Annual Highlights

The focus of our research is Psychiatric Epidemiology. Epidemiology is the study of the distribution of diseases across place and time. By examining where and when diseases occur, epidemiologists can define the *burden of diseases* in society and generate clues as to what *factors might cause disease*.

The 'holy grail' for epidemiologists is to find preventable causes, and then to use safe and cheap public health interventions to reduce the burden of disease. We have evidence that low vitamin D (the sunshine hormone) during early life may disrupt brain development, and leave the affected offspring at an increased risk of autism and schizophrenia. With the support of the Niels Bohr Professorship, we are studying this hypothesis in a large new study linking Aarhus University with the Staten Serum Institut. In 2017 we appointed Dr Sanne Grundvad Boelt to coordinate this project.

Danish researchers have made major contributions to our understanding of psychiatric epidemiology. The aim of the Niels Bohr Professorship is to cross-link senior Danish researchers with *preeminent international research groups*; (a) one of the world's leading statistical genetics groups (Peter Visscher, Naomi Wray – University of Queensland), (b) the influential Mental Health and Substance Use Disorders Team within the Global Burden of Disease project (Harvey Whiteford, University of Queensland and University of Washington), and (c) the prolific WHO World Mental Health Survey Initiative (Ron Kessler, Harvard University).
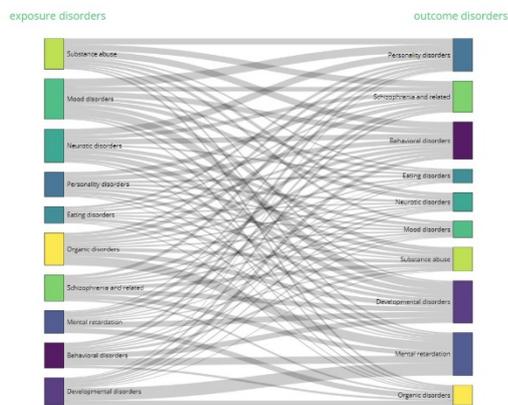

Figure 6 : Sankey diagram showing the general flows between Disorder Groups.

In 2017 Dr Oleguer Plana-Ripoll commenced a large project looking at comorbidity within mental disorders. The aim of the current study is to undertake a comprehensive study of comorbidity within pairs of mental disorders in a fashion that can guide future research and clinical practice. We have examined a population-based cohort study including all individuals born in Denmark and living in the country during the study period and followed up for 83.9 million person-years. Danish health registers were used to identify mental disorders. This project builds on research undertaken by the World Mental Health Survey. We will explore the same research question in both Danish registers and mental health surveys from over 30 countries around the world.

Mental and substance use disorders are the leading causes of global disability. In 2018 we will commence work on the burden of mental disorders in Denmark. We have recently appointed two PhD students to examine this research question, and we run a training workshop and symposium mid 2018. The results of this research and the comorbidity project will be made widely available on an interactive data visualization website.

Finally, John McGrath was awarded the prestigious Erik Stromgren Medal in November 2017. This was in recognition of his contribution to psychiatric research