

# The Danish Council for Strategic Research

For smaller countries, focusing on national research strengths can be pivotal in order to impact at a global level. Seeking out these strengths, Council Chair, **Peter Olsen**, talks about strong choices and honed planning

**Could you summarise the mission of the Danish Agency for Science, Technology and Innovation and explain the main aims and objectives of the relatively newly formed Danish Council for Strategic Research?**

The Danish Agency for Science, Technology and Innovation is an institution under the Danish Ministry of Science, Technology and Innovation. The agency has two main aims: firstly, to offer advice and expert knowledge to the Danish political system on questions related to research and innovation; and secondly, to fund public research. In order to do the latter, the agency functions as secretariat to the Danish Council for Independent Research, the Danish Council for Technology and Innovation and the Danish Council for Strategic Research - three councils funding public research and innovation, with a variety of foci. The Danish Council for Strategic Research funds research that addresses major societal challenges facing Danish society and which will potentially contribute to increased economic growth and/or welfare. It is the Danish parliament that chooses which challenges the Council should address.

**What are some of the strategies you plan to employ in ensuring research in Denmark meets the challenges facing Danish society?**

One example is Denmark's commitment to the goal of becoming fully independent of fossil fuels in 2050. This sets a very ambitious aim for Danish research communities and will influence the priorities of the different communities in the years to come.

**By what means are you promoting international cooperation in research, including cooperation with new high-growth countries?**

The Council promotes international cooperation in a range of ways. First and foremost, the Council favours international cooperation in grants awarded; accordingly, more than half have international participation. Secondly, the Council represents Denmark in the European Joint Programming Initiative, and we are active in ERA-nets and various Nordic research collaborations. Finally, the Council promotes international cooperation with India and China through bilateral joint calls for proposals. In 2010, approximately 2 million euros is offered for a joint call with the Indian Department of Biotechnology and approx 12 million euros is offered in cooperation with the Chinese Ministry of Science and Technology. The first calls with China and India were launched in 2009.

**How are you strengthening the interaction between publicly financed research and the rest of society, such as privately financed research, private organisations, public institutions and the corporate world?**

The interaction between these different sectors of society is of major importance to the Council and is promoted by focusing on problem-driven research. The focus on solving a given problem brings together

various interests across different sectors. Grants awarded by the Council are normally characterised by having a strong involvement from the users of the research, eg. public institutions and/or the corporate world. The users are important because they can drive the research towards a high degree of applicability.

**What impact does research education have on the development of research environments in Denmark?**

The mere fact that new generations of researchers are trained secures Denmark in continuing to have a vibrant research environment. Moreover, some of these researchers will be educated in the multidisciplinary, problem-driven environment that characterises strategic research. This can hopefully influence the future Danish research environment. The Council gives about 50 per cent of its funds to research education.

**Established in 2004 as an innovation within the Danish funding system for research, what has the Council facilitated thus far?**

The Council has funded a very broad range of research projects. These have contributed significantly to solving various challenges facing Denmark, such as the need for sustainable energy, as well as healthier food products and dietary habits. With regard to awarded grants, the Council has, over the years, succeeded in raising the size of grants and international cooperation. Moreover, the Council has been successful in influencing the Danish debate on research by underlining the importance of multidisciplinary approaches, international cooperation and user-involvement. The Council has also helped the Danish public realise that there is a need for prioritising funds to research. Denmark is so small that it is impossible to have world-class scientific communities in a broad range of research areas: we need to pick the winners. The Council has helped facilitate this debate.

**To what extent will the Council contribute to ensuring Denmark's research is a global frontrunner regarding welfare, wealth and science in the short- and long-term?**

I will point out two areas where the Council has an important role to play. Firstly, the Council will continue supporting global exchange of knowledge and innovation. The Council is already engaged in various international partnerships and this type of cooperation will be strengthened. Secondly, the Council has an important role to play in ensuring that research is applicable and addressing societal needs. One way of doing this is supporting the SPIR initiative (Strategic Platforms for Innovation and Research). The intention with the initiative is to create the basis for a partnering model in which industry and enterprises participate in both the planning and execution of the platforms' activities jointly

with universities and other institutions. So we will always try to ensure that the generated research is useful.

**Strategic research must always take place in a problem-orientated context, not a discipline-orientated one. How is the Council embracing a multidisciplinary approach?**

First of all, members of the Council are drawn from a broad range of academic disciplines. This means that all debates in the Council are multidisciplinary from the very outset – plus, the multidisciplinary approach is driven by the problem-orientated context. The focus on a given problem allows the participants to be evaluated in relation to how their specialised knowledge contributes to the solving of that problem. The quality of awarded grants is secured by fierce competition, as 85 per cent of the applications are not successful.

**What are some of the Council's research themes for 2010 and how wide-ranging are they?**

In 2010 the Council has calls for proposals across a broad range of research themes, eg. 'Connection between food, health and lifestyle' (15 million euros); 'Energy Systems of the Future' (36.5 million euros); 'Health and Prevention' (8.5 million euros); and 'Education research and Post-vocational degree occupations' (3.5 million euros). The awarded grants in 2009 show that a challenge such as sustaining and improving the quality of food can be addressed from a wide range of perspectives.

**Why is the dissemination of research so important for today's scientists?**

It is vital, simply because there are so many great scientists around the world. Today's scientist can advance his or her scientific work immensely by integrating work from colleagues elsewhere. It is also important because one's research quickly and efficiently needs to reach the users. This is becoming an important factor for private and public innovation – both of which are important to global competition. Moreover, in the face of the challenges that our societies are facing, it is important to utilise all available research; we have an obligation not to allow knowledge to lay dormant.

**Where do you see the Council in 10 years and what do you hope to see in the future?**

I hope to see the Council centrally placed in the Danish scientific community and I hope this community has developed in three important ways. The international exchange of knowledge is monumental to the success of Danish academia: we have to improve in this aspect. Not only this, the Danish scientific community should improve in relation to the applicability of knowledge, with research used in better ways. Finally, I would like to see Danish research becoming more specialised and focused. We have global frontrunner positions in areas such as energy, food and pharmaceuticals. These positions should be sustained and extended by prioritising the funds allocated to these areas.

**Is there any other aspect of the Council's work that you would like to discuss?**

I am very pleased that the Council promotes integration and cooperation in the Danish research world. Often, the different universities, research institutes and individual researchers are in fierce competition. However, strategic research promotes cooperation, as the awarded grants bring together researchers at different institutions. I am confident that this will help accelerate private and public innovation processes needed to drive the future competitiveness of Danish society.

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