

<b>Position Title:</b>	Statistician or Senior Statistician
<b>Reports To:</b>	Science Team Leader
<b>Direct Reports:</b>	Nil
<b>Group:</b>	Digital Agriculture
<b>Key Relationships:</b>	Data Science Colleagues, Science Colleagues, Research Office, Internal and External Stakeholders
<b>Location:</b>	Grasslands (Palmerston North), Invermay (Dunedin), Lincoln (Christchurch) or Ruakura (Hamilton)

## WHO WE ARE

We are passionate innovators, dedicated to making a difference in the future of New Zealand by delivering world-leading research 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 highly regarded by farmers and governmental stakeholders for all 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 Mātauranga Māori.

## POSITION SCOPE & PURPOSE:

This role involves operating as part of multi-disciplinary project teams to deliver high-quality science outcomes relevant to agricultural industry priorities; and working with others to identify and convert opportunities into successful R&D proposals and outcomes.

As a Statistician, you will advocate statistical principles, working collaboratively with AgResearch scientists to provide expert advice on design of experiments, statistical methodologies and the interpretation of statistical findings. You will use your skills in analytical, conceptual and quantitative thinking in statistics to underpin and support scientific innovation and to develop data-driven solutions for New Zealand's agricultural sector.

This is a permanent position and located at the AgResearch campuses, with preference for the Lincoln campus near Christchurch or Invermay campus in Mosgiel, near Dunedin (depending on skills).



## KEY ACCOUNTABILITY AREAS

### RESEARCH STRATEGY AND DELIVERY

- Manages and meets stakeholder expectations and retains stakeholders by ensuring timely responsive service and open communication
- Contribute to the design of statistically sound and biologically practicable experiments
- Provides statistical analyses and interprets scientific data in line with good statistical practice
- Identify and provide appropriate solutions for one-off and ongoing statistical and data science problems
- Proactively displays a collaborative ethos that optimally draws on knowledge and capability across the organisation to deliver the best possible outcome
- Has awareness of project budgets and ensures project milestones are achieved within those budgets. Develops project budgets and timelines as they relate to statistical milestones
- Contributes to successful funding proposals that attract significant revenue and offer solutions to existing and new customers
- Communicates all project-related concerns, risks and/or opportunities pro-actively with the project leader, science team leader or sponsor.
- Develops and implements integrated high-quality research and product plans.

#### For the senior role

- Demonstrates thought leadership and guidance in the area of statistics and if appropriate data science
- Demonstrates high levels of innovation and originality in area of expertise
- Assists with the training of development and implementation of best practice statistical methods across the organisation
- Lead successful funding proposals that attract significant revenue and offer solutions to existing and new customers

### SCIENTIFIC EXCELLENCE

- Works proactively to consistently deliver high-quality, relevant research.
- Demonstrates science credibility by publishing research in world-leading journals, with co-authorship of papers, conference proceedings, abstracts etc.
- Authors appropriate project documentation, effectively communicates findings to internal stakeholders, and if appropriate, external stakeholders
- Participate in New Zealand scientific societies, and BSI internal manuscript review. May contribute to



the advancement of scientific knowledge by presenting at conferences, chairing conference sessions, etc.

- Maintains an active involvement in the wider pastoral and statistics and data science research communities

## RELATIONSHIP MANAGEMENT

- Initiates and maintains strong relationships with science colleagues by pursuing internal networking opportunities, attending project meetings, and participating in local campus activities and events
- Provides expert guidance and training on statistical and data science tools, methods, and relevant software
- Be a strong advocate for the Statistics Team and wider Data Science/Digital Agriculture Group
- Shares specialist skills and knowledge with the Statistics Team
- Assists with initiatives across the organisation and undertakes strategic projects for your manager
- Actively contributes to building and maintaining a strong culture of partnership with scientists across the organisation, focussed on creation of impact
- Networks with and presents seminars to the wider organisation

### For the senior role

- Actively contributes to building and maintaining a strong culture of partnership with stakeholders, focussed on creation of impact in their sectors
- Works with Sector Managers, Account Managers, Science Group Leaders and Data Scientists and other Scientists to maintain strategic partnerships and generate new opportunities
- Networks with and presents seminars to the wider organisation and industry stakeholders in the wider pastoral community
- Works with stakeholders to identify opportunities and innovative solutions that will lead to significant funding, collaborative projects and enhancing company profile.

