), which contribute to foster the mobility of researchers and promote academic cooperation between highly qualified researchers of both countries.

Both sides also gave positive appraisal on the specific topic of Public & Academic Outreach with JSPS making a presentation on public outreach event "Nobel Prize Dialogue Tokyo" jointly hosted with Nobel Media AB, and EOS making a presentation on academic outreach event "Japan-Sweden University Presidents' Summit", both of which were held in 2015, and further addressed the holding of similar events to promote public and academic engagement in the field of STI.

Almost all of these key fields of cooperation were individually followed up by separate meetings held between relevant institutions which were held back to back to the JCM to further strengthening their collaboration.

Noting the extensive relations in the STI cooperation through this constructive JCM, the co-chairs reaffirmed the commitment of the both sides to intensifying cooperation in this field and expressed their hope for contributing to addressing global challenges by further expanding the future partnerships of our two countries with continuous exchanges of knowledge and expertise.



Government Offices of Sweden

Press release from Ministry of Education and Research, Ministry of Enterprise and Innovation

# Billion kronor investment in next generation biologics

Published 14 December 2015 Updated 14 December 2015

Minister for Enterprise and Innovation Mikael Damberg and Minister for Higher Education and Research Helene Hellmark Knutsson presented a national programme for protein research, method development and biologics production.

The research programme, which aims to make Sweden a leader in the development and production of biologics, will be established at VINNOVA, the Swedish Agency for Innovation Systems, which will run the programme in close collaboration with the Swedish Research Council. The research programme will extend over a period of eight years and state funding will total SEK 320 million.

The research programme is part of the Government's strategic investment in the life sciences that aims to improve health, meet societal challenges and strengthen Sweden's competitiveness in an international context.

"Sweden has a strong base in biologics production and we have a proud tradition of protein research that we want to build on. The research programme will strengthen Sweden's competitiveness in an international context," says Mr Damberg.

"Strategic and long-term investments in life sciences research are key to discovering and producing new medicines. In the long run, it is crucial for our well-being and for improving human health," says Ms Hellmark Knutsson.

"Collaboration between academia and industry, and between small and large companies, is essential to managing health-related societal challenges. Life sciences are a priority of the Prime Minister's Innovation Council and as such have the Government's full attention," says Mr Damberg, who like Ms Hellmark Knutsson, is a member of the Innovation Council.

"The Government is taking steps to strengthen Swedish research and innovation. This investment in next generation biologics is part of efforts to make Sweden a leading research nation. Sweden will not settle for less," says Ms Hellmark Knutsson.

The Government is presenting the initiative jointly with the Knut and Alice Wallenberg Foundation and AstraZeneca. At the same time, AstraZeneca will present its research collaboration on proteins and biologics.



Press release from Ministry of Education and Research

# Helene Hellmark Knutsson visits teacher education programme at Helsinki University

Published 20 October 2015 Updated 20 October 2015

Tomorrow, 21 October, Minister for Higher Education and Research Helene Hellmark Knutsson will travel to Helsinki to meet representatives of the teacher education programme at Helsinki University. During the day, Ms Hellmark Knutsson will also visit one of the teacher education programme's field schools and meet staff, teacher students and pupils. Armi Mikkola, Counsellor of Education at the Department for Higher Education and Science Policy at the Ministry of Education and Culture will also take part in the visit to the field school.

According to figures from the Swedish Teachers' Union and Statistics Sweden, there is risk of a deficit of 65 000 teachers in Sweden until 2025. At the same time, only five per cent of Sweden's teachers consider that the teaching profession has high status and only every other teacher would choose the same profession a second time. In Finland, many people apply to the teacher education programme and the purpose of the visit to Helsinki University is to gain insight into and understanding of the attractive Finnish teacher education programme and its field schools.

During the period 2014–2019, a pilot project is under way in Sweden with field schools and field preschools at fifteen higher education institutions. The purpose is to help raise the quality of school-based teaching practice, for

instance by strengthening the quality of guidance during the school-based teaching practice and the contacts between a university college and a field school or field preschool.

### **Programme**

10.00–12.30 Visit to Helsinki University

Venue: Siltavuorenpenger 5 A

13.00–15.00 Visit to Viikki Teacher Training School

Venue: Kevätkatu 2





Press release from Prime Minister's Office

# Prime Minister Stefan Löfven to receive President Dilma Rousseff of Brazil in Stockholm

Published 16 October 2015 Updated 16 October 2015

On Monday 19 October, Prime Minister Stefan Löfven will receive the President of Brazil, Dilma Rousseff, in Stockholm. They are meeting to discuss economic exchanges between Sweden and Brazil, climate and sustainability, and defence.

During her visit to Sweden, President Rousseff will also participate with Mr Löfven in a business forum and a meeting with representatives of the City of Stockholm. She will also go to see Norra Djurgårdsstaden and visit companies in Kista and Linköping.

## Programme points, 19 October

### **09.30 Business Forum**

Mr Löfven and Ms Rousseff address a business forum at Grand Hôtel.

### **10.00 Reception by the Prime Minister at Rosenbad**

Mr Löfven and Ms Rousseff arrive at Rosenbad.

Photo opportunity at the entrance.

Discussions.

Photo pool – meeting room.

Minister for Foreign Affairs Margot Wallström, Minister for Higher Education and Research Helene Hellmark Knutsson, Minister for Social Security Annika Strandhäll and Minister for Housing, Urban Development

and Information Technology Mehmet Kaplan will also take part in the discussions.

### **11.15 Press conference at Rosenbad**

Mr Löfven and Ms Rouseff hold a joint press conference in Bella Venezia.

The press conference will be webcast live on [www.regeringen.se](http://www.regeringen.se).

### **Lunch at City Hall**

The City of Stockholm hosts a lunch for Mr Löfven and Ms Rouseff at City Hall.

Photo pool.

### **15.50 Visit to Saab in Linköping**

Ms Rouseff and Mr Löfven visit Saab in Linköping.

## **Advance registration**

Advance registration and/or application for a place in the photo pool is required. Please register/apply via the International Press Centre at the Ministry for Foreign Affairs no later than 16.00 on 16 October. More detailed information about times and venues of meetings will be sent to media representatives concerned.

Advance registration/application for place in photo pool



Government Offices of Sweden

Press release from Ministry of Education and Research

# Swedish Research Council to have more active role as host of the European Spallation Source

Published 16 October 2015 Updated 16 October 2015

The Government has tasked the Swedish Research Council with responsibility for a support function as Sweden hosts the European Spallation Source (ESS).

“Building ESS is incredibly important to enable Sweden to be a leading knowledge and research nation. This can become a hub for high-quality research,” says Minister for Higher Education and Research Helene Hellmark Knutsson.

The Government previously tasked the Swedish Research Council with stimulating Sweden’s participation in and use of ESS in research and industry.

The European Commission recently decided to establish ESS as a European Research Infrastructure Consortium (ERIC). ESS will become the new generation facility for neutron-based materials research. The facility is currently being built outside Lund and is expected to be fully operational in 2025. The European Commission has identified ESS as one of the largest, highest priority projects for research infrastructure in Europe.



Press release from Ministry of Education and Research

# Extension of space cooperation between Sweden and the United States

Published 07 October 2015 Updated 07 October 2015

In Washington DC last night Swedish time, a framework agreement was signed between Sweden and the United States to extend their space cooperation.

This new framework agreement means that the cooperative activities between Sweden and the United States in the exploration and use of outer space for peaceful purposes has been extended for an additional ten years. The first framework agreement, signed in 2005, has been successful and has made possible a number of joint projects between the Swedish National Space Board, NASA and industrial actors.

“The United States is the world’s most important space nation, while Sweden is at the forefront in a number of different areas in space research and technological development. Our agreement, which has been in place for ten years, has been profitable for both countries, and through this extension for an additional ten years we are securing the best conditions to enable Swedish space actors to continue advancing their cooperation projects with American partners. This in turn will provide opportunities for increased knowledge and new business deals, and may create more job opportunities,” says State Secretary Anders Lönn.

Mr Lönn signed the new framework agreement at House of Sweden in Washington DC in connection with the seminar ‘Swedish American Space Symposium – Space Cooperation for the Future’. The seminar was organised by the Swedish Embassy, the Swedish National Space Board and the Aerospace Industries Association, gathering representatives from the Swedish and American space industries.





Press release from Ministry of Education and Research

# Helen Hellmark Knutsson to visit Kyoto University and meet Nobel laureate

Published 05 October 2015 Updated 05 October 2015

Minister for Higher Education and Research Helene Hellmark Knutsson is attending the high-level Science and Technology in Society (STS) Forum in Kyoto. The Minister will today meet Jean-Pierre Bourguignon, President of the European Research Council, and Shinya Yamanaka, Nobel laureate in medicine.

Helene Hellmark Knutsson's programme, Kyoto, Monday 5 October:

- Study visit at Kyoto University, meeting with Shinya Yamanaka, Nobel laureate in medicine, and visit to the International Science Innovation Building and the Centre for iPS Cell Research and Application
- Meeting with Chiheb Bouden, Tunisia's Minister of Higher Education and Scientific Research
- Meeting with Professor Jean-Pierre Bourguignon, President of the European Research Council
- Meeting with Dr Michinari Hamaguchi, President of the Japan Science and Technology Agency

Ms Hellmark Knutsson is visiting Japan and the STS Forum on 3–7 October.



