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Phenomics Network Bioinformatician

Australian Phenomics Facility The John Curtin School of Medical Research ANU College of Medicine, Biology and Environment

Canberra/ACT

ANU Officer Grade 8 or ANU Officer Grade 9/10 (\$68,539 - \$85,338)

The Australian Phenomics Facility (APF), located at the ANU in Canberra is seeking an experienced Bioinformatician to design and implement a data management project within the Australian Phenomics Network (APN), and to take responsibility for participating, evaluating and representing the APN in international and national efforts. The APF is a key partner in the Australian Government NCRIS funded APN; a world class network of Australian facilities producing and characterising mouse models for biomedical research. The APN will be producing large quantities of research data and will be working with interrelated activities to organise and integrate the biological data into national infrastructure. You will need to have excellent communication skills and have experience with working with a large group of stakeholders. This is a collaborative venture with the Australian Plant Phenomics Facility (University of Adelaide) and the Atlas of Living Australia (CSIRO) in Canberra. Applicant Enquiries Contact: Adrienne McKenzie, T: (02) 6125 2228,

E: Adrienne.McKenzie@anu.edu.au

Reference number: G073-08GU

Closing Date: 24 September 2008



Position Information

Phenomics Network Bioinformatician

Australian Phenomics Facility

Responsible To:

Head of Australian Phenomics Network Services

Role Statement:

PURPOSE STATEMENT:

The Australian Phenomics Facility (APF) is a key partner in the Australian Government NCRIS funded Australian Phenomics Network (APN); a world class network of Australian facilities producing and characterising mouse models for medical and other research. The APN will be producing large quantities of research data and will be working with interrelated activities within Integrated Biological Systems (Atlas of Living Australia - ALA; and Australian Plant Phenomics Facility - APPN) to organise the biological knowledge that is generated. The Bioinformatician will address data management within APN specifically, be responsible for participating and evaluating international efforts and will work with ALA to integrate these data sets with tools for biological data discovery.

POSITION DIMENSION & RELATIONSHIPS:

The incumbent will work under broad direction with a high degree of autonomy and report to the Head of Australian Phenomics Network Services. They will be expected to work closely with all partners in the APN and to act as the technical interface with international projects. In addition they will be required to work closely with the Technical Architect for the Atlas of Living Australia. There may be opportunity to contribute to research collaborations within the area of expertise if desired. There will be a requirement for travel within Australia. There may be a requirement for international travel.

ROLE STATEMENT:

- 1. Represent the Australian Phenomics Facility (as part of the APN) in the development and implementation of policies for a National data standard for Australia and the APN in Phenomics data.
- 2. Provide strategic support and advice to the APN in the development of technical infrastructure including hardware architecture and bioinformatics services.
- 3. Liaise with academics, researchers and professionals within the ANU and nationally to develop and implement a strategic plan for managing Phenomics data
- 4. Develop, manage and maintain data management and mining strategies appropriate for the data produced by the Australian Phenomics Network ensuring standardisation and interoperability with similar data sets in other operations nationally and internationally.
- 5. Be responsible for the development and implementation of a program for the integration of Phenomics data into metadata repositories and data search tools, to be developed by the Atlas of Living Australia.

- 6. Develop, adopt and integrate appropriate shared policies, standards and interfaces with other relevant projects and networks including the EU-funded project for Coordination and Sustainability of International Mouse Informatics Resources (CASIMIR) and the Mouse Genome Informatics (MGI) resource (Jackson Laboratory, Maine, USA).
- 7. Source, evaluate and apply relevant ontologies and vocabularies.
- 8. Other duties consistent with the classification of this position, as required.
- * Appointment at ANU Officer Grade 9/10 level will require that the incumbent undertake a leadership role designing the framework for ensuring research data is accessible and useful to Australia's ongoing bio-medical research effort.

Selection Criteria:

SELECTION CRITERIA for ANU Officer Grade 8:

A. QUALIFICATIONS

1. A degree in a Biological Science or Computer Science and progressing towards a postgraduate qualification in Bioinformatics or significant experience in bioinformatics and modelling of biological data or equivalent combination of education and experience.

B. EXPERIENCE

- 1. Experience in planning, implementation and management of significant projects with complex requirements and multi-disciplinary teams.
- 2. Experience with modelling data and objects (UML), ontology use (OWL or OBO formats) and/or development.
- 3. Significant experience using relational databases and web technologies and programming skills in at least one language.
- 4. Ability to integrate Phenomics data into metadata repositories and data search tools and develop shared standards and interfaces with other relevant projects and networks.
- 5. Demonstrated excellence with inter-personal and communication skills, both oral and written, to foster and motivate a team of skilled professionals and external contributors.
- 6. Ability to take leadership in liaising with providers of scientific data sets and in communicating with clients in determining their needs and achieving objectives.

C. ATTRIBUTES

- 1. Demonstrated ability to set and monitor own work objectives within set resource limits and deadlines.
- 2. Commitment to an output and service driven environment with a proven ability to work closely with both internal and external teams and deliver products in a demanding dynamic and multi-stakeholder environment.
- 3. A demonstrated high level of understanding of equal opportunity principles and a commitment to the application of EO policies in a university context.

SELECTION CRITERIA for ANU Officer Grade 9/10:

A. QUALIFICATIONS

1. Postgraduate qualification in Bioinformatics and significant experience in bioinformatics and modelling of biological data or equivalent combination of education and experience.

B. EXPERIENCE

- 1. Demonstrated experience in planning, implementation and management of significant projects with complex requirements and multi-disciplinary teams.
- 2. Demonstrated experience with modelling data and objects (UML), ontology use (OWL or

OBO formats) and/or development.

- 3. Extensive experience using relational databases and web technologies with programming skills in at least one language.
- 4. Demonstrated ability to integrate Phenomics data into metadata repositories and data search tools and develop shared standards and interfaces with other relevant projects and networks.
- 5. Demonstrated excellence with inter-personal and communication skills, both oral and written, to foster and motivate a team of skilled professionals and external contributors.
- 6. Ability to take leadership in liaising with providers of scientific data sets and in communicating with clients in determining their needs and achieving objectives.

C. ATTRIBUTES

- 1. Demonstrated ability to set and monitor own work objectives within set resource limits and deadlines.
- 2. Commitment to an output and service driven environment with proven ability to work closely with both internal and external teams and deliver products in a demanding dynamic and multi-stakeholder environment.
- 3. A demonstrated high level of understanding of equal opportunity principles and a commitment to the application of EO policies in a university context.

*ANU Officer Levels 9 and 10 are broadbanded in this stream. It is expected that at the higher levels within the broadband occupants, through experience, will have developed skills and expertise enabling them to more independently perform the full range of duties at a high overall degree autonomy, and that more time will be spent on the more complex functions of the position.