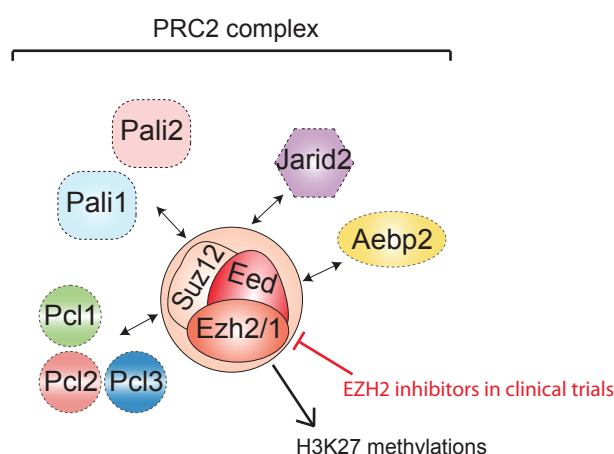


Postdoc Position in Epigenetics and Chromatin Biology

A Postdoc position is now open in the laboratory of Prof. Adrian Bracken at the Smurfit Institute of Genetics, Trinity College Dublin, Ireland.



Selected Publications:

Brien et al., Nature Structural Molecular Biology, 2012.
Egan et al., Developmental Cell, 2013.
Brien et al., Genes & Development, 2015.
Conway et al., Curr Opin Cell Biol, 2015.
Streubel et al., EMBO J. 2017.
Conway et al., Molecular Cell, In Press. 2018.
Streubel et al., Molecular Cell, In Press. 2018.

Background and aim of the project:

Polycomb group proteins are a family of chromatin regulators that are essential for maintaining cellular identity in higher eukaryotes, and are frequently deregulated in human cancer. The Polycomb Repressive Complex 2 (PRC2) is composed of the core proteins, Suz12, Eed, Ezh1/2 and mediates H3K27me1/2/3 methylations. PRC2 associates with several sub-stoichiometric components, including PCL1-3, JARID2, AEBP2 and EPOP, which are thought to confer distinct functional effects, including modifying the activity and association of the complex with chromatin (Holoch and Margueron, 2017). We recently discovered a new family of vertebrate specific PRC2 associated proteins, called PALI1 and PALI2, which also bind to nuclear receptors (Conway et al., 2018). This project will characterise the exciting link between PALI1 and nuclear receptors in mouse embryonic stem cells and in hormone dependent cancers, including prostate and breast cancer.

To dissect the mechanism of PALI1/2 function and their interplay with nuclear receptors and PRC2, the project will use a combination of tiled CRISPR screening of protein domains (Shi *et al.*, Nat Biotechnol. 2015 33(6):661-7), in addition to 'Next-generation' sequencing approaches (ChIP-seq, RNA-seq, ATAC-seq), proteomics, stem and cancer cell biology and biochemistry.

How to apply:

For this project, the successful applicant will be highly motivated and with experience in the chromatin field and have a proven publication record, including at least one first author paper. The salary will be €37-48,000/year, depending on experience. The project start date will be mid-late 2018 (depending on availability) and run for 2-3 years. Interested applicants should submit their CV, including two references to Prof. Bracken at adrian.bracken@tcd.ie before 6pm, April 25th, 2018.



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

<http://www.gen.tcd.ie/bracken>