Government Offices of Sweden

Press release from Ministry of Education and Research

# Helene Hellmark Knutsson to attend the Science and Technology in Society forum in Japan

Published 01 October 2015 Updated 01 October 2015

Sweden's Minister for Higher Education and Research, Helene Hellmark Knutsson, will visit Japan on 3–7 October. The Minister will attend the Science and Technology in Society (STS) forum in Kyoto and her address will focus on gender equality in higher education.

“Sweden aims to be a leading knowledge and research nation. To get there, our higher education institutions need to be more gender equal. It's a waste of skills that so few women are professors – and we can't afford such waste,” says Ms Hellmark Knutsson.

The STS Forum brings together politicians, researchers, government agency representatives and other actors from all around the world. Ms Hellmark Knutsson will have bilateral talks with Hakabun Shimomura, Japan's Minister of Education, Culture, Sports, Science and Technology, and John Holdren, senior advisor to President Barack Obama on science and technology issues.



Government Offices of Sweden

Press release from Ministry of Education and Research

# Helene Hellmark Knutsson to meet Cambodia's education minister

Published 25 May 2015 Updated 25 May 2015

Today, Minister for Higher Education and Research Helene Hellmark Knutsson will meet Cambodia's Minister of Education, Youth and Sport Dr Hang Chuon Naron. They will meet at the Swedish Ministry of Education and Research to discuss higher education and research.

Since the 1980s, Sweden has provided support to programmes for increased access to high-quality primary education for poor children. We have been one of the largest donors and have played a major role in the area of education in Cambodia. In the current strategy, Sweden has decided to increase its support to include upper secondary and higher education.

Dr Naron is visiting Sweden on 25–26 May along with a delegation from the Cambodian Ministry of Education, Youth and Sport.

The meeting will take place today at 15.00–16.00 at the Ministry of Education and Research.





Government Offices of Sweden

Press release from Ministry of Education and Research

# Helene Hellmark Knutsson to meet Swedish Nobel laureate in New York

Published 22 May 2015 Updated 25 May 2015

Minister for Higher Education and Research Helene Hellmark Knutsson is in New York today. During her visit, she will be given a guided tour of Rockefeller University by Dr Torsten Wiesel, Swedish Nobel laureate and former president of the university.

Ms Hellmark Knutsson's programme in New York on Friday 22 May (NB. all times are local):

10.00 Meeting with representatives of the Institute of International Education

11.30 Meeting with representatives of New York University

14.30 Guided tour of Rockefeller University, led by Dr Torsten Wiesel, Swedish Nobel laureate and former president of the University



Government Offices of Sweden

Press release from Ministry of Education and Research

# Helene Hellmark Knutsson to meet John Kerry

Published 21 May 2015 Updated 25 May 2015

Minister for Higher Education and Research Helene Hellmark Knutsson is currently in Washington DC, as Sweden yesterday signed a new polar research agreement with the United States. Today Ms Hellmark Knutsson will meet US Secretary of State John Kerry at a reception for the Member States of the Arctic Council.

Ms Hellmark Knutsson's programme in Washington DC, Thursday 21 May (local time)

09.30 Meeting with staff at the Swedish Embassy

11.00 Meeting with the American Association for the Advancement of Science

12.15 Meeting with the EU Delegation

14.45 Meeting with the Association of American Universities

18.00 Reception hosted by Secretary of State John Kerry



Press release from Ministry of Education and Research

# Sweden signs research agreement with the United States

Published 20 May 2015 Updated 25 May 2015

Helene Hellmark Knutsson, Minister for Higher Education and Research, is in Washington today, when Sweden – via the Swedish Polar Research Secretariat – is signing a new research agreement with the United States. The agreement will result in two major joint research expeditions to the Arctic and positive synergies for Swedish polar and climate research.

To mark the US assumption of the Chairmanship of the Arctic Council, the Swedish Embassy in Washington DC is holding a conference this week entitled ‘The Arctic – hot or cold?’ Ms Hellmark Knutsson will hold a keynote speech at the conference today to highlight that the United States and Sweden have decided to take a step toward greater cooperation in polar and climate research. In connection with the speech, the United States and Sweden will sign an agreement on a joint Arctic expedition this summer (2015) and a further expedition in the summer of 2017.

“Our collaboration means that we will get more research for our money. If more countries use the Swedish icebreaker Oden, it can do polar expeditions at more frequent intervals, more measurements can be carried out and the researchers can form new partnerships. This will benefit research and the climate, and create jobs,” says Ms Hellmark Knutsson.

Sweden is a world leader in polar and climate research. Thanks to the Swedish icebreaker Oden, which is equipped with research laboratories and sophisticated equipment, Swedish polar research has gone from being good to world-leading. Through increased collaboration with the United States, this research can further contribute to efforts to tackle climate change.

“Cooperation in the Arctic and in polar and climate research will be a clear indication of how closely we cooperate with the United States and an important contribution to efforts to address the defining issue of our time,” says Ms Hellmark Knutsson.



Government Offices of Sweden

Press release from Ministry of Education and Research

# Remains at Karolinska Institutet to be returned

Published 27 February 2015 Updated 17 May 2015

The Government today decided to return human remains from Karolinska Institutet to New Zealand and French Polynesia.

“The task of academics and politicians is not to hide embarrassing parts of our history; rather it is to ensure that they are never ever repeated. It is important that these remains reach the correct recipients who will take care of them with dignity. Any future cases must be dealt with more promptly by the higher education institutions in question,” says Minister for Higher Education and Research Helene Hellmark Knutsson.

In New Zealand the remains will be taken care of by the Museum of New Zealand Te Papa Tongarewa, which was given a mandate by the Government of New Zealand in 2003 to establish a repatriation programme.

In French Polynesia the remains will be taken care of by Te Tupuna Te Tura, a non-profit organisation that is working to repatriate remains and that is familiar to some in Sweden, having previously received similar materials from Uppsala University.



Press release from Ministry of Education and Research

# Funding of Swedish research institutes in the Mediterranean region to continue

Published 18 November 2014 Updated 17 May 2015

Central government funding of the Swedish research institutes in Rome, Athens and Istanbul will continue and the proposed budget cuts indicated for 2016 and 2017 will not be implemented. This was announced today by Helene Hellmark Knutsson, Minister for Higher Education and Research, following a review of alternative funding sources for the institutes.

- “Today I am able to announce that the Swedish research institutes in the Mediterranean region will continue to receive central government funding. The advance notice given of reduced central government funding for 2016 and 2017 no longer applies following our review of alternative funding sources for the institutes. We value these institutes and their important activities. They are highly regarded from many points of view – cultural, historical and for their research,” says Ms Knutsson.

- “The proposal in the Budget Bill did not apply to 2015, but was rather advance notice for 2016–2017 and dependent upon finding alternative funding for the institutes. It was never the Government’s intention to jeopardise the future of the institutes. The Government has given priority to a review of alternative funding sources and has taken on board the misgivings that were raised in relation to these. We have therefore decided to continue with our funding of the institutes,” says Ms Knutsson.

The costs associated with the Swedish research institutes in the Mediterranean region include significant sums for the operation and

maintenance of their properties, which embody major cultural values. The direct operational grants provided by central government are partly used to cover some of these basic costs.

The Government will find an alternative way to finance the amounts involved (SEK 12 million in 2016 and SEK 22 million in 2017), which will be announced at a later date.



Government Offices of Sweden

Speech

# Speech by Helene Hellmark Knutsson, Minister for Higher Education and Research, at the Meeting of Nordic Higher Arts Educations

Published 18 April 2018

Stockholm, April 18th 2018. Check against delivery.

Thank you for the opportunity to say a few words about Nordic collaboration in education and research.

As you know, Sweden holds the Presidency of the Nordic Council of Ministers in 2018. During our Presidency, Sweden wishes to work for an inclusive, sustainable and innovative Nordic region. A Nordic region that is both secure and open. Based on our Nordic model with three pillars: an economic policy focused on full employment, a universal and generous welfare system, and an organized labor market.

In achieving those goals, education and research have a crucial part to play. Education and research represent hope for the future. To enable individuals and societies to develop, education must be inclusive and accessible to all. The education we provide must be sustainable, but also capable of responding to the changes taking place in society.

And research is one of the areas that need to be most innovative and dynamic of all, to offer answers to the major challenges which our societies face and which we share across the Nordic countries.

At the present time we face a troubled world and major challenges to our societies. Fake news and disinformation travel fast and contribute towards



distrust, insecurity and tensions.

In many parts of the world we see challenges to the fundamental values of higher education, such as academic freedom and institutional autonomy. We have had reports about universities being closed based on political conflict, and universities facing new legislation aiming to stop their operations.

In the Nordic countries, we share a belief in academic freedom and institutional autonomy. This is important to highlight and work for in times like these, when such fundamental values are threatened elsewhere.

As countries, we have seen how the expansion of our education sectors has helped transform our societies into knowledge economies. However, to us higher education is not merely about providing instrumental skills. It is also about promoting fundamental values.

Arts education and artistic research – the areas which you represent – have a crucial role to play in this context. Art and culture are integral to vibrant, democratic societies and can act as counterforces against undemocratic tendencies. The education and research that you provide, can help build strong, democratic societies inhabited by curiosity driven and critically reflecting men and women.

In times like these, it is more important than ever to continue to invest in Nordic cooperation. The similarities between us are greater than the differences, and working together on issues we are agreed on gives us an even stronger voice than we would each have on our own. Nordic co-operation is also something that our students and citizens appreciate, an appreciation we must safeguard.

During the Swedish Presidency of the Nordic Council, two topics dominate. Both are considered crucial to the future and are discussed at the Council of Ministers for Education and Research (MR-U). The first is our common Nordic research policy, the second is the future of Nordic co-operation in education. I will say a few words about each of these topics.

