



The Capital Region
of Denmark



World-class cardiovascular research

The Cardiovascular Research Center at Gentofte Hospital is a highly active research environment with many notable research findings under its belt. The idea is to build on this trend, preferably in cooperation with the pharmaceutical industry and other private and public actors.

Experts used to differ greatly on the extent to which patients with kidney disease who suffer from arterial fibrillation should or should not be administered anticoagulants. Kidney disease increases the risk of this treatment being more harmful than beneficial. However, in 2012 the Cardiovascular Research Centre at Gentofte Hospital published a study in the *New England Journal of Medicine* indicating that patients would gain so much from the treatment that the increased risk is offset by the benefits.

This is just one of several studies from the centre that has attracted the attention of experts in most parts of the world. Senior Consultant Professor Gunnar Gislason states two reasons for its major results:

“The centre generally works at an incredibly high level. At the same time, our registries in Denmark invite precisely this type of research looking into the effect of a specific treatment and any unwarranted side effects. In this respect we’re in a strong position in Denmark, and this is also reflected in our research findings.”

Large, randomised studies

Gislason and his colleagues also published a study earlier showing that patients with artificial heart valves benefit from treatment with anticoagulants over 3-6 months. Experts used to differ considerably on this issue too.

Nonetheless, researchers at the Cardiovascular Research Centre do not work exclusively with register-based studies. They also conduct large-scale randomised, clinical trials in conjunction with industry. And they aim to strengthen this dimension in the future. Of course, as Gunnar Gislason points out, they will also certainly carry on working with register-based studies.

“There’s a lot of exciting work ahead, and the real challenge is to keep up the pace and to secure the necessary funding for further work,” he says.

International opportunities

“Owing to our research and the opportunities afforded by Danish registries, we’re interesting partners for our colleagues abroad. As a result we’ve built up a large international network of contacts, including with a number of American universities,” says Gunnar Gislason and continues:

“This is an important position to maintain, since it enables us to send, in particular, younger researchers out into the world, where they acquire new skills and receive personal and professional input which benefits our research back here when they return home.”

The network also enables researchers to perform studies which would otherwise be impossible, and which have an impact on basic knowledge about heart disease.

“We’re currently collaborating with Duke University in the US, conducting two identically designed parallel studies on cardiac arrest. It will be interesting to see whether we get the same results in the two countries. If not, we obviously have to investigate the cause of the discrepancies,” says Gunnar Gislason.

Cardiovascular Research Centre at a glance

The centre is situated at Gentofte Hospital and has a large staff of senior researchers, PhD students, scholars and research nurses, as well as two professors from the University of Copenhagen. The centre’s high research output yields over 100 scientific articles published in international journals every year. The centre won a Global Excellence award in 2011.



Professor Gunnar Gislason, Cardiovascular Research Centre, Gentofte Hospital

Facts about Global Excellence – in Health

The Global Excellence programme seeks to recognise and highlight the leading research and therapy environments in the field of healthcare in the hospitals and universities of the Capital Region of Denmark. The programme was established in 2010 in close cooperation with the University of Copenhagen and The Technical University of Denmark (DTU). The purpose of this initiative is to encourage internationalisation of the Region's excellent research and therapy environments with a view to attracting international partners, researchers, talents and both private-sector and public funding for research. The programme comprises the awarding of one or two prizes each year, followed up with focused support in the form of consultancy, tools, website development, conferences, etc.

The Global Excellence award is given to the hospital and university environments in the region that perform first-rate international level research leading to the development and implementation of new, pioneering healthcare services, treatment methods and products for the benefit of patients. The selected Global Excellence environments have been chosen by the executive committee of the Capital Region of Denmark on the basis of evaluations by a specialist review committee of national as well as international experts. The awardees are characterized by unique efforts within one or more areas such as: The extent and quality of their research and development, teaching, examination and treatment of patients, and innovation and dissemination of the new knowledge. In addition to the Global Excellence distinction, which is valid for a period of five years, the awardees each receive a grant of EUR 200,000 to help strengthen and further their international profile.



Facts about the Capital Region of Denmark

The Capital Region of Denmark is one of five regional administrative units in Denmark. The Capital Region of Denmark, provides healthcare, mental healthcare, carries out research and regional development for 1.7 mio. people or approx. 30% of the population in Denmark. In addition to hosting the largest health care system in Denmark, the region is also home to one of the world's strongest life science clusters, and 70% of Denmark's biotech companies are located in the area.

The Capital Region is home to a number of specialist environments at the nine university hospitals in the region that perform world-class health research and have the ability to translate this new, innovative knowledge into pioneering health care services and treatment of the highest international standard. In order to highlight and acknowledge these environments, in 2010 – 2013 the Global Excellence – in Health award has been presented to a total of 22 hospital and university environments.

Denmark is in fourth place among the OECD countries regarding scientific publications per inhabitant and similarly in third place regarding citations. Accordingly health research in the Capital Region ranks among the best in Europe. In close collaboration with the University of Copenhagen, The Technological University of Denmark, the Capital Region of Denmark represents frontline health science and clinical research, together with research of high quality in other areas with relevans for development of future healthcare. Health research is carried out for approx. EUR 185,000,000 annually at the university hospitals in the region (including internal as well as external funds).

Sources: OECD Territorial Reviews: Copenhagen, Denmark (OECD, 2009); Research Barometer 2012 (Danish Agency for Science, Technology and Innovation, 2012)

