



THE UNIVERSITY OF
WESTERN AUSTRALIA



HARRY PERKINS INSTITUTE
OF MEDICAL RESEARCH



plant energy biology
ARC CENTRE OF EXCELLENCE

POST-DOCTORAL RESEARCH FELLOW IN BRAIN EPIGENOMICS

Epigenetics and Genomics Laboratory (Lister Lab)

Harry Perkins Institute of Medical Research
ARC Centre of Excellence in Plant Energy Biology
The University of Western Australia

- 3 year appointment
- Salary: Level A (\$85,942 p.a.) or Level B (\$90,468 - \$107,431 p.a.)
- [Job Reference # 494093](#)

A post-doctoral position is available to undertake research in the area of mammalian brain epigenomics. The research will involve the utilization of molecular, genetic and (epi)genomic techniques to investigate neural activity-dependent plasticity of genomic DNA methylation in the mammalian brain, cellular recognition and interpretation of epigenomic modifications in neural cell genomes, and perturbation of DNA methylation patterns in neurological disorders.

The Epigenetics and Genomics Laboratory ([Lister Lab](#)), located at the University of Western Australia and the Harry Perkins institute of Medical Research, is comprised of a mix of molecular and computational biologists, forming a multi-disciplinary team environment undertaking a diverse range of epigenetics and genomics research. We utilize genomic, computational, genetic, molecular, and biochemical approaches in animal and plant systems to answer fundamental unresolved questions concerning the regulation of genomic information by epigenetic mechanisms. For examples of our previous work in these areas see the following publications in *Science* ([2013](#)), *Nature* ([2009](#), [2011](#), [2015](#)) and *Cell* ([2008](#)).

The successful applicant will have the opportunity to lead and develop research projects focused upon deciphering the role of DNA methylation in mammalian neural genome regulation and neurological disorders.

Candidates should have experience in a diverse range of molecular biology, biochemistry, genetics and cell biology techniques. Expertise in molecular and cellular analyses in the context of the brain and neurological disorders is highly relevant. Advantageous skills would include experience with the isolation, culture, characterization and manipulation of mammalian neural cells, next-generation DNA sequencing, and bioinformatics as applied to genomics data analysis. A PhD in neurobiology, molecular biology, biochemistry, genetics, or related disciplines is required.

Contact: Ryan Lister (ryan.lister@uwa.edu.au)

Closing date: Tuesday 7 April, 2015

Applications must be submitted [online](#). Full details of the responsibilities and the selection criteria are outlined in the position description. Applicants should demonstrate they meet the selection criteria.