

Annual Highlights

2020 has been a year of global disruption. International travels have ground to a halt, and we have been forced to work from home during lockdown. Face to face conferences and seminars have been cancelled or converted to zoom meetings. Despite the pandemic, my team has been able to meet our goals during the fourth year of the Niels Bohr Professorship, with several landmark publications during 2020.

In 2020 we published our first papers related to the WHO Global Burden of Disease Study. This group of studies is, by far, the most influential set of analyses undertaken in health research. In an invited editorial in the Canadian Journal of Psychiatry, we outlined the need for better ways to measure the burden of mental disorders, and made recommendations for future studies. We have since published the first analysis of premature mortality associated with mental disorders based on both the traditional method and a new one developed by our group and Danish collaborators. Building on our landmark paper in the Lancet related to premature mortality, we provide estimates for each type of mental disorder. This work is progressing well, and we have recently had a paper related to the non-fatal burden of mental disorders accepted in the prestigious Lancet Psychiatry (IF = 16.09). This is a landmark for the field, and we are very proud of these developments.

Despite major setbacks related to COVID-19-related closures, our team at Statens Serum Institut has now completed a suite of vitamin D-related studies based on 84,000 samples. This is one of the largest ever studies of biomarkers in neonatal blood samples, and we expect to contribute several publications in the next 6-12 months.

One of the main areas of research for the Niels Bohr Professorship has been comorbidity (i.e. the presence of more than one type of health disorder). We were very proud to publish our analysis of the association between mental disorders and general medical conditions in the top medical journal, the New England Journal of Medicine (Impact Factor = 74.699). We have also linked comorbidity within mental disorders and subsequent mortality – published in the top-ranked psychiatry journal World Psychiatry (Impact factor = 40.595).

Our genetics team, led by Bjarní Vilhjálmsson, has had a productive year in 2020. He was joined by Dr Zhihong Zhu, who previously worked at the University of Queensland with our Brisbane-based co-investigators Professor Peter Visscher FRS and Professor Naomi Wray. Our vision has been realized, that this new team would attract ongoing funding and cross-link with many different groups in Denmark and internationally. With this strategic investment, we believe that Denmark can make a major contribution to the modern synthesis of genetic discoveries and psychiatric epidemiology.

As we approach our final year of the Niels Bohr Professorship, our investment in capacity-building has been rewarded with promotions for our staff. Two members of our team were promoted - Dr Oleguer Plana-Ripoll was promoted to Senior Researcher and Dr Bjarní Vilhjálmsson was promoted to Professor. Oleguer and Bjarní have also been awarded highly-competitive Fellowships – a Marie Skłodowska-Curie Actions Global Fellow and a Lundbeck Fellowship respectively. This augurs well for the sustainability of the research established as part of the Niels Bohr Professorship.

Illustration for the short summary:

Legend: Our research related to comorbidity between mental disorders and somatic disorders was accompanied by educational material in English and Danish.