About research policy co-operation, this is one of the most extensive and oldest areas of collaboration within the Nordic Council of Ministers. The aims of this co-operation are to help the Nordic region develop into a leading knowledge region. And for the research undertaken to promote the advances in knowledge that are fundamental to the development of society, and policymaking, across a wide range of fields and sectors.

Most Nordic Council of Ministers research initiatives are channeled through NordForsk, which primarily is a platform for collaboration between national research funding agencies. During its Presidency, Sweden has set out to further clarify the role of NordForsk and further develop its work in terms. For example, of Nordic added value, improved collaboration and a greater focus on quality.

When it comes to education, the Swedish Presidency is focused on the agenda for future cooperation. The work that we are now undertaking builds on a report from 2017 by a High Level Group appointed by the Nordic Council of Ministers to carry out a strategic review. The report provides recommendations on how future Nordic co-operation in education could be strengthened and renewed. During the Swedish Presidency, the ambition is that, based on the High Level Group's report, it will be possible at to adopt clear guidelines and priorities for further work by the Council of Ministers on educational issues in the coming years.

Both topics – strengthening our common Nordic research policy and setting out the agenda for our future collaboration in education – will be important in many respects. Nordic collaboration in research can provide real added value to the work that is undertaken in each of our countries. This probably holds true not least in a developing field such as yours. And I note that you have embarked on a number of joint Nordic actions such as a new research journal.

Nordic collaboration in education not only gives the individual student an opportunity to take part in high quality education in a neighbouring country – it also strengthens development in our home institutions.

I am sure that this is something that you are highly aware of in your field. I note, for example, that there are dynamic and ambitious Nordic networks under the Nordplus umbrella, in the fields of fine art and music pedagogy and many others.

The Nordic countries are region in the far north. We need to draw on our joint knowledge and skills, research and innovative capacity.

We also need to build on our common understanding and fundamental values.

It is by working together, that we can achieve a Nordic region that is secure, strong and open. Based on our successful Nordic model.

Let us continue this joint venture, with the goal to secure the Nordic region

as a strong, sustainable and innovative knowledge region.



Government Offices of Sweden

Speech from Ministry of Education and Research

# Speech by Helene Helmark Knutsson, Minister for Higher Education and Research, Swedish American Life Science Summit, House of Sweden.

Published 14 April 2018 Updated 14 April 2018

Washington, 12 April 2018. Check against delivery.

Honourable guests, ladies and gentlemen! It is a great pleasure and a privilege to be here today. I would specifically give my thanks to Barbro Enhbom and the Swedish American Life Science Summit for inviting me here today.

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As the Minister for Higher Education and Research in Sweden, one of my top priorities is to enable excellent research and innovation. And I firmly believe that through collaboration between our countries – we can further strengthen the Life -Science sector.

The Swedish government is strongly committed to supporting continued rapid development in the life science sector, benefiting the whole society. And we welcome and value our relationship with the US in this endeavour.

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While many countries decrease their investments in research and development, Sweden has chosen a different path. The government's research and innovation bill contains an increase of 300 million Euros of government funding over the next few years.

One of the top priorities in the research bill is life science. Sweden is a major

player on the life science arena, offering a thriving life science environment which is technology-driven and characterised by close collaboration between academia, health care, industry and patient organisations.

As a logical consequence of this, life science is a dominating line of business and a cornerstone of the Swedish economy. Supporting research, innovation and co-creation in the life science sector has been a long-standing strategic priority of the Swedish government.

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The threats to human health are escalating rapidly across the globe, rendering human health a major global challenge. Accordingly, in 2015, our National Innovation Council, which is chaired by our Prime Minister Stefan Löfven, launched a strategic programme in life science to further accelerate progress in research and innovation, and promote co-creation involving all major stakeholders.

Further, in February 2018, an Office for Life Science was established in the Government Offices, a first assignment of which is to develop a national strategy for life science.

However, there is so much more to be done. The process of turning research results into clinical practice is of uttermost importance. If new knowledge is not converted into new treatments and other innovative solutions, patient benefit will be lost. Efforts must be made to speed up this transformation and make it easier for researchers, industry and healthcare to join forces.

Clinical studies Sweden is one such effort. It is a national infrastructure that supports and optimizes conditions for conducting clinical trials. The aim is to make it easier – both for academic researchers and for companies – to do high-quality clinical trials in Sweden.

To further strengthen life science in Sweden, the Government has made other several efforts during recent years and I would like to mention a few examples.

The area of biological pharmaceuticals is a Swedish priority. Sweden has the chance to position itself as one of the leading countries for the development and production of biological drugs. Broad efforts have been made within the area, including a national research programme for protein research, method development and production of biological pharmaceuticals.

In parallel with the Government's initiative, the Wallenberg Center for Protein Research has been established. The center is run by three universities, (The Royal Academy of Technology, Uppsala University and Chalmers), in collaboration, with main funding from Knut and Alice Wallenberg Foundation. AstraZeneca and the Novo Nordisk Fund also contributes financially to the Center's operations.

The total investment is close to 100 million Euros and is a brilliant example of the kind and level of resources that can be raised when government and private actors work together.

To further strengthen this field, a test center for industrial scale-up of the production of biological pharmaceuticals will be launched this summer. The center is a joint venture between the Government and GE Healthcare.

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The Government also promotes the start and scale-up of new companies in the life science sector. In 2016, the Swedish Parliament gave Government the mandate to launch an investment company.

Starting in 2017, Saminvest Incorporated, with a capital of SEK 5 billion, is entrusted with the task of capitalizing new venture capital funds that are expected to vitalize the Swedish venture capital market. Experience so far indicates that there is a major interest from the life science sector.

A further initiative that is currently being considered includes prolongation of the period of tax reduction available to international experts who are recruited to Sweden as well as provision of options to personnel as a means of attracting and retaining key competences in Small and medium enterprises.

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I would like to mention something about the digitalisation revolution in life science. Digitalisation has been a prerequisite for efficient handling of 'big data' arising from the new technologies and will continue to speed up progress in life science and clinical medicine.

Here, Sweden has competitive advantages. Our public health care system, along with the personal identification numbers introduced in 1947, has made generation of unique, comprehensive patient registers and functional biobanks possible.

Sweden's patient registries can provide data from ongoing patient care ("real world data"), including diagnoses, use of drugs and medical devices, compliance with prescribed treatments, and follow-up of outcomes on a large population scale. Combining the use of registries with biobanks paves the way for more in-depth studies on, for example, genetic factors and biomarkers.

The Swedish government has invested more than 150 million euros over the last 5 years, and work is under way to further enable the use of patient registries for research, development and follow-up.

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While the health threats and challenges have increased, new opportunities for prevention, diagnosis, treatment and cure have emerged in parallel. Major advances in areas such as genomics, molecular biology and protein science have revealed the specific causes of disease and, increasingly, offer possibilities for finding cures.

These new tools for identification of causal mechanisms of disease, on the level of individual molecules, and for production of drugs targeting specific molecular mechanisms have turned treatment tailored to the individual into a reality.

Lastly, I would like to mention that neither Sweden or the US can't do it alone. We need to strengthen our relationship further if we are to face our global health care challenges together. Only by building a strong knowledge-based society will we be able to take on the challenges ahead of us. And this can only be obtained by continuous efforts into research and innovation in both the US and Sweden.

Thank you very much for listening!



Government Offices of Sweden

Speech from Ministry of Education and Research

# Speech by Helene Helmark Knutsson, Minister for Higher Education and Research, at the 2nd China Sweden Health Forum

Published 20 June 2017

Beijing, 13 June 2017. Check against delivery.

Excellencies, good morning! Thank you very much for the opportunity to speak here at the Second China Sweden Health Forum.

As our societies grow wealthier our populations also live longer and are exposed to new health challenges. Such as increased diabetes, cancer and respiratory diseases. The proportion of people with Non-Communicable Diseases continue to grow.

Therefore, our health care systems must deliver care of high quality, while at the same time being cost efficient. This is a challenge shared by Sweden and China.

I believe that international collaboration and pioneering research are crucial to find the most innovative and best solutions for this.

Working across borders to fight disease and conduct joint research with the aim to solve mutual problems is the way forward.

The 2nd Sweden-China Health Forum will provide an opportunity to discuss how different stakeholders can work together to improve care for people in Sweden and China. This is very promising.

One focus area for our government is health care and life science. And Health care and life science is also a prioritized area for Sweden in China.



Swedish health care companies contribute to the Chinese health care system, with research as well as innovative services and products.

A number of Swedish companies have together with Swedish authorities and academia created a platform in order to coordinate bilateral cooperation and to better understand what opportunities and challenges that exist in China within the life sciences and health care. We call this the Swedish Life Science and Health Care platform in China.

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Sweden is doing well as a research and innovation nation, and our aim is to continue to be one of the top countries in the world.

We invest heavily in R&D, devoting around 3.3 percent of our GDP to R&D in 2017.

As Minister for Higher Education and Research in Sweden, one of my goals is to enable excellent research and innovation in the public sector – in close collaboration with the business sector.

Collaboration between universities, industry and the public sector is one of the cornerstones of the Swedish innovation system. Through this collaboration we are able to create mutual learning experiences.

Our research and innovation bill, which recently passed parliament, has a long-term perspective. It will define Sweden's research policy for the upcoming 10 years. It contains an increase of 300 million Euro of government funding to R&D over the next four years.

