



THE UNIVERSITY OF
WESTERN AUSTRALIA



HARRY PERKINS INSTITUTE
OF MEDICAL RESEARCH



plant energy biology
ARC CENTRE OF EXCELLENCE

POST-DOCTORAL RESEARCH FELLOW IN EPIGENOME ENGINEERING

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 # 494094](#)

A post-doctoral position is available to lead the development and utilization of molecular tools for engineering the epigenome. The research will utilize molecular, genomic, biochemical, and genome editing techniques to develop molecular tools that enable precise targeted addition or removal of epigenomic modifications such as DNA methylation and post-translational histone modifications in the genome of human and other animal cells. (Epi)genomics approaches will be used to determine the efficacy of these tools for targeted modification of chromatin state, transcriptional activity, and cellular function.

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 epigenome engineering projects in a variety of systems.

Candidates should have experience in a diverse range of molecular biology, biochemistry, genetics and cell biology techniques. Advantageous skills would include experience with genome editing systems, next-generation DNA sequencing, and bioinformatics as applied to genomics data analysis. A PhD in 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.