









## Two Postdoc positions: Understanding the role of chromatin during cell differentiation in choanoflagellates.

Who we are: The positions will be in the lab of James Gahan (<a href="mailto:gahanlab.com">gahanlab.com</a>) at the Centre for Chromosome Biology (<a href="www.chromosome.ie">www.chromosome.ie</a>), University of Galway, Ireland. The lab opens in April 2024 with funding from an ERC Starting Grant and Wellcome trust.

What we do: The group is broadly interested in how changes in genome regulation contributed to animal evolution. To fill this fundamental gap, the group will reconstruct the origin and evolution of cell-type-specific gene expression by investigating the generegulatory mechanisms that drive life history transitions in the closest living relatives of animals, the choanoflagellates. We will specifically use *Salpingoeca rosetta* as a model and integrate omics approaches, microscopy and newly developed transgenesis and genome-editing tools to understand the function of chromatin regulators in this process.

**Position 1: Dissecting transcriptional and epigenetic changes during cell differentiation in** *S. rosetta*. The selected candidate will be responsible for leading efforts to use multiple -omics technologies (ChIPseq, ATACseq, MicroC etc.) to define the transcriptional and epigenetic changes underlying differentiation in *S. rosetta* cells.

**Position 2: Understand the role of Polycomb-mediated repression in** *S. rosetta.* The Postdoc will lead a project to understand the function of Polycomb mediated repression in *S. rosetta* by generating transgenic and mutant tools (via CRISPR-Cas9) and dissecting both the function and the mechanism of targeting of Polycomb in *S. rosetta.* 

**The ideal candidates** should be highly motivated with a proven track record in research (e.g.1st author publications). They will have a PhD in molecular biology, biochemistry, or a related discipline. Experience in bioinformatics (Position 1) or genome editing (Position 2) would be an advantage as would experience in evolutionary or chromatin biology.

The start dates are flexible but after May 1<sup>st</sup> 2024. Starting salary is €42,033 (gross). Funding is for 4 years (Position 1) or 3 years (Position 2), although initial appointments may be shorter and further extension may be possible depending on funding.

**To apply** please email your CV along with a cover letter explaining your research/career goals as well as motivation for applying for this position, and the contact details of two referees to James Gahan (<a href="mailto:james.gahan@bioch.ox.ac.uk">james.gahan@bioch.ox.ac.uk</a>). Informal enquiries are welcome. The positions will stay open until filled.