

### **R-003 A pilot study to assess the influence of early life events on future risk of development of inflammatory bowel disease – SHSCT + QUB**

Inflammatory bowel disease (IBD) is believed to result from an abnormal immune response to normal gut bacteria, leading to uncontrolled inflammation and damage to the gut. The fetal gut is sterile but bacteria begin to inhabit it immediately after birth and this process is influenced by several factors including mode of delivery, infant diet, and hygiene levels. Since both gut bacteria and a defective gut immune system are involved in the development of IBD, early life events may be important in determining whether a person develops IBD later in life. This pilot study will assess the influence of early life events on development of IBD. We will utilise child health data from residents in the Southern Health & Social Care Trust (SHSCT) geographical area. These data were recorded by the Department of Health in N. Ireland (DHSSPSNI) for a cohort of 435,000 live births in NI from 1971-1986. The information was recorded by midwives and health care visitors and included details of the pregnancy, infant feeding, and home living conditions. We will create a register of all patients with IBD attending SHSCT using clinical notes and pathology (biopsy) results –these people will form the ‘cases’ group. For each case, up to 5 residents in the SHSCT geographical area without IBD will be chosen to form the ‘control’ group. We will analyse the child health information to see whether there are any early life differences between the case and control groups.