

## Annual Highlights

This annual report will provide a concise summary of our research during 2020 and also comment on the achievements of the entire 5 years of the Niels Bohr Professorship.

The last year has seen continued disruption due of COVID-19, with periods of working from home, and disruption to travel. In addition, our staff and their families have had periods of sick leave and quarantine because of the pandemic. Regardless, I am pleased to report good progress over 2021 and we are on track to complete the key objectives for the Professorship by the end of April 2022.

The first of our PhD students graduated in August 2021. Dr Nanna Weye pioneered work related to the WHO Global Burden of Disease Study. These studies examined how best to measure premature mortality associated with mental disorders, and also how to capture the non-fatal burden of disease. Nanna's final paper (currently under review) linked our comorbidity work associated with general medical conditions and the burden of non-fatal disorders.

Another PhD student (Maria Christensen) has submitted her thesis in February 2022. In 2021 Maria Christensen completed key parts of her research related to the economic impacts of mental disorders. A detailed systematic review was published, and a person-level analysis of the costs of mental disorders is now under review. In keeping with our tradition of making our findings accessible and available to the wider community, we have also developed an interactive data visualization site <https://nbepi.com/cost>

I am most proud of the contribution our team has made to understanding patterns of comorbidity related to mental illness. This complicated body of research has been completed on schedule, and has resulted in several high-impact publications (New England Journal of Medicine, Impact Factor = 74.699; World Psychiatry, Impact factor = 40.595). Our team is pleased that the methods developed as part of the Niels Bohr Professorship are now being used by the wider research community. Some of these 'spin-off' have recently been published.

The studies based on samples from the Statens Serum Institut) are on track to be completed in the next few months. The analysis (based on four biological variables measured in 84,000 samples) is well advanced.

Our genetics team, led by Bjarni Vilhjálmsson, continues to prosper. Bjarni was promoted to Professor and was awarded a Lundbeck Fellowship in 2020. Our original vision, that this new team would attract ongoing funding, has been realized. We believe that this group will make important contributions to the modern synthesis of genetic discoveries and psychiatric epidemiology.

**Illustration for the short summary:**

Legend: Our research related to health metrics was accompanied by educational material in English and Danish.

