

## **Proposed Project 1 (Supervisors M. Cannon and D. Cotter):**

### **Examining the longitudinal associations between early life adversity and psychological symptoms in young people and the role of inflammation**

**Objectives:** This PhD project will investigate the role of early life adversity and inflammation as risk factors for mental health problems in young people in two population based cohort studies.

#### **Methods:**

Data from 2 unique population-based longitudinal studies will be used.

1. *Growing Up in Ireland Study* : the *Growing Up in Ireland Study* ([www.growingup.ie](http://www.growingup.ie)) will be used to identify the types and timing of stressors association with psychological symptoms, as measured using the Strengths and Difficulties Questionnaire (SDQ), at age 9, 13 and 17. This large, government-funded cohort study has extensive data on early childhood conditions, and adequate statistical power to allow analysis of many types of stressors in relation to psychological symptoms and mental disorders in adolescence. A total of 8,570 9 year-old children, were successfully recruited for the first wave of the cohort. For Wave 2 at age 13 there was a 90% response. A further follow-up of the cohort at age 17 has just been completed.
2. *The ALSPAC cohort*: is an internationally renowned general population cohort of 14000 young people from the UK. It is a rich resource of demographic, environmental, and clinical data on the individuals involved and also has collected biological samples which allows examination of molecular risk factors within an epidemiological context (<http://www.bristol.ac.uk/alspac/researchers/access>). We will study a nested case control sample of the AL SPAC cohort . Our focus will be on young people who report psychotic symptoms or depressive symptoms compared with controls at each time point -age 11, 18 and 25.

**Analysis:** Regression techniques and growth curve modelling will be used to test the association between abnormal SDQ scores, and stressful life events controlling for relevant confounders. Quantitative data on inflammatory markers will be available from the ALSPAC study and this will be analysed in relation to early life adversity and mental health outcomes.

This PhD project will allow training in psychiatric and molecular epidemiology and will give an excellent grounding in statistical and epidemiological research methods using two excellent datasets.

#### **Target trainees**

Suitable for either “typical” PhD or health professional psychology or medical or social work graduates