

The Novo Nordisk Foundation awards DKK 235 million for stem cell research

Press Release, 23 November 2015

The Novo Nordisk Foundation has awarded a grant of DKK 235 million (€31.4 million) for the Novo Nordisk Foundation Section for Basic Stem Cell Biology at the University of Copenhagen to strengthen and expand the Section's activities.

The Section focuses on understanding how organs and tissues form during fetal development, and how they are maintained in homeostasis, investigating the role of stem cells in these processes and how their aberrant behavior can explain disease such as cancer and diabetes.

Research topics of the Section include how to induce stem cells to differentiate into certain types of cells, including insulin-producing beta cells, and the specific role of cancer stem cells in developing different types of cancer.

The new grant allows the Section to invest in state-of-the-art technologies related to single cell analysis and bioengineering as well as to strengthen existing technology platforms, to launch new research fields, including pancreatic cancer, and to recruit new key personnel.

"This grant will enable us to continue to position the center internationally as a leader in basic and translational stem cell research in the diabetes and cancer areas," says Professor Henrik Semb, Executive Director of the Section.

"It will enable us to develop new technologies for the study of individual cells. We will explore how the cells interact via chemical and mechanical signals to establish the necessary developmental programs to control stem cell behavior during organogenesis in the embryo and tissue homeostasis in the adult," he adds.

Established in 2010 by a grant of DKK 350 million (€46.8 million) from the Novo Nordisk Foundation, the Section is part of the Novo Nordisk Foundation Research Centre Cluster comprising four large research centres and the Danish National Biobank. The purpose of establishing the cluster is to make Greater Copenhagen an international beacon within bioscience.

Birgitte Nauntofte, CEO of the Novo Nordisk Foundation says: "Under the skilled leadership of Professor Henrik Semb, the Novo Nordisk Foundation Section for Basic Stem Cell Biology has rapidly developed into a world-class research centre producing

research with a high international impact. The planned expansion and investments are essential to further develop and position the Section as a global leader within the competitive field of stem cell research. In this way, the Section is contributing to making Greater Copenhagen an international beacon within bioscience.”

About stem cells and basic research

Pluripotent stem cells can develop into almost any type of cells in the human body, such as brain, blood and skin cells.

Because many serious diseases result from conditions in which cells are absent or malfunctioning, considerable therapeutic potential can be harvested if researchers can understand and mimic the development from stem cells into specialized cells.

About the Novo Nordisk Foundation Section for Basic Stem Cell Biology

The Novo Nordisk Foundation Section for Basic Stem Cell Biology was established in collaboration with the University of Copenhagen on the basis of a 10-year grant of DKK 350 million (€46.8 million) from the Novo Nordisk Foundation in 2010.

The Section is one of two sections of the Danish Stem Cell Center (DanStem). The Section conducts basic research within developmental, stem cell and molecular biology. It currently has 120 employees. The ambition of the Section is to generate knowledge that will form the basis for developing more targeted and efficient therapies for diabetes and cancer. Professor Henrik Semb is the Executive Director of both the Section and the Center.

DanStem’s other section, the Section for Strategic Translational Stem Cell Research and Therapy (TransStem), is supported by the Danish Council for Strategic Research and industry partners. TransStem’s overall aim is to translate promising new research results into the active development of new therapies.

<http://danstem.ku.dk/>

About the Novo Nordisk Foundation

The Novo Nordisk Foundation is an independent Danish foundation with corporate interests. Its history goes back more than 90 years.

The objectives of the Foundation are:

- 1) to provide a stable basis for the commercial and research activities of the companies in the Novo Group; and
- 2) to support scientific, humanitarian and social purposes.

The vision of the Foundation is to contribute significantly to research and development that improves the health and welfare of people. Since 2007, the Foundation has donated more than DKK 6 billion (€803 million), primarily for research within

biomedicine and biotechnology at universities and hospitals in Denmark and the other Nordic countries. The Foundation supports the entire research chain – from education to innovation.

www.novonordiskfonden.dk

About the Novo Nordisk Foundation Research Centre Cluster

The Novo Nordisk Foundation Research Centre Cluster comprises four large research centres and a national biobank.

The cluster centres are: The Novo Nordisk Foundation Center for Basic Metabolic Research, the Novo Nordisk Foundation Center for Protein Research, the Novo Nordisk Foundation Section for Basic Metabolic Research, all located at the University of Copenhagen, as well as the Novo Nordisk Foundation Center for Biosustainability at the Technical University of Denmark and the Danish National Biobank at Statens Serum Institut.

Since 2007, the Novo Nordisk Foundation has awarded close to DKK 3.5 million (€469 million) for the establishing and operating cost of the Cluster.

Further information:

Christian Mostrup Scheel, Press Officer, Novo Nordisk Foundation, mobile: +45 3067 4805, e-mail: cims@novo.dk

Naomi Dayan, Project Coordinator, The Danish Stem Cell Center, University of Copenhagen, mobile: +45 2364 9098, e-mail: naomi.dayan@sund.ku.dk