The name of the bill, Collaboration for knowledge, also underlines the Swedish politics in this area. Collaboration with all relevant players in society is essential for achieving greater societal impact.

Some of the societal challenges pointed out by the Swedish Government – climate, health, sustainable societies and digitalisation – are global. To address these challenges we will all, globally, benefit from strong research collaboration.

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International exchange is vital to strengthen the quality of higher education and research, but also to promote understanding between countries. Mobility at all levels should be stimulated as well as exchange of best practice and mutual learning.

Our government has appointed a special commissioner to lead an official government inquiry into how Swedish research and higher education may be further internationalised.

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I wish to mention that Sweden and China already have ongoing research collaborations at many levels.

For instance, within the antimicrobial resistance, AMR-area, China and Sweden have joined forces and established a joint research programme funded by the Swedish Research Council and the Natural Science Foundation in China (NSFC).

"Framework grants" in antimicrobial resistance have been awarded at several occasions.

The NSFC and the Swedish Research Council, are also funding Swedish-Chinese collaborative research within natural sciences and medical sciences. This programme has a long term perspective.

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I also want to say some words about the Swedish health care system. It is regularly ranked at or near the top of most comparative analyses of international health care systems.

One of the main features of the Swedish health care system is its universal coverage. The system ensures that all residents have equal access to health care services. And it is to a large extent publicly funded.

Now, we must ensure that modern health care can be available not just to us, but to our children and their children in the future. For this, we need more research and new solutions.

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So this is just the beginning. It is now imperative to maintain momentum, advance our positions and build capacities in order to meet our commitments.

And to do it together in international collaboration.



Government Offices of Sweden

Speech from Ministry of Education and Research

# Speech by Helene Helmark Knutsson Minister for Higher Education and Research at The 5th European Women Rectors Conference

Published 19 June 2017

**Brussels 29 may 2017. Check against delivery.**

Dear participants, dear rector Ullenius, ladies and gentlemen.  
I'm very glad to be here today at the 5th EWORA conference. It really gives me inspiration that so many bright women and men are here to push these issues forward.

For me, the issue on the agenda here today is at the very centre of my political ambition as Minister for higher education and research in Sweden.

We are here to discuss and to raise awareness of the under representation of women in leadership positions within academia. The need of discussing these issues is still very relevant all over Europe.

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Sweden has the world's first feminist government. And this is not empty words, it implies real obligations.

That means that gender equality is high on our agenda in every field and that gender equality must be central to all decision-making and allocation of resources.

For the Swedish government, the goal of gender equality policy is that women and men shall have the same power to shape society as well as their

own lives. This broader perspective is important to keep in mind as academia is not an isolated area from the rest of society. We need to work with these issues in society as a whole and at the same time focus on specific solutions in areas such as the academic world.

And maybe it is even more important that the academic world, that has such immense importance for growth, democracy and knowledge, carries the values of openness and equal opportunity.

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Swedish governments have worked with these issues throughout a number of years. But we still have a long way to go.

For example, the share of female professors today in Sweden is 27 %. This is despite the fact that more women than men attend and graduate from higher education, and that it has been this way since the 1970's. And this is despite that Sweden is world leading when it comes to the participation of women at the Swedish labour market.

Statistics of employees at universities in Sweden give the appearance that there is an even gender spread. But if you dig a little deeper, the numbers shows that the women are first and foremost employed as administrative staff. Women and men are also to a large extent studying different subjects at all levels. This leads to a labour market that reinforces gender segregation.

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The same picture can be seen in the whole of Europe. From the report SHE FIGURES 2015 it can be read that women are increasingly under-represented as they move up the stages of an academic career. This is despite the significant progress in their level of education relative to men.

Another interesting fact is that the proportion of women among heads of higher education institutions in the EU is only 20 %. In scientific and administrative boards 28 % of the board members are women, and only 22 % are board leaders.

And the European Research Area Survey shows that 36 % of research performing organisations indicated that that they had introduced gender equality plans in 2013. This is not enough.

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These numbers show that we are not talking about a single Member State's challenges, but rather a European challenge. I'm very interested in what

other Member States are doing to face these issues. I think that it is important that if you agree that this is a European challenge that we exchange ideas and thoughts on how to combat this problem.

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For Sweden these challenges are countered by some key reforms: One policy that lies at the heart of our work is our strategy of gender mainstreaming. This is absolutely crucial to make change. The strategy is a way of ensuring that all policy making has a gender equality perspective and analysis.

The perspective is relevant in all policy areas, at all levels and all stages, by the actors normally involved in the policy-making process. Not least in academia.

That's why I'm glad to say that the Swedish government has included all the state universities and university colleges, into a programme that will strengthen their work with gender mainstreaming.

That's partly why this conference is so important. We need to remind ourselves as decision makers and the other actors working in various ways in the academic world of this holistic view. We need to do this until it gets integrated into every day thinking and policy making at local, national and European level.

There are targets set for each state university and university college regarding the proportion of women among newly recruited professors. And our government has stated that 50 per cent of newly recruited professors should be women by 2030 at the latest.

These are new ambitious goals. And some universities have already expressed their concern, about if they will be able to achieve this. But we need to drive development forward. And I'm convinced that it needs to be done and that it is possible!

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We are also trying to improve conditions for young researchers and make career paths more clearly defined to promote mobility. Career development positions should become more uniform and be advertised in open competition at national level and if it possible at international level. It should be about merits and not about who you know. Without attractive career paths where scientist are judged on the merits of their work, universities and

university colleges will ultimately not be able to attract the right competence to research.

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Finally: I want to remind us all that we need to change our perception of who the scientist is. If a child is asked to draw a scientist they often draw an older man. This is no accident. In popular culture – video games, books, and movies – professors and geniuses are often men. Being bombarded with these images will inevitably influence young girls and women to believe that pursuing a career within science are not for them.

This is why it is so important to speak about female role models within science at these events as well.

Let us do that and continue to fight the inequality within academia today. The world needs more science and science needs more women.

THE END



Government Offices of Sweden

Speech from Ministry of Education and Research

# Speech by Helene Hellmark Knutsson at BIO-Europe spring 2016

Published 04 April 2016 Updated 04 April 2016

Stockholm, 4 April 2016. Check against delivery.

Mayor, honorable guests, ladies and gentlemen. It is a pleasure to see all of you here in Sweden, for this truly important event for life sciences in Europe.

As the Minister for Higher Education and Research, one of my goals is to enable excellent research and innovation in the public sector – in close collaboration with the business sector.

To do this, Sweden needs to build on its strengths, and one of them is life sciences. We have strong medical research, for instance in protein research and genomics, at world-leading universities and in industry. We also have a healthcare system that has always been very innovative and ahead of its time. There is a strong collaboration between the industry and academia, both in medtech and pharmaceuticals.

Moreover, we have a long tradition of strong universities and we are now increasing the number of students in all our universities all around the country. Through this, both research institutions and industry will find very high-skilled staff. It is the high level of skills in particular that has made our country very attractive to investors.

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The future of life science in Sweden is of high priority for the government. There are many reasons;

- The demands from the health sector are growing – especially since a larger proportion of the population are the elderly. We need to invest in making life better and in making cures more efficient in the future.
- The life science industry is going through a change where the new ideas more often come from SMEs and universities than from Big pharma. The industry is therefore more and more dependent on collaborations with academia and health care providers.
- Also, Life science is one of Sweden's largest export areas after wood and paper. So it is of high importance for creating jobs and growth for our economy.

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I want to tell you about some of the initiatives the government is working with:

1: The Government has appointed an Innovation Council which is chaired by the Prime Minister. It has identified Life Science and digitalization as key sectors for Sweden.

Our aim now is to strengthen Sweden's position in research and development and improve our attractiveness for investments. And also to contribute to better health and help to tackle the health-related challenges we face as a society.

I also wish to highlight that the government will work with a long-term perspective on life sciences. We will address this area in the coming research policy bill that will define Sweden's research policy for the coming 10 years.

2: In order to strengthen Swedish Life Sciences cooperation is the key. I have appointed a national coordinator for life science with the task of stimulating cooperation between the academia, industry and the health care sector, Anders Lönnberg.

The government has also appointed an advisory board with representatives for each part of the sector to assist the coordinator in identifying obstacles, and through dialogue find solutions. The objective is to set priorities and an agenda for the life science sector to work with, and also to leave suggestions for further actions to the government.

3: The Government has identified that with Sweden's skills in protein research and development it is time to make an effort to make Sweden one



of the leading regions for bio-production.

So, in December the government presented a national program for protein research, method development and biologics production. It will extend over a period of eight years and the state funding will total SEK 320 million.

By this new program the Swedish government wishes to enhance the collaboration between the different sectors and make Sweden a stronger international player in the Life Science area. We strongly believe that Sweden has an unmet potential to become an attractive international platform for collaborators both in academia, the health sector and the industry.

Therefore, I am glad that we have had parallel investments by the Knut and Alice Wallenberg Foundation and AstraZeneca.

Together with the government, almost one billion Swedish crowns is invested in total. This shows the importance of common goals.

Portions of this national research program may also be linked to the important research infrastructures existing in Sweden, like the SciLifeLab, the European Spallation Source (ESS) and MAX IV. This creates opportunities for international partners and for creating cross-border cooperation.

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I would also like to invite you to these large infrastructures, which are open for collaboration. And I hope that we will see more collaboration between academic research and industry, all over Europe, in the future.

Sweden has a long tradition of research and innovation in the life science area. And I hope that we together with the rest of Europe can take it forward - for the benefit of our society.

So I wish you good luck the coming days!

Thank you!



