

Equity principles underpin all UNE policies and procedures. The University is committed to EEO principles, values cultural diversity, and recognises that all its employees have a contribution to make in ensuring an equitable and harmonious working environment.

## **University of New England**

### **Position Statement**

**DIRECTORATE:** Animal Genetics and Breeding Unit  
**POSITION TITLE:** Senior Database Manager and Web Programmer  
**REPORTS TO:** Director of AGBU  
**CLASSIFICATION LEVEL:** HEO 7  
**DATE CLASSIFIED:** 20 August 2008

#### **DIMENSIONS OF POSITION:**

This is a computing position to support key R&D projects for various industries like beef, sheep, and pig at the Animal Genetics and Breeding Unit, a group with some 20 scientists and postgraduate students. AGBU has an international reputation to develop and deliver genetic evaluation systems for livestock industries eg BREEDPLAN & BreedObject, PIGBLUP and OVIS. These systems make intensive use of computers and now the WWW. AGBU is also involved in the design, development and maintenance of large and complex livestock databases for research purposes that are accessible via the WWW. The position is responsible for the design and development of new, and modification and management of existing livestock databases as required by existing and new research contracts.

This position works with a high level of independence and is responsible for advising the AGBU Director and Senior scientists on developments in the IT, database and web design area.

#### **POSITION OBJECTIVES:**

Provide leadership and advice to the Director of AGBU and its scientists in the development and maintenance of AGBU's computer systems and WWW accessible databases. Enhance and manage the dataflow in and out of the existing Beef CRCs' databases and develop relational databases with WEB access for new projects. The incumbent also edits the BreedObject WEB programs and its interactions with various breed society databases and a similar project for the sheep industry. The position requires that programming and database skills are independently used and that solutions are provided for problems which are only sketched out by scientists.

#### **DUTIES:**

The incumbent of this position has to perform the following duties under general to broad direction:

1. Advise the Director of AGBU and senior AGBU scientists of developments in database management and the possible consequences for AGBU's research and development programs.
2. Be responsible for the development of Beef CRC and other AGBU relational databases, queries and Internet tools to interrogate these data in a secure way from outside UNE via the Web using programs written with .NET, PERL, XHTML, PostgreSQL and MySQL.

3. Maintain secure Internet solutions for AGBU's BreedObject and SheepObject system linking breed society databases with various programs using mainly PERL.
4. Provide budgets for database development and management components for research applications.
5. Develop user manuals and provide training in the use of databases and Web implementations developed by AGBU when required.
6. Be responsible for ensuring the integrity of all data in the Beef CRC database and management of the import and export of data. Develop data verification procedures for the database.
7. Produce regular and complex reports for the senior scientists in the projects and funding agencies on the status of these databases using a range of systems.
8. Lead the development of future computing policies at AGBU, ensuring they comply with those of the University.
9. Ensure the University's policies and procedures relating to equal opportunity, risk management, occupational health and safety, records management and quality assurance are applied in relation to the responsibilities of the position.

#### **QUALIFICATIONS AND SELECTION CRITERIA:**

1. Completion of a relevant degree with substantial relevant experience; or an equivalent alternative combination of relevant knowledge, training and experience.
2. Demonstrated excellent programming skills including developing & implementing complex relational databases using MySQL (or similar such as PERL, SQL Server, ORACLE) on a Unix computer system.
3. Demonstrated significant experience in developing Web applications and Internet solutions.
4. Demonstrated ability to coordinate the collection and processing of complex data from a number of sources for data analysis and reports.
5. Proven ability to work independently within a team environment and the ability to consistently produce a high level of accuracy in all work under tight deadlines.
6. Substantial experience in the production of user and system documentation.
7. Awareness of EEO, risk management, quality assurance, records management and OH&S principles as they relate to this position.