

John Stocker PhD Top-up Scholarship in Epigenomics

Research project and top-up scholarship information:

We are looking for an enthusiastic PhD student to join our dynamic groups working on epigenetics and seed development using the model plant *Arabidopsis*. A John Stocker Postgraduate Top-up PhD scholarship valued at \$7000 per annum for 3 years will be offered to the successful candidate.

The project will use a number of techniques in epigenomics (RNA-IP and ChIP-seq) coupled to isolation of specific cell types and high-throughput sequencing technology to determine the repertoire of small RNAs and histone modifications in the chalazal endosperm, endosperm and embryo during seed development. These will then be compared and related to changes in gene expression in the different tissues within the seed and developmental events (e.g. cellularization). This data will be used to identify candidate small RNAs and histone modifications that will be investigated for functions in regulating gene expression and seed properties with a focus on those that affect size and yield. You will work along side a research fellow who is performing complementary research.

Essential Qualifications:

- A degree in Agricultural Science, Biochemistry, Bioengineering, Biotechnology or Science.
- Obtained or expecting to obtain 1st Class or upper 2A honours
- Eligible for an APA scholarship.

Research Environment:

The laboratories of Dr. Chris Helliwell and Dr. Iain Searle are located in open and informal research atmospheres in CSIRO (Plant Industry, Canberra) and the ANU (Research School of Biology), respectively. CSIRO and the Research School of Biology are internationally renowned and dynamic research organisations that employ genomics, molecular genetics, and cytogenetics to unravel developmental processes in plants.

Application closing date: 21st January 2011.

Start date: Available after 1st February 2011.

Further information about the project can be obtained by Emailing Dr. Chris Helliwell (Chris.Helliwell@csiro.au) or Dr. Iain Searle (iain.searle@anu.edu.au).

Application: Email your ½ page letter of motivation, CV, academic transcript and names of two references to, Iain.Searle@anu.edu.au

Short listed candidates will be interviewed in late January 2011.