Government Offices of Sweden

Speech from Ministry of Education and Research

# Speech at the conference Large Scale Research Infrastructures – Maximising the Potential of Renewed growth in Europe

Published 23 November 2015 Updated 23 November 2015

Stanhope Hotel, Brussels, 16 November 2015 Check against delivery.

Dear fellow speakers, ladies and gentlemen,

It is a great privilege to be here today to listen and to discuss big-science investments in Europe. But first I would like to reflect on the acts of terror in Paris this Friday.

During the minute of silence earlier today, the whole EU mourned with the people of France – and our thoughts went to the victims and their families.

The dreadful acts of terrorism we have seen in Paris, and in Beirut only a few days earlier, are attacks upon democracy itself and our open society. They must and will be met with resolve. And in these times, the most important thing of all is to stand up for the values that guide us - democracy, freedom and equality between people. Terrorism cannot and will not shake these values.

Terrorism must be opposed. And we also need to tackle the underlying causes of terrorism, by taking a long-term approach. Here we need knowledge, research and international collaboration. Only then can we hope to understand and counteract the complex patterns that attract people to the path of terror.

Knowledge is important – with the right to education, but also increased knowledge of racism and terrorism. The Swedish Government has established an institute to help prevent extremism and terrorism, but also established a research program against racism.

There is also several examples of international collaboration – us being here today, the European Union itself, but also collaboration between member states in projects as the European Spallation Source and MAX IV are examples of.

I very much welcome the initiative taken by the organizers of this event to discuss the important question on how Europe can maximize the societal and economic impact of the investments made in research and specifically in Research Infrastructures.

As the minister for Higher Education and Research in Sweden, I will also take this opportunity to share some more general views and priorities of the Swedish research policy in the coming years.

Today, humanity faces several of its biggest societal challenges ever. Global warming, the rapid extinction of biological diversity, the need to create inclusive societies, ageing societies, public health and pandemics are but a few examples of the grand challenges we need to address.

The way politics, business and society can handle these challenges will strongly affect Europe's economy and society in the coming years. We cannot expect a single scientific or technical area to solve the problems. We need long-term support and investment in broad areas of research and education. This to provide for a sustainable development, economic growth and increased competitiveness for Europe.

Innovation is crucial for Europe's future and Research Infrastructures are a driving force behind it. Research Infrastructures are the most advanced tools for new discoveries and scientific breakthroughs and the pillars in the European Research Area (ERA). But they are also platforms for interdisciplinary research and for collaboration between research, education, industry and the society.

Ultimately, the potential of high-quality Research Infrastructures means that they can contribute to the successful realisation of the Europe 2020 strategy. Research Infrastructures will help to stimulate new ideas, new technologies and new talents. Something Europe will need to realise in the ambitious

programme of the Innovation Union.

Research Infrastructures can attract human capital and become important nodes for regional, national and international collaboration. But care must be taken to ensure they do not become isolated islands. Both public and private sectors need to collaborate to further increase the potential for societal impact, chain of patents, spin-off companies and industrial contracts.

Different countries and regions each have their own unique possibility to transform scientific results to economic growth. Smart Specialization is a good approach to achieve this. The meeting today has provided valuable input on how priorities and policies can be set to maximize the knowledge-based development and innovation ecosystem of a region.

Long-term stability and financial sustainability for construction and operation are key factors for a successful usage of Research Infrastructures.

We are proud to host two facilities in Sweden – the European Spallation Source (ESS) and MAX IV – which are expected to be world-leading in their respective field. Two facilities that will play an important role to help us tackle our big societal challenges.

Sweden has been committed to these two facilities over a long period of time and taken a big responsibility for their realisation. This has allowed the construction of both facilities to start without delays and for other countries to participate.

The recent start of construction of ESS shows that European countries, even in times of economic hardship, can collaborate and invest in the future and in the next generation of scientists.

Sweden is strongly committed to provide good operating conditions for ESS and MAX IV. In this work the role of the region is also important. A shared responsibility for the investment cost is needed and in Sweden the Region Skåne is co-financing both facilities. Regions are promoters for innovation and growth and are providers of the local infrastructure. Without strong regional support and political engagement there will be no fertile soil for the growing of a Research Infrastructure.

By using the possibilities given within the European Union we can build a stable foundation on which ESS can grow - not just nationally but also among all the member countries.

With the recent decision by the European Commission to grant ERIC status to ESS, a true joint European ownership is firmly established. We are very happy for this decision and for reaching this important milestone in the project. There is a solid governance structure in place allowing ESS Member Countries to contribute and guide the project and take a long-term responsibility.

Since the beginning of the 1980s, there is a tradition in Sweden to issue recurrent Government Bills on Research and Innovation, laying the foundation for the government's research policy in a 3-4 year period.

The next Government Bill is planned to lay out the strategies for the research policy until 2026, with a special focus on the period 2017-2020. It will mostly address research, but it will also highlight parts of higher education and innovation which is mutually beneficial.

We need a longer perspective to provide a long-term stability for research – and enable a higher risk taking. Therefore, the Swedish government has expressed its will to have a 10-year perspective of the next Government Bill. Some of the most important scientific discoveries come as a result of the unexpected. We must dare to invest in research for which there is a high-risk of failure but where the potential for new discoveries can be ground-breaking.

We need to stimulate the societal impact of research and create competitive environments where scientists, industry and other areas of the society can cooperate in an innovation system. This is an integral part of research policy and higher education and needs to be taken into consideration.

In Sweden, universities constitute an essential first part of the innovation value chain. But they need to have closer links to business and the public sector in order to find practical applications for new scientific discoveries.

The transfer of knowledge is central in an innovation system. In practice, it is often the individual researcher or student who carries key knowledge and competence. Therefore the mobility of students and researches plays an important role, as does the conditions for young scientists in order to make science careers attractive for young people.

The gap between higher education institutions and society needs to be minimised. In this area politics have an important role. We need to increase the incentives for universities to interact with society.

Therefore, we want to make it easier to shift careers and exchange positions between academia and the rest of society. By increasing the number of people with a science background we help to increase knowledge transfer and growth.

Sweden has the world's first Feminist Government. This affects all policy fields, including research and higher education. I believe that gender equality is essential for Sweden to become a truly prominent research nation. Gender equality is about using all talents and thereby increasing research quality. But it is also a question of democratic rights: that each and every citizen is given the opportunity to follow his or her dreams.

Gender equality needs to improve across the board. That is why I have appointed an Expert group to give advice on gender policy for higher education and research. We are also starting to Gender Integrate all our universities and to set new, ambitious, recruitment goals for gender balance among professors.

We have an ambition to provide more resources to universities. The increased interest from industry in taking advantage of basic research only comes with excellent quality of research. Basic science is as important as the more applied and it is the responsibility of the government to safe-guard this.

To quote the research policy advisor of President Obama: "Basic research is the seed corn for innovation".

For a small country like Sweden it is especially important to develop a national strategy for an effective use of ESS and MAX IV. The resources and efforts spent on these facilities are unique in the history of Swedish research policy.

ESS and MAX IV is a high priority for the Swedish Government. The Swedish Research Council has a special role in supporting the work on ESS/MAX IV and will present its first draft of a national strategy for these facilities in 2016.

Research Infrastructures need to support new user communities. The recruitment of new users of the facilities should be a part in the strategic plans for facilities like ESS and MAX IV. There are many research areas which could benefit from using the facilities, such as climate- and energy research and life science, but where the methods offered by the facilities are not the standard tools in their respective areas of research.

The co-location of facilities is another way of attracting new user groups and to further optimize the investments in Research Infrastructures. ESS and MAX IV will complement each other and offer opportunities beyond what each could accomplish alone. Before the end of the next decade researchers visiting Lund and Sweden, will have access to two state-of-the art experimental facilities. Facilities that could be host joint education, summer schools and perhaps a joint access and use of the facilities.

The universities are the strategic centers for securing the necessary competence to use and develop Research Infrastructures. Researchers at the facilities should get the opportunity to teach and perform research at the universities.

In facilities like ESS and MAX IV we are investing in the future. It is therefore important to attract the next generation of scientists which will be the future users of the facilities.

Finally, I would like to encourage you all to take advantage of the great potential facilities like ESS and MAX IV offer. The Swedish government welcomes a continued dialogue with the regions, the Member States and the European Commission how the use of Research Infrastructure can be more effective to tackle the Societal Challenges we face.

Europe's response to Societal Challenges in the fields of research and innovation is important and I look forward to continue the discussions on these topics in the framework of the Lund Revisited Conference in Sweden on December 4th this year.

Thank you!



Government Offices of Sweden

Speech from Ministry of Education and Research

# Speech at Science and Technology forum 2015

Published 14 October 2015 Updated 14 October 2015

International Conference Center, Kyoto, Japan, October 4, 2015 Check against delivery.

Dear fellow panellists, Prof. Wiesel, ladies and gentlemen

Sweden prides itself on being a knowledge society. Our global competitiveness depends on our ability to create, develop and make practical use of new scientific discoveries. In short: our capacity to innovate. We invest in knowledge and competence.

But innovation is not just about competitiveness and economic growth. As we consider the big challenges facing our societies today – climate change, inclusive societies, energy, health and ageing, just to mention a few – innovation is at the heart of our ability to find solutions that are economically, socially, and environmentally sustainable.

In Sweden, universities constitute an essential first part of the innovation value chain. But they need to have closer links to business and the public sector, in order to find practical applications for new scientific discoveries and to transfer knowledge and we also need to look more at students as central carriers of new ideas and knowledge.

