

## Position description

### Senior statistician – Research and Development

#### Te Rautaki a NZCER 2017–2021

Mā te mātauranga e taea ai e ia ākongā o Aotearoa te kite i ō rātou pūmanawa kia ea ai ō rātou wawata.

#### Tō mātou kaupapa

Ka whakaawe te ao mātauranga e NZCER. Ko mātou ngā kaiarataki i te mahi rangahau, i te whanaketanga o ngā rākau āwhina me te tuku ratonga e kōkiri ana i ngā akoranga tōtika kia puta mai ai ngā hua tōtika i ngā mahi kaupapa here me ngā wāhi mahi.

I whakatūria te NZCER i te tau 1934. E tū motuhake ana a NZCER hei whare rangahau, hei whare whakawhanake i raro i tāna ake ture. Ko ngā mātāpono o te Tiriti o Waitangi te tūāpapa o ā mātou mahi, mā konā e hāpaitia ai te mana Māori i roto i ā mātou kaupapa mahi, i ngā hononga me ngā tikanga mahi.

Ka tōia mai ngā mātauranga o mua, ka kuhu atu hoki mātou ki ngā mahi mātauranga o nāiane, hei tārai i te ao mātauranga o āpōpō. Kei raro i te Ture o NZCER 1972, kei te kawē, kei te tuku atu hoki mātou i ngā momo rangahau mō te ao mātauranga. E tū motuhake ana mātou ki te tāpae pārongo, ki te tuku whakaaro me ngā momo ratonga āwhina ki te iwi whānui.

#### NZCER Strategy 2017–2021

Education in Aotearoa New Zealand should enable every learner to discover their potential and realise their aspirations.

#### Our purpose

NZCER inspires education. We play a leading role in research, developing tools, and providing services that drive effective learning and positive change in policy and practice.

Established in 1934, NZCER is an independent research and development organisation, operating under its own legislation. We use the principles of the Treaty of Waitangi as the founding document of Aotearoa to help us uphold mana Māori in our work, relationships, and ways of working.

We draw on a rich heritage of, and play an active part in, shaping the future of education. The NZCER Act 1972 provides us with a mandate to carry out and disseminate education research, and provide independent information, advice, and assistance.

### **Ō mātou uara**

Mā ēnei uara, ā mātou mahitahi ki ētahi atu, ō mātou whanonga me ō mātou whakataunga e arataki.

### **Te tū motuhake**

Nā ngā taunakitanga tōtika e hāngai ana, e whai mana ana ā mātou kōrero.

### **Te mahi ngātahi**

Ka mahi ngātahi mātou ki ngā rōpū whai pūkenga kē, kia tino whai hua ngā mahi.

### **Te auahatanga**

Mā ā mātou rangahau, ā mātou rākau āwhina me ā mātou ratonga te ao mātauranga o āpōpō e tārai.

### **Te ngākau pono**

Nā ō mātou pūkenga me ō mātou mātāpono tōtika e tutuki ai ā mātou kaupapa i te wā tika, i roto hoki i te ngākau pono.

### **Our values**

Our values guide how we work with others, our behaviours, and decision making.

### **Independence**

We use robust evidence to speak with confidence and authority.

### **Collaboration**

We work with complementary expertise to achieve greater impact.

### **Innovation**

Our research, tools, and services help shape the future of learning and education.

### **Integrity**

We use our expertise and strong ethical principles to deliver work that is timely and trusted.

## **Purpose of job**

The Senior Statistician will take a leadership role in NZCER's research and assessment programme, leading statistical analysis and supporting the development of staff capability. The Senior Statistician is expected to write and contribute to winning bids for research projects. They will be able to lead and support quantitative statistical research projects and research teams across NZCER and will be responsible for managing project budgets and time-lines.

The Senior Statistician will ensure that statistical analysis and educational research is implemented to a high standard at NZCER. They will be able to communicate and disseminate results arising from research activities. They will analyse assessment and survey data using quantitative software packages, and assist with data management.

They will lead and advise others and maintain effective working relationships with staff, external clients, and stakeholders. They are also expected to contribute to the wider organisation.

