WHO WE ARE

We are passionate innovators, dedicated to making a difference to the future of New Zealand by delivering world-leading research and through complex problem solving across diverse agricultural areas. We are respected by the scientific community for thought leadership, trusted by industry partners for the value we add to the sector, and admired by farmers and governmental stakeholders for all that we do to keep New Zealand at the forefront of global agricultural excellence.

We go beyond innovation to maintain AgResearch’s role as a leading collaborator and contributor to New Zealand’s worldwide agricultural reputation.

Our Vision is to drive economic prosperity by transforming agriculture while incorporating the fundamental concepts of sustainability, environmental responsibility and Vision Matauranga.

OUR TEAM

The Statistics team is part of the wider Bioinformatics & Statistics team within the Knowledge & Analytics group. The team works closely with the scientists working on a range of areas in the pastoral sector.

Main focuses of the team are:

- Be part of research projects as collaborators from planning to publication.
- Provide day to day support to our science colleagues in their statistical and data science queries

POSITION SCOPE & PURPOSE

As a Data Scientist, you will advocate data science principles, working collaboratively with AgResearch scientists to apply new technologies and to develop data-driven solutions for New Zealand’s agricultural sector. You will use your analytical, statistical and computer programming skills to collect, analyse and interpret complex data sets. This is a permanent position and ideally will be located at our Grasslands campus in Palmerston North, however an appointment at our Lincoln campus will be considered for the right candidate.
KEY ACCOUNTABILITY AREAS

The Data Scientist shall be accountable in the following Key Result Areas:

1. **Scientific Research**
   - Model, analyse and interpret scientific data
   - Contribute to the design of statistically sound and biologically practicable experiments
   - Identify and provide appropriate solutions to one-off and ongoing statistical and data science problems
   - Contribute to high-quality scientific publications and outputs
   - Keep abreast of relevant new statistical and data science methodologies and tools

   **In addition, for a senior appointment**
   - Collaborate with AgResearch scientists to identify opportunities for leveraging data and technology to underpin scientific discovery in New Zealand
   - Have full responsibility for the data science aspects of scientific research projects, from the initial project planning phase through to data preparation, analytics and the dissemination of results
   - Make a significant contribution to scientific research through the application of innovative and/or specialised data science
   - Demonstrate thought leadership in data science

2. **Science Relationships**
   - Initiate and maintain strong relationships with science colleagues by pursuing internal networking opportunities, attending project meetings and participating in local campus activities and events
   - Provide expert guidance and training on statistical and data science tools, methods and relevant software

   **In addition, for a senior appointment**
   - Promote the capability of the Knowledge and Analytics group, and build new collaborations internally and externally
   - Provide data science, scientific and operational leadership
   - Support the advancement of the data science capability within the Bioinformatics & Statistics team, including providing expert guidance on data science tools, methods and software
   - Mentor and coach junior team members, and serve as a conduit to other staff, sharing knowledge and helping others develop their skills

3. **Teamwork**
   - Be a strong advocate for the Bioinformatics & Statistics team
   - Share specialist skills and knowledge within the Bioinformatics & Statistics team
   - Assist with initiatives across the organisation and undertake strategic projects for your manager

   **In addition, for a senior appointment**
   - Use interpersonal skills to positively engage and lead staff
   - Champion positive workplace relationships and a culture that influences organisational success and positively impacts on staff engagement

4. **Health and Safety**
   - Follow AgResearch Health and Safety policies and procedures
PERSON SPECIFICATIONS

The person best suited to this position will possess the following:

EDUCATION & QUALIFICATIONS

- Postgraduate qualification in data science or a closely related field, PhD will be preferable

In addition, for a senior appointment

- A minimum of 5 years’ post degree relevant experience in data science and collaborative research

CAPABILITIES & EXPERIENCE

- Knowledge of a wide range of data science methods and tools;
  - Knowledge and experience of a variety of machine learning, data mining and statistical techniques (e.g., clustering, neural networks, text mining, decision trees, GLMs etc.)
  - Ability to effectively use one or more computer languages (e.g., R, Python, C++, etc.) to manipulate and draw robust insights from large and complex data sets
  - Experience with distributed data / computing tools (e.g. Hadoop, Spark, etc.) in an HPC/cloud computing environment
  - Skilled in data integration and data visualisation
- Demonstrable knowledge of statistics
- Ability to identify, learn and critically assess relevant new technologies and techniques
- Ability to build and maintain strong strategic relationships across the diverse range of groups and interests within the organisation
- Excellent communication, organisational and problem-solving skills
- Ability to prioritise workload and be able to handle multiple projects simultaneously
- An interest in working in the agricultural sector

In addition, for a senior appointment

- Expert and demonstrable knowledge of a range of data science methods and tools
- Recognised by peers and collaborators for expertise in data science and its application
- Ability positively engage, mentor and lead others in the development of both data science and interpersonal skills
OUR VALUES

- Exemplifies Our Values
- Supports strategic priorities
- Assumes positive intent
- Is open to new ideas

- Acts with integrity
- Demonstrates credibility
- Appreciates diversity

- Actively seeks out relationships and partnership opportunities
- Works across boundaries
- Priorities shared goals

- Shares information and resources
- Involves others
- Supports others to be successful

- Maintains a best practice mind-set
- Emphasis timely and high quality delivery
- Establishes challenging stretch goals and performance expectations

- Gathers, Compares and evaluates information
- Establishes robust decision making criteria
- Fully utilises support systems

- Priorities time to innovate
- Takes a future and solution based approach
- Creates a positive learning environment
- Demonstrates openness to change

- Constructively challenges the status quo
- Emphasises freedom of independent thought
- Assesses risk

- Builds long term relationships with customers
- Provides clear, open and timely communication

- Identifies customer needs
- Commits to realistic delivery timeframes
- Translates initiatives into action

- Takes a long-term, strategic and future oriented perspective
- Focuses on the bigger picture
- Promotes the cross-fertilisation of ideas

- Champions transformational change
- Demonstrates decisiveness
- Commits to ongoing learning and development