And not every scientist should be forced into becoming an entrepreneur. There will always be scientists who come up with new ideas and produce excellent research, but for different reasons do not want to take their projects outside academia. That is why there needs to be ways in which their discoveries can be picked up by other actors in the innovation system.

About half the population in Sweden and the world is female. The Swedish



labour market has a high participation of women, 77 %. This is the main reason why Swedish employment and labour force participation long have been among the highest in the EU. But we still see big differences between women and men when choosing higher education and their possibilities to make a career in research and science.

In Sweden there are more women taking part in higher education than men and the study choices of students are seemingly gender-based. We need to take a long, hard look at our societies and ask ourselves: who gets to appear as scientific experts on TV and in newspapers? What is the gender portrayed for different professions that influences the choice of education? Who gets portrayed as smart and innovative in popular culture? Preconceptions about gender have deep roots and are hard to change. Here, academia has a vital role to play.

Since 1999 the number of Swedish female professors has increased from 12 to 25 %. This is good, but not good enough – especially as the increase has slowed down in the recent years. This means that research and education lose important competence due to fixed ideas and prejudice. Sweden has the world's first Feminist Government. This affects all policy fields, including research and higher education. I believe that gender equality is essential for Sweden to become a truly prominent research nation. But it is also a question of democratic rights: that each and every citizen is given the opportunity to follow his or her dreams. That no one is forced do away with their innermost ambitions.

Gender equality needs to improve across the board. That is why I have appointed an Expert group to give advice on gender policy for higher education and research. We are also starting to Gender Integrate all our universities and to set new, ambitious, recruitment goals for female professors.

Research grants must also be awarded in an equal way. Swedish research councils have equal success rates for men and for women. But the outcome of applications to the European Research Council gave us cause for concern. Sweden came out at the lower end with only 10 % of successful applicants being female. An important goal for us will be to make research funding gender equal.

Sweden is often described as one of the most equal countries in the world. Higher education is a democratic right, available free of charge to every citizen. And still participation in higher education remains highly determined

by your socio-economic background. If your parents have some sort of higher education, you are twice as likely to take part in higher education yourself, compared to those with parents who only finished secondary school. This is a huge flaw in our system.

In a modern country like Sweden, socio-economic background, gender, or disability cannot be allowed to determine a person's chances of getting a degree. Equal access to education is a democratic right. This is why I have put widening access and widening participation in higher education and research front and centre of my agenda as a minister. I have told our government agencies to step up their work on these issues, to identify successful examples and encourage the spreading of best practice among universities.

I look forward to your questions, and this opportunity to have a constructive discussion about the role of universities in creating more democratic, sustainable, and equitable societies in the future.

Thank you!



Government Offices of Sweden

Speech from Ministry of Education and Research

# Speech at Association Of Space Explorers XXVIII Planetary Congress

Published 21 September 2015 Updated 21 September 2015

Stockholm Concert Hall, September 29, 2015. Check against delivery

It's an honour to be here with you all today. In Sweden, and probably in your countries, the media headlines are normally about politicians, movie stars, musicians, company leaders and other celebrities

However, for a few weeks in 2006 and then again in 2009, all headlines were about a scientist, about Christer Fuglesang. This was when he twice visited the International Space Station.

It is quite rare to see a researcher being treated like a star - but that was the case when Christer returned to the earth and went on tours in Sweden.

Besides the obvious pleasure of meeting your colleagues, you are also on an important mission this week – to help spread the fascination of space to the public and especially to young people. Your visits to different schools are highly appreciated and will most definitely increase the students' interest in science.

Only three weeks ago, a proposal for a national space strategy was handed over to me after more than one year's work. I had the pleasure to present the work together with the investigator directly to the Prime Minister and several other government colleagues, companies and scientists - the National Innovation Board. They were very interested in how space can increase our knowledge and also improve conditions on earth.

The focus in this strategy is on having a holistic perspective on space activities in all sectors - not only space industry and research. It is important to ensure that the benefits for mankind - and for the societal needs and challenges are in focus.

We will soon ask other Swedish stakeholders for comments on this proposal. And I look forward to receiving these and to continue the discussion on how Sweden can strengthen its role in the global space community - and how to make the best use possible of space activities nationally and in international cooperation.

One thing that was recommended in the proposal was to develop the Swedish space base Esrange - situated above the Arctic circle – and it has a unique potential due to its isolated location and its space cluster. Esrange could be a European space port with capacity to launch small satellites into orbit, besides the existing European space port in French Guiana for heavier payloads. It is an interesting suggestion and we will consider it.

As we heard today, the space context is very international, and your presence here today is a proof of that. The International Space Station owns its success due to the international collaboration. The space can actually be seen as a successful peace project, and Sweden is dedicated to contribute to work in international organizations so that space will remain that way.

We just have one Earth, but up until now we have not been kind to it. Pollution, deforestation, over-fishing and other unsustainable activities have a severe toll on Earth, and the ongoing climate change is already causing changes in weather patterns and sea level rise. To understand what is happening and to be able to come up with efficient counter-measures, we need to monitor the development.

Earth observation satellites are crucial for this purpose. But also for tackling immediate crises like forest fires, flooding and other natural disasters. The Copernicus programme within the European Union and the European Space Agency will be vital for this monitoring - It shows the importance of international cooperation and long term planning and investments.

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Every four years, The Swedish government drafts a National research and innovation strategy. We have recently started the work on the next one that will be ready next autumn. I see space as a driver for innovation, since the

extreme conditions in space demand innovative and efficient solutions. Many of these innovations will be useful also on earth.

And we have many things around us in our daily life that actually stem from space applications and products.

It is a privilege to have the opportunity to meet you.

I look forward to talking to you since I will be attending several parts of your programme this week. Your comments and advice on space issues and how Sweden can embrace it are appreciated. I encourage you to talk to my colleagues from my ministry since they will be around for most of today's program.

Once again, I want to welcome to Stockholm, and may you have a fantastic week here!

Thank you very much!



Government Offices of Sweden

Speech from Ministry of Education and Research

# Speech at Nordic Life Science Days 2015

Published 09 September 2015 Updated 09 September 2015

Stockholm Waterfront, September 9, 2015. Check against delivery

Thank you for inviting me to this meeting. It is a great pleasure to participate in the forming of closer ties between Nordic academy and industry.

As a Minister for Higher Education and Research, one of my goals is to enable excellent research and innovation in the public sector in collaboration with the business sector.

I think it is crucial that our welfare is strong for our competitiveness and for our ability to tackle our grand challenges. For this, the government is convinced that in order to stay competitive Sweden must compete with knowledge, research and innovation, not low wages.

It is through the high quality of Nordic higher education and research, in this case life science, that we manage to satisfy the high-tech industry with qualified staff and knowledge - and attract investments in factories and in research and development from the industry.

The Nordic countries are an attractive area to conduct research in, both for individuals and for businesses. But to stay strong we need to attract talented young researchers to a career in science.

I believe that creating attractive research environments as well as providing good working conditions in terms of planned careers will strengthen our position in the world.

Therefore, the system for researchers' careers may need to be revised. In Sweden we are currently looking into this.

Another thing that is necessary for our success is gender equality. If not all our talents are given the possibility to develop, we lose valuable competence. Therefore, the government wants to promote gender equality in science in general, and at universities and colleges in particular.

The Nordic countries have a long tradition of medical research of world class, successful large and small pharmaceutical companies, and a well-developed and well organized health care. Partnerships between academia, industry and health care have been very fruitful. They have led to significant innovations in the form of medicines and better treatments. The open collaboration and access to health care resources have been key factors for this success.

The Nordic countries have certain strengths which we could to a larger extent make use of and benefit from, not the least our life science companies. In the Nordic region we have collected medical information in registers for many years. They are gold mines for research. But our populations are small and the cohort sizes may not always be large enough. So to step up and compete we may need to increase the Nordic collaboration even more.

Expensive research infrastructure is another area where the Nordic countries already are working together. We would like to invite you to the large research infrastructure initiatives that we build now, ESS and MaxIV and SciLifeLab, which are open for collaboration.

As for life science in Sweden, I want to tell you what initiatives we work with. The Government has appointed an Innovation Council which is chaired by the Prime Minister and which among a handful of areas has special focus on Life Science and digitalization.

I have, as the Minister for Higher Education and Research, the overall responsibility for the area of Life Science in the government. We have appointed a coordinator for the life science, Anders Lönnberg. His work involves giving the government suggestions for changes and improvements within the Swedish Life Science eco-system including the business sector, the academic sector and the health care sector.

The next year, the Swedish government will present a research bill with a long term perspective - as a step in strengthening research by providing long-term conditions.

There are also a few relatively new Swedish programs that focus on clinical research that are relevant to the life science industry:

- National coordination of clinical trials, placed at the Research Council. It aims to facilitate and increase collaboration between industry, university and health care.
- A committee of the Swedish Research Council that distributes 100-150 million Swedish crowns per year in clinical treatment research.

I would like to see more collaboration between academic research and industry. It is important that publicly funded research is useful for society in many ways. This can be by providing highly educated people through higher education, by new scientific breakthroughs - but also through direct cooperation between scientists and companies.

In times when the pharmaceutical industry is transforming, it is important that the academic sector is available as a source for knowledge transfer to industry and as a place where industry can find world leading research in areas of interest for their research and development.

Life science is an area that has high priority for the Swedish government. There are many reasons;

- The demands from the health sector are growing – especially since a larger proportion of the population are the elderly
- The life science industry has gone through a tough change and is more and more dependent on collaborations with academic science and health care providers
- The technical development has made it possible for different disciplines to work together in a new way

Sweden and the Nordic countries have a long tradition of research and innovation in the life science area. Now I hope that we together can take it forward into the future.