## HEALTH AND SAFETY

- Maintains current knowledge of AgResearch's Health and Safety Management policies, systems, and procedures.
- Ensures awareness of own responsibilities and the procedures to follow in relation to health and safety.
- Identifies and reports any hazards, near misses or incidents as per prescribed policy and procedures.
- Demonstrates safe workplace behaviour by taking all practicable steps to ensure own and other's safety in the workplace.




- Attends scheduled Health and Safety training and development initiatives on a regular basis.

## ORGANISATIONAL OBJECTIVES

- Applies and implements prescribed project management methodology into all project work
- Applies principles of continuous improvement by taking ownership for identification, analysis and investigation of work-related matters with the intent to improve, manage compliance and initiate best practice in our place of work
- Actively participates in and contributes to performance conversations and personal development
- Embraces the AgResearch Values framework and develops own behaviours to support these Values on a continuous basis
- Takes responsibility to understand and apply AgResearch policy, processes, systems, and procedures on a daily basis.
- Commits to accurate and timely information sharing and recordkeeping as per set organisational standards.
- Performs additional tasks, duties and/or responsibilities as directed by your Science Team Leader.
- Assists and supports AgResearch business across different science groups and business units, as agreed with your people leader.

## INFORMATION MANAGEMENT

- Ensure that all information created or received during the course of your work is managed as per  AgResearch Information Management policy. This includes naming, storing, classifying and ensuring it is available to other staff as per the policy.



## PERSON SPECIFICATIONS

### EDUCATION & QUALIFICATIONS

- Postgraduate qualification in statistics/data science or a closely related field, PhD will be preferable
- Relevant practical experience.

#### For the senior position

- PhD or appropriate post graduate qualification
- A minimum of 5 years' post degree relevant experience in statistics and collaborative research

### CAPABILITIES & EXPERIENCE

- Knowledge of a wider range of statistical methods and tools;
  - Knowledge and experience of a variety of statistical and data science methods and techniques (e.g., GLMs, mixed models, multivariate analysis, machine learning, experimental design, etc.)
  - Ability to effectively use one or more computer languages (e.g., R, Python, Genstat etc.) to manipulate and draw robust insights from large and complex data sets
  - Skilled in data integration and data visualisation
  - Skills in quantitative genetics and genomics are preferred
- Demonstrated ability to understand collaborator's needs, provide a general statistical consultancy and to contribute to a research team environment
- 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
- An interest in working in the agricultural sector

#### For the senior role

- Expert and demonstrable knowledge of a range of statistical methods and tools
- Recognised by peers and collaborators for expertise in statistics and its application
- Ability to lead, and take full responsibility for, the statistical aspects of scientific research projects
- Ability to positively engage, mentor and lead others in the development of both statistical expertise and interpersonal skills
- Has a proven record of accomplishment of research and development in relevant science areas with a national reputation and at least 5 years of relevant post-graduate scientific experience
- Excellent peer-reviewed publication record in high-impact scientific journals



## COMPETENCIES

Organisational wide competencies – these are the competencies determined by the organisation as critical to every role.	
Accountability	Accepts responsibility for one's actions regardless of outcomes.
Caring About People	Displays sensitivity towards the attitudes, feelings, or circumstances of others.
Developing People	Provides support, coaching, training, and career direction to others.
Integrity	Acts honestly in accordance with moral or ethical principles
Driving Results	Accomplishes goals, completes tasks, and achieves results.
Leveraging Diversity	Respects and values individual differences to obtain a desired effect or result.
Relationship Building	Develops collaborative relationships to facilitate current and future objectives.
Self-Development	Actively acquires new knowledge and skills to remain current with and/or grow beyond job requirements.
Role based competencies – these are the competencies required to perform this role.	
Customer Focus	Provides courteous, timely, and helpful service to encourage client loyalty.
Driving Innovation	Stimulates creative ideas and perspectives that add value.
Engagement	Demonstrates loyalty and commitment through enthusiasm and extra effort.
Flexibility	Changes direction as appropriate based on new ideas, approaches, and strategies.
Networking	Builds and maintains a system of strategic business connections.
Presenting to Others	Conveys ideas and information to groups.
Quality Focus	Strives to meet quality standards and produce quality work products.
Solving Problems	Identifies solutions given available information.
Teamwork	Collaborates with others to achieve goals.
Time Management	Plans and prioritises work to maximise efficiency and minimise downtime.

