

Aarhus Genome Center - *i*SEQ seminar series on Precision Medicine

Thursday 1 February 2018 at 10.00 – 11.00



Professor Gerome Breen, King's College London.

Talk:

The genetics of depression: exploring the role of traumatic environments while trying to find new drugs and targets.

Abstract:

Exploring both the environmental and genetic risk factors for depression is essential if geneticists and epidemiologists can contribute to the improvements in healthcare for depression. We are conducting genetics analyses of depression in UK Biobank on <157K people who have completed a standardised questionnaire on common mental disorders that included 26 childhood and adult trauma items. I will present on the heritability of depression in cases who did and did not experience severe trauma (such as abuse and domestic violence) as well as their implications for genetic correlations. Turning to trying to find new drugs and targets from GWAS data, we have analysed the recent PGC2 MDD data, which found 44 loci for major depression, and find a significant enrichment for the targets of known antidepressants. Further analyses reveal several interesting drug classes and known drugs with significant associations. Finally, I will explore visualisations of the data and the implication for new therapeutic development.

Biosketch:

I am a Reader in the MRC Centre for Social, Genetic and Developmental Psychiatry at the Institute of Psychiatry, Psychology & Neuroscience, King's College London and theme lead (unit leader) at the NIHR Biomedical Research Centre (BRC; a type of large translational medicine centre, focused solely on psychiatry) for Mental Health and the South London and Maudsley NHS Trust. I am originally Irish and, whilst it will be a great pleasure to visit Aarhus, I would like to emphasise that I am not coming to Denmark to talk about football. My research focusses on the genetics mood and eating disorders with strong interests in translational bioinformatics with over 200 publications in psychiatric genetics.

Venue:

Eduard Biermann Auditory, The Lakeside Theatres, Aarhus University, Bartholins Allé 3, 8000 Aarhus C.