Thank you very much!





Government Offices of Sweden

Speech from Ministry of Education and Research

# Speech at the inauguration of the Integrated Cardio Metabolic Centre (ICMC)

Published 12 June 2015 Updated 12 June 2015

## Karolinska institutet (KI), June 2, 2015 Check against delivery

Thank you for inviting me to this inauguration. It is a great pleasure to be here, and to participate in forming a better environment for Swedish research.

It is my mission as Minister for Higher Education and Research to enable the formation of excellent research environments. And this is one of those environments!

Karolinska institutet is one of the internationally most famous Swedish universities. I want to form a government policy that can help you maintain, and improve, your leading position in the world.

Our government is now in the process of forming the research policy for the coming decade. It will be presented in a bill to parliament next year.

And we want input from the scientific community in our work to produce this strategy. This process is now starting. We have invited all universities, university colleges, academies and research funding organizations to give us their input. We think it is important to have a broad discussion about research. That is why we also welcome input from companies and organizations.

I have also appointed an advisory council, Forskningsberedningen, consisting of renowned scientists from different fields, who will give their input to our

work.

Following the advice from the scientific community and other stakeholders, we will develop the details in the coming research bill to parliament which we plan to present in 2016.

**And I wish to mention a few priorities that the Swedish government has identified for our new research policy:**

Research needs to be viewed as a long-term activity. That is why the new research bill will include a **10-year perspective**.

**Basic funding** to universities and colleges will have priority. The portion of institutional funds needs to increase.

**Working conditions for young researchers** needs to improve – for research as a whole to thrive, but also to make sure the best young talents choose a carrier in science.

**For Sweden to be a prominent research nation academia needs to be more gender equal – this enables both men and women to realize their full potential.**

The connection between research and higher education should be strengthened. This is important to raise the quality of education, and to inspire the next generation of top researchers.

The Government's goal is also to make higher education **available and accessible all around Sweden**. The Government will also work to **increase the quality** of higher education.

The Karolinska institutet is a very international institution with many students, graduate students and scientists from all over the world. This is contributing to the high quality that research and education have at Karolinska. This very is positiv, since the government's ambition is to increase internationalization of higher education.

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Regarding ICMC, I think it is a unique cooperation between academic research and industry.

I would like to see more collaborations of this kind. It is important that

publicly funded research is useful for society in many ways. It can be that by providing highly educated people through higher education, by new scientific breakthroughs - but also by cooperation between scientists and companies.

In times when the pharmaceutical industry is transforming, it is important that the academic sector is available as a source for knowledge transfer to industry. And as a place where industry can find world leading research in areas of interest for their R&D.

Life science is an area that has high priority for the Swedish government. There are many reasons;

- The demands from the health sector are growing – especially since a larger proportion of the population are elderly
- The life science industry has gone through a tough change and is more and more dependent on collaborations with academic science and health care providers
- The technical development has made it possible for different disciplines to work together in new ways

There are also specific challenges that need to be addressed within life science.

There is a need for funding mechanisms that lead to increased quality of research and that will support existing research in the best possible way. But they also need to create opportunities for the development of new areas and innovative methods.

Life science research also requires advanced equipment and research facilities. Creating access to such top-class research infrastructure requires national coordination and financing.

Other important challenges are how to better integrate basic and clinical research and how to stimulate entrepreneurship and innovation as well as collaboration.

Recently, the Prime Minister has launched an Innovation Council to strengthen Sweden's competitiveness and one of their highlighted areas is life science. I am a member of the council, and so far we have had two inspiring and productive meetings.

To that end, we have also recently appointed a national coordinator for life science, Anders Lönnberg. The coordinator will support the government's life science work, including overseeing a group of experts from various areas of the life science sector. The input from this group will help the government to improve competitiveness. This can include initiatives such as research and development programs.

Sweden has a long tradition of research and innovation in the life science area. Now we are taking it forward.

The collaboration between Karolinska institutet and AstraZeneca today is very welcomed by the government and we wish you great success with you future work!



Government Offices of Sweden

Speech from Ministry of Education and Research

# Speech at House of Sweden on arctic research

Published 20 May 2015 Updated 25 May 2015

Speech at at House of Sweden on arctic research, Washington D.C. 20 maj 2015 Check Against Delivery. Thank you for inviting me to participate in this inspiring Arctic event, at the beautiful House of Sweden.

It is a great pleasure to be here at this time - when our two countries are intensifying our collaboration in the Arctic. It is an area which is becoming more and more important. I believe that we need more of scientific cooperation to tackle the climate challenge and support the Arctic in the future.

Also, I wish to say that this event is very well timed now when the US is taking over the chairmanship of the Arctic Council.

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Sweden has research agreements with the countries we have identified as key nations in science and where we together can benefit from closer cooperation. None of these agreements are as active, and important, as the one with the United States of America.

It's no wonder this is the case - the US is the leading country in the world in most areas of science. Our science attaché back in 2001 actually made a study on US science that was suitably named "The envy of the world".

The American scientific community has no match in the world, not only by size, but also when it comes to quality and areas where science develops most rapidly.

Twenty years ago, more than 50 percent of Swedish scientific papers were written together with American partners. Now, only a third of Swedish papers are written with USA. The total volume of our collaborations has not decreased, but our cooperation with other countries has increased - especially within Europe.

I think the same holds for the US. The US and European scientific lead is challenged. New large research nations are emerging, like China, South Korea and India. And they are increasing their scientific production very fast.

In general terms, their increased investments in science are good for the world. The more science we do globally the more knowledge is created for the next generation of citizens. We need it to overcome our great challenges. But it is also hard to remain at the top when other countries are joining us there. And I believe that we have unused opportunities for more teamwork between Swedish and American scientists.

Also, investments in science are more important now when many countries have an economic downturn and little growth. This is the time to expand our knowledge base with increased investments in higher education and in research.

Right now, our government is in the process to define our research policy for the coming decade. During the past six years research investments at our universities has increased with more than 35 percent - but the investments are not delivering the full potential outcome. My view is that we need to gather our strength strategically

And I wish to mention a few priorities that the Swedish government has identified for our new research policy:

Research needs to be viewed as a long-term activity. That is why the next research bill will include a 10-year perspective. It will make it possible for the research community and universities to act more strategically.

Basic funding to universities and colleges will have priority. The fraction of institutional funds needs to increase. It is important for the ability to invest in new projects which – even if the outcome might be uncertain – have the potential of giving rise to breakthrough scientific discoveries.

Recruitment of young scientists must be improved in order to make sure the best young talents choose to stay in science. Now, young scientists can go

for years on short term employment not knowing if they will be able to get tenured. This discourages many of the best talents and that must change. This is also important for global collaboration and mobility. In this matter, we are looking into the US system - with tenure track and tenured positions as a possible model to build upon.

For Sweden to be a prominent research nation - academia needs to be more gender equal as this enables both men and women to realize their full potential. Since 1999 the number of female professors has increased from 12 to 25 %. Good, but not good enough. Therefore, we will work for an increase in the number of female professors. Also, our research funds must be awarded in an equal way.

The connection between research and higher education needs to be strengthened. This is important to raise the quality of education and to inspire the next generation of top researchers.

More priorities will come. And I believe that by the right investments in science, we can solve many of our problems and meet the climate challenge.

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We will continue to build strategic alliances in science cooperation. Our most important partner is, naturally, the US.

There is no other place where the best scientists of the world can come and get such opportunities to develop their ideas. It is no wonder that American scientists are awarded the most Nobel prizes. It is also noticeable that many of the laureates have their background from other countries and were once in their youth given the opportunities to settle as scientists at American universities. This shows the importance of international mobility - and of creating good working conditions for scientists.

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The agreement between the US and Sweden was signed in 2006. It has been a very active cooperation during the past almost 10 years. The first two years the US embassy in Stockholm and in particular the ambassador (Michael Wood) was the main driver with the (OBT) cooperation on renewable fuels. This resulted in an important deal (between DoE and our energy agency).

At the same time, another agreement was signed between our ministry of defence and department of homeland security on security issues. Both have been very successful. In addition to those two, we have also a number of collaborations between our funding organisations. All originating from the

overarching agreement.

My participation in this event is based on the discussion between our countries on a closer cooperation in Arctic research using the Swedish research vessel and ice breaker Oden. This is in good alignment with our priority on polar research.

We are increasing the funding for the polar secretariat directed at Oden so that we will be able to have yearly, or bi-annually, expeditions to the Arctic together with American scientists.

I am pleased that we now once again come together on Oden. We start with a joint expedition already in the coming summer 2015, with a follow up in 2017.

By joining forces our investments will bring us further. Funding from one of us might bring us to the Arctic ice front. But with funding from both our countries - we can spend more time doing research on location. And this matters.

In addition, the time our scientists spend together will open up opportunities to develop new projects and strengthen ties. By bringing scientists together, new unexpected science will develop.

Oden is a key to the Swedish high priority on polar research. No other vessel has this ice breaking capability together with scientific laboratories and equipment of the highest calibre. We hope it will serve us for at least another decade. But to be competitive in the long term, we must also look beyond the lifetime of Oden.

Our government will in the coming year initiate a study on the next generation polar research vessel - with the aim of having a new ship in operation from around 2030.

The outcome of the discussions during these days is one way for us to understand the need for the coming years, with Oden and beyond – and it opens up the possibility for long-term cooperation in polar research.

