



THE UNIVERSITY OF
WESTERN AUSTRALIA



plant energy biology
ARC CENTRE OF EXCELLENCE

POST-DOCTORAL RESEARCH FELLOW IN GENOME BIOINFORMATICS

Epigenetics and Genomics Laboratory (Lister Lab)

ARC Centre of Excellence in Plant Energy Biology

School of Chemistry and Biochemistry

The University of Western Australia

- 3 year appointment
- Salary: Level A (\$82,818 p.a.) or Level B (\$87,179 - \$103,526 p.a.)
- [Job Reference # 493255](#)

A post-doctoral position is available for a computational biologist specializing in genome informatics. The research will focus upon developing and utilizing computational approaches for the analysis of diverse genomic datasets to investigate a variety of biological questions, with a particular emphasis on epigenomic modifications and their role in genome regulation in human, mouse and plant systems.

The Epigenetics and Genomics Laboratory ([Lister Lab](#)) 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. The successful applicant will have the opportunity to lead the integrative analysis of genomics data from projects in the areas of evolutionary epigenomics, cellular reprogramming, neuroepigenomics, and epigenome engineering. In addition, the appointee will be encouraged to be involved in the design of genomics analyses and development of their own research ideas.

Candidates should have bioinformatics experience in short read DNA sequencing analysis and genome scale integrative analysis of diverse experimental datasets (e.g. DNA methylation, ChIP-seq for histone modifications and DNA binding proteins, transcriptomes, chromatin accessibility, and chromatin interaction analysis). Demonstrable skills in programming, biostatistics, and database languages (e.g. Python, Perl, C++, R, MATLAB, MYSQL) and the Linux environment are essential. Candidates with a background in mathematics, computer science and statistics and who are very interested in genome biology are welcome to apply. A familiarity with molecular biological techniques involved in genomics experiments is advantageous, and good communication skills are required as the successful applicant is expected to interact closely with experimental colleagues.

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

Closing date: Friday 25 July 2014

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.