## **Key tasks and responsibilities**

### **1. Statistics**

- Take a leadership role in NZCER's research programme
- Have a high level of expertise and be independently competent in all aspects of quantitative research. This includes:
  - analysing quantitative data using a variety of statistical techniques including multivariate analyses and regression models
  - using programming languages and statistical computer packages (R preferred)
  - sampling using appropriate techniques
  - advising on survey and assessment instrument development and data collection
  - managing the capture and cleaning of data
  - reviewing and synthesising the literature to keep abreast of changing techniques
  - writing technical reports
  - supporting research teams by providing advice and contributing to research reports (in particular to the statistical sections)
  - ensuring that researchers understand the results and technical reports presented to them
  - maintaining databases used for longitudinal studies and archiving data
  - providing expertise on software, hardware, and new developments when required
- Take responsibility for deciding on and effecting the most appropriate data analysis, including quality assurance
- Lead or contribute to:
  - developing new projects

- writing research proposals, including conceptualising quantitative components
- presentations to academic conferences and client/stakeholder/sector groups
- writing articles and/or commentaries on statistical techniques or research findings
- training and support in the use of statistical software packages to enhance NZCER's competencies
- Demonstrate effective team-work by being able to work productively with others in flexible project teams within the organisation and in collaboration with other organisations
- Demonstrate effective relationship management with clients and stakeholders
- Communicate complex analysis in a range of ways appropriate for different audiences
- Commit to continuous improvement

## **2. Management/Leadership**

- Understand the requirements of a contract research environment
- Manage research projects — making sure projects keep to agreed timelines, budgets and quality standards
- Control and direct resources for maximum efficiency
- Develop strategies for solving problems, maximising opportunities and mitigating risks
- Introduce innovative ideas for projects, research directions, and methodologies
- Write synthesizing commentaries and/or 'think pieces' (i.e. work that goes above and beyond individual research projects)
- Raise issues and new ideas (about research or statistical data analysis), create debate, and, where necessary, lead change
- Develop and sustain external client relationships and collaborations
- Contribute to the development of new and existing products and services

## **3. Mentoring**

- Contribute to the professional development of others in the organisation — particularly their development as researchers and/or statisticians
- Contribute to the management of staff aligned to NZCER's HR systems (managing the overall work and performance of individuals—as distinct from project leadership)
- Support and mentor researchers with complex statistical analysis

## **4. Other duties**

- Other agreed tasks as required

## **5. Health and Safety**

- Take reasonable care for your own health and safety
- Take reasonable care that your acts or omissions do not adversely affect the health and safety of other persons
- Comply, so far as reasonably able, with any reasonable instruction that is given by NZCER (the PCBU) to allow NZCER to comply with the law

- Cooperate with any reasonable policy or procedure of NZCER relating to health or safety at the workplace

## Experience, knowledge, and skills

- Experience working as an applied statistician
- A relevant undergraduate degree including core papers in mathematics and statistics
- Preference for a post-graduate degree in theoretical or applied statistics
- Critical thinking and analytic skills
- Effective communication skills (both oral & written)
- Knowledge of and some experience of computer programming
- Expertise using R to manipulate data and apply modelling techniques
- Experience with the Statistics NZ IDI would be an advantage
- Experience with the education and/or social sector research and analysis desirable
- Knowledge and understanding of education in New Zealand is desirable

## Personal attributes

At NZCER we expect our staff to behave in ways that are consistent with our values and established ways of working.

In addition, all staff must be able to demonstrate the following:

- an ability in, and a desire to improve, te reo Māori
- commitment to the principles of the Treaty of Waitangi and upholding mana Māori in our work
- respect for others and valuing diversity
- an orientation towards continuous improvement to systems and processes
- personal desire for ongoing learning and development
- recognition of the value of team effort; sensitivity to the needs and opinions of other team members
- personal & professional integrity

## Scope of Role

<b>Reports to:</b> General Manager, Research or Chief Researcher – to be confirmed	<b>Direct Reports:</b> Yes
<b>Band Range:</b> I	<b>Dimension</b> Permanent Full-time (negotiable)