The first step is taken already this year with the agreement today between NSF and our Polar secretariat on a joint expedition this coming summer. Let us now continue the work together for the Arctic.



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Speech from Ministry of Education and Research

# Inspiring new generations – science policy and public engagement

Published 15 April 2015 Updated 17 May 2015

## Speech at Forum for Research Communication - London Calling!, Gothenburg 15 april 2015

Thank you for inviting me here today. I believe that the topic for this seminar is of high importance for both science and our society. And it is nice that we also have the opportunity to listen to our colleagues from London.

I would like to start with some words on Swedish research. The Swedish government is committed to continue the important public investments in research.

And now, we are starting the work on the next research bill.

To remain competitive in the future, Sweden needs to recruit the next generation of scientists. This is of high importance for the government.

Some areas we are already highlighting are how to give young scientists good working conditions - and how to make science more gender equal.

But our future as a research nation is also depending on how the university sector and its researchers engage with, and communicate with, the rest of society.

And our continued investments in research need to build on the confidence in research among the public. According to the SOM surveys conducted by University of Gothenburg, the Swedish people have a stable and high confidence in Swedish scientists – about 64 % state that they have high confidence in researchers – which is a higher figure than for most other

professions, (such as teachers, engineers, economists and journalists).

So scientists are truly popular!

And in general, Swedes also have a positive image of science and believes that research makes a very positive contribution to our society.

But this can never be taken for granted. Trust and confidence can be easily lost. A slightly worrying trend for instance is that the confidence in science has decreased somewhat in the last ten years. And for many governments, it is not possible to invest in research in these times.

But through science communication and public engagement – we can involve a larger public in the discussion about research and science. And build confidence.

I also want to say some words about the power of inspiration.

We need to encourage our children to become interested in science, to study and maybe to later on choose research careers.

Many studies actually support that the basis for becoming a university student and developing an interest in research is based on developing a strong foundation already in primary school.

Therefore, we need to give our children a solid knowledge foundation at an early age. And we need to inspire them so that they might become interested in choosing science and research when they become older.

Many anecdotes tell us how individual scientists – including Nobel Prize laureates – first developed an interest in science through an especially inspiring teacher. Children are curious, experimenting and eager to learn, and we need to support this in our schools.

Clearly there can be many different ways to achieve this. To encourage children's interest in science - they can be allowed to become researchers themselves in the classroom. They can perform suitable and real experiments, or collect information for scientific projects. In this way, teaching does not need to rely only on one-way communication of information. Instead, it can show children at an early age that they themselves can be active participants in a research process. And that it can be fun!

Public institutions can also participate in this. The Nobel museum for example, offers courses where school classes to test being part of simple research processes. And many other museums offer similar learning experiences for children.

There is actually one other factor to consider when asking how to inspire young persons to become our scientists of the future. Young people need to feel that it is important and exciting to be a scientist! They need to learn that scientists are normal persons - with extraordinary jobs.

But most important, the inspiring teacher in school is often the person who can most strongly inspire our children to become interested in science and research. Therefore, teachers need to be in contact with current research. This of course, is part of the larger context of improving the Swedish school experience.

When it comes to public engagement, Sweden has already created some legal support for this task, through a clear legal requirement.

This is important, but nevertheless some work remains.

For example: does it really have a positive merit value for university staff to engage in such activities of public engagement? Or do university promotion boards sometimes regard such public engagement as distracting activities from research?

These are all issues that we need to look into when we ponder upon the next research bill.

I also believe that individual researchers can do many things to participate in public engagement.

For example, they can choose to publish newspaper articles, discussing their research. They can participate in science festivals, or work with museums that exhibit scientific work, or participate in public lectures and discussions.

Universities as organisations can also do a number of things to ensure that they engage with the public. Their key strategy documents can be formulated so they stress the role of public engagement.

Universities can formulate policies so that staff is valued and promoted for their public engagement activities. And universities can give training and support to individual academics.

Our government values and encourages public engagement by scientists.

Sweden is a strong research nation today, but it can grow even stronger if it encourages increased public engagement. It is as important for universities to engage with the public - as is it to get the public to engage with the universities.

Thank you for inviting me!



Government Offices of Sweden

Speech from Ministry of Education and Research

# Research as co-operation at home and abroad

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Your Royal Highnesses, your Excellences. Teachers and staff, dear students.

First, I would like to take your time and, on behalf of the Swedish government, express our sincere condolences for the tragic school shooting that took place the other day.

I thank my colleague Mr. Ossinovski for his excellent speech. I am grateful for this opportunity to share with you some of my views on the links between education, research, and scientific discovery. I am especially content that one of my first travels as a minister of the newly elected Swedish government has been to Estonia. Already, two of my colleagues in government, Prime Minister Stefan Löfven and Minister of Foreign Affairs Margot Wallström, have visited Estonia. I need not remind you of the extraordinary historical links between our countries. As made evident by these recent visits, those links remain to this day, closer now perhaps than ever.

Today I wish to talk about how we aim to ensure that Sweden stays competitive in a fast-changing, interconnected world. How we can prosper and make life better for our citizens, while at the same time facing up to some of the most pressing challenges of our times. And how this requires a sustained effort involving all parts of society, as well as close co-operation with other countries.

Research and higher education is becoming increasingly internationalised. Student mobility, research collaboration, and co-publishing is now part of everyday life at universities both in Sweden and Estonia. Tartu University alone has entered into bilateral agreements with partners in 26 different

countries, including Sweden.

Mobility for students and researchers is something my government is keen to encourage. There are already many great programs in place, both at the EU level, among the Nordic and Baltic states, and bilaterally. These have to be used to their full potential. There is scope for a far greater flow of people between our countries. This would contribute to the quality of research and education. It would also enhance cultural understanding.

When Tartu University was founded in 1632, higher education was a privilege reserved for a select few. Today higher education is a right for all Swedish citizens. Everyone should be given equal opportunity to progress to higher education - regardless of class, ethnicity, gender, or sexual orientation. It is essential to combat these disparities in access to education wherever they arise. I will return to this subject in a minute.

As Mr. Ossinovski mentioned in his speech, right now two research infrastructure projects are under way in Lund in the south of Sweden. One is the European Spallation Source, the ESS. When up and running, it will generate neutron beams that will enable scientist to study the structure and function of different materials. The other major project in Lund is the extension of the MAX IV facility. The MAX IV makes possible the study of extremely small details in materials, through the use of intense X-ray. Both structures will be of great value to scientists from all over the EU. Estonian scientists, including some from this very university, have a long history of contributing to research at the MAX IV.

Both structures also represent big financial undertakings which no single European country is capable of in these trying economic times. That is why Sweden greatly appreciates the contributions made by Estonia and other member states in order to make these important projects happen. Pan-European projects such as these, and investments in research and development more generally, will be paramount in ensuring our future competitiveness as well as economic recovery.

Sweden of course has a long and proud history as a nation of innovation. Of great scientists and groundbreaking discoveries. This tradition is perhaps best exemplified by the Nobel Prize. In December each year we celebrate the best minds, those men and women - although mostly men - who, in Alfred Nobel's famous words, "during the preceding year [&] have conferred the greatest benefit on mankind". It is a proud moment for every Swede.

But as you all know, research is always teamwork. In the sense that we as a society make these efforts possible through our commonly funded schools and universities. We put the right infrastructure in place. We create the right environments for research to thrive and generate new knowledge. We educate and encourage our children to become critical, creative, and reflective. And we do this in order for them to reach their own full potential as human beings. But also because such citizens are the single most important resource for a society that is looking to prosper and develop in tomorrow's globalized world.

We provide day-care centers, making it possible to combine family life with being a dedicated researcher. This is especially important in our efforts to make academia more gender equal. My government has set itself the task of increasing the number of female professors at Swedish universities. Though the numbers are moving in the right direction, they are moving much too slow. More women than men take part in undergraduate studies. But only one in four professors in Sweden are women.

This obviously represents a significant loss for the educational institutions. They fail to recruit the best minds to their faculties. But greater equality also requires appropriate support from outside academia. We must take a holistic view of these issues. We need to think about how all of society can be better geared towards encouraging both men and women to take up careers in research on equal terms. Hopefully we can expect many more female Nobel laureates in the future. Both from Estonia and from Sweden.

Yesterday, I had the pleasure of taking part in a seminar at this year's Sustainable Development Forum, hosted by the Stockholm Environment Institute. Estonia has taken the important decision to put issues pertaining to the Baltic Sea front and center, through declaring 2014 the Baltic Sea Year. Work done in for example the Council of the Baltic Sea States and the Baltic Marine Environment Protection Commission deserves wider recognition and support.

The seminar covered different aspects of maritime environmental and development issues. Listening to the scientists, officials, and other actors involved, the scope of our challenge became clear. But also the opportunities presented by a joint, focused effort. The Baltic Sea is such a clear example of the necessity, as well as benefits, of scientific co-operation in the environmental field. These challenges know no national borders. Nor can we in our search for solutions.



To close, I would like to sum up some of the main points of what I have touched upon earlier. Small, open countries such as ours have every opportunity to continue to prosper in the world of tomorrow. But we will need to make the right choices. We will have to continue to co-operate. Both bilaterally and through different fora such as the EU and around the Baltic Sea.

We also have to make sure we get the foundations right at home, nationally. By this I mean putting the enabling infrastructure in place. Making sure society as a whole contributes to scientific excellence and the production of new knowledge. Great research environments are about more than just our universities and laboratories. It has to involve all parts of society. And each citizen should be considered a potential scientist.

Thank you for your time.