

Post-doctoral Research Scientist position University of Cambridge

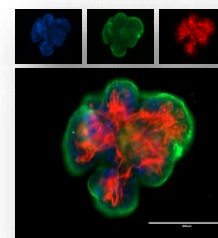


Epigenetics in intestinal health and Inflammatory Bowel Diseases

Key words: *Intestinal epithelium, human gut organoids, IBD, epigenetics, single cell RNA-sequencing*

We are looking for a Post-doctoral researcher to join the group of Professor Matthias Zilbauer, Department of Paediatrics at the University of Cambridge, UK (Funds available for a 3-year position).

PROJECT: This research project aims at investigating the role of epigenetic mechanisms in regulating human intestinal epithelial cell function in health and Inflammatory Bowel Diseases (IBD). Benefitting from an established translational research study set-up we have access to a large patient cohort providing human intestinal tissue for the generation of organoids and single cell RNAseq profiling.



Intestinal organoid

ENVIRONMENT: Our group has extensive experience in the establishment, differentiation and gene editing of human intestinal organoids. Situated at Addenbrookes Hospital in the heart of the Cambridge Biomedical Research Campus (<http://cambridge-biomedical.com>), we have access to state-of-the-art research facilities. In addition we benefit from strong established collaborations particularly to the Cambridge Stem Cell Institute (<http://www.stemcells.cam.ac.uk>) and the Wellcome Sanger Institute (<https://www.sanger.ac.uk>). The successful candidate will be offered a competitive salary and provided with a structured, personal development plan (supported by dedicated educational funds).



Central Cambridge

TEAM WORK: The post-holder will join a diverse, supportive and friendly team of scientists, clinicians and other professionals within the Department of Paediatrics. We place major emphasis on the importance of team work and an enjoyable work environment as a foundation for performing internationally leading translational research.



Zilbauer lab team

CANDIDATE: The ideal candidate will have a PhD in a related subject (applications from candidates who have recently submitted their thesis will be considered) and/or relevant skills either wet lab and/or computational biology. The most important selection criteria are evidence of academic excellence, personal drive and a clear rationale for joining our group. The post requires someone who is enthusiastic, focused, and has a passion for cutting edge science. The successful candidate will play a crucial part in leading aspects of our research theme and will be expected to strengthen existing collaborations as well as developing new ones.

If you are interested in this position or know of any suitable candidate please contact Prof Zilbauer (mz304@medschl.cam.ac.uk).

Websites: <http://paediatrics.medschl.cam.ac.uk/about-us/people/senior-academic-staff/dr-matthias-zilbauer>
<https://www.stemcells.cam.ac.uk/research/affiliates/dr-zilbauer>

Key publications: 1. Kraiczy *et al.*, DNA methylation defines regional identity of human intestinal epithelial organoids and undergoes dynamic changes during development. *Gut* 2019. 2. Howell *et al.*, DNA Methylation and Transcription Patterns in Intestinal Epithelial Cells From Pediatric Patients With Inflammatory Bowel Diseases Differentiate Disease Subtypes and Associate With Outcome. *Gastroenterology* 2018. 3. Jenke AC, Zilbauer M. Epigenetics in inflammatory bowel disease. *Curr Opin Gastroenterol* 2012. 4. Kraiczy *et al.*, Assessing DNA methylation in the developing human intestinal epithelium: potential link to inflammatory bowel disease. *Mucosal Immunol* 2016.