

Request for Proposals

Partnering for Innovation in Equitable Breast Cancer Care 2024 \$600,000

A research initiative from Breast Cancer Foundation NZ

Overview

Breast Cancer Foundation NZ (BCFNZ) is committed to funding research with potential for significant impact on breast cancer detection, treatment or outcomes in New Zealand.

In 2024, we will fund a single grant of \$600,000 (paid over 4-5 years) to support an important study where a research team has defined an innovative project with clear clinical potential.

In this Request for Proposals (RFP), BCFNZ is seeking to proactively encourage research in areas aligned to our mission – ***Pushing for new frontiers in early detection, treatment and support*** – in the pursuit of our long-term, aspirational vision of ***Zero deaths from breast cancer***. Equitable access and care will be fundamental to achieving this vision.

“New frontiers” could be in any area of cancer research or practice, including radiology, pathology, surgery, oncology, bioengineering, immunology, genetics, chemistry, informatics, automation, mathematics and human interface technology. We expect that the successful project will involve an interdisciplinary approach and collaboration with other researchers or institutions; there is also a requirement to have a named clinician on the research team.

We welcome proposals for research (including pilot studies and clinical trials) in the following areas aligned to the BCFNZ mission:

- Innovative approaches for earlier detection and diagnosis
- Personalised treatments for greater efficacy and fewer toxic side effects
- Improving patient outcomes through better supportive care.
- Innovations that address barriers to improving breast cancer outcomes, in the context of predicted long-term growth in demand on healthcare resources globally

See the section **Scope of the Research** for more details of our interest in these areas.

Please note, the significant investment and longer term partnership nature of this grant will involve ***a different assessment process from that which you may previously have experienced with us***. Shortlisted teams will be required to present their proposal in person.

How to apply

Applicants should complete the application form available on the BCFNZ grants portal at <https://grants.breastcancerfoundation.org.nz/>

Applications close Friday December 8, 2023*

**please contact BCFNZ as soon as possible if there is a good reason this deadline can't be met*

Assessment Process

1. Preliminary review / shortlist

Researchers will submit a detailed description of the research goal and the initial phase of the study (e.g. Year 1 or Years 1-2), plus an outline for the remainder of the project. Proposals will be reviewed by Breast Cancer Foundation NZ and its medical advisors. Projects not deemed of sufficient quality or interest will be declined at this stage. A shortlist of four or five applications will move to further assessment.

2. Peer review

Shortlisted applications will be sent for peer review, internationally and / or nationally.

3. Applicant rebuttal

Reviews will be sent to applicants for rebuttal (with the identity of the reviewer removed). Applicants may wish to respond to specific reviewer comments or questions, or to provide clarification to allow an accurate assessment of the proposal.

4. Presentation to BCFNZ

Shortlisted applicants will be invited to present their application in person to a panel of BCFNZ representatives and advisors. Guidance will be given as to what is required for this presentation. The presentation may take place at BCFNZ's Auckland office (in which case BCFNZ will meet reasonable travel expenses), or at the research institution.

5. MAC and Board Approval

Assessment panel recommendations will be submitted to BCFNZ's Medical Advisory Committee and Board of Trustees for confirmation of funding.

Funding Timeline

Publish RFP	September 11, 2023
Applications due	December 8, 2023
Preliminary review / First eliminations	January 10, 2024
Peer review	Mid Jan – late Feb
Rebuttals	Feb-early March
Shortlist 3-5 applications	End of Feb
Presentations to Assessing Group	Late March 2024
Submit to Board of Trustees and MAC for approval	April 2024
Applicants notified of outcome	April 30, 2024

Background

Breast Cancer Foundation NZ's mission is ***Pushing for new frontiers in early detection, treatment and support*** in the pursuit of our long-term, aspirational vision of ***Zero deaths from breast cancer***. The Foundation's core activities are awareness and education for early detection of breast cancer, funding scientific and clinical research to support advances in diagnosis and treatment, and supporting women with breast cancer. We also invest in advancing clinical knowledge and practice, and advocacy.

BCFNZ has been one of NZ's major funders of breast cancer research for the past 20 years. We also fund and oversee Te Rēhita Mate Ūtaetae - Breast Cancer Foundation National Register, which holds detailed information about diagnosis, treatment and outcomes of 40,000 breast cancer patients in Aotearoa New Zealand.

NZ health policy and strategy context: Te Pae Tata and the Women's Health Strategy

New Zealand's interim health plan Te Pae Tata (2022) calls for service change and innovation to improve equity and outcomes in cancer (one of five priority areas). Innovation should support "more equitable and better health and wellbeing for people, whānau and communities, as well as making it easier for our workforce and our providers to do their work."

BCFNZ will accordingly favour programmes that consider:

- Integrating innovative approaches in technology, education, or engagement strategies into existing healthcare paths to provide patients with effective and equitable care. This can include, but is not limited to, novel screening technology, liquid biopsies, personalised treatments, digital health technologies, and screening pathways for high-risk or for underrepresented people e.g. Māori/PI, dense breast tissue.
- Using Artificial Intelligence and machine learning in breast cancer to enhance diagnostic and treatment precision, predict treatment outcomes, support workforce capacity and capability, and discover insights from complex molecular and clinical data. This can include, but is not limited to e.g. AI-powered imaging/multi-omics, patient management through risk stratification, and statistical analysis of register data to inform on cancer aetiology and outcomes.

The Women's Health Strategy (2023) "provides high-level priority areas and sets the direction for change that will guide health sector entities and organisations to prioritise and improve women's health and wellbeing in a coordinated way". Elements of the strategy with strong applicability to proposals for this grant include:

- Gaps resulting in preventable disease and death for our women and future generations
- Prioritisation of screening and early intervention programmes
- Best practice pathways of care to support timely screening, diagnosis, treatment
- High quality evidence-based care and support
- Continuous quality improvement
- Increased participation of women in clinical trials
- Partnerships for health and wellbeing
- Improved utilisation of health technology and innovation to support system access and health monitoring for women.

Research Objectives

The key objectives of this RFP are to:

- Establish a partnership with a research team that has a clear vision for a programme of work with clear clinical potential within a definable timeframe.
- Advance innovative approaches to existing and new challenges, underpinned by the need for equitable delivery and outcomes.
- Leverage expertise, experience and technologies across multiple scientific and clinical disciplines and / or institutions to maximise effectiveness and utility of the proposed work.
- Support projects where there is a clear benefit or logic in this research being undertaken in New Zealand rather than elsewhere.
- Enable a significant investment that provides a level of confidence and certainty that encourages others to invest.

What do we mean by partnership?

In providing a grant of \$600,000, Breast Cancer Foundation NZ is looking to establish a named partnership (for example, the BCFNZ Ferrier Institute Breast Cancer Research Partnership) with an excellent research group. The grant is intended to enable work towards a specific research goal over four or five years, giving confidence to the research team and to other potential funders.

An aim of the partnership is to reduce the risk of “orphan” projects that depend on one investigator remaining in their position, or that come to an end when a smaller grant runs out.

We require an annual meeting with the research team, where the team will report progress and outline the next year of work. The aim of the meeting is to ensure that the overarching goal of the project remains in scope. We would expect the research team to propose a redirection of the work programme if it becomes clear that the current trajectory will not address the goal. In a case where it had become clear that the research could in no way achieve the goal, both parties might need to agree an acceptable alternative goal or project. If no way forward can be agreed that is acceptable to BCFNZ, the partnership would cease.

Scope of the research

Our first priority with this research is that **the proposed programme of work must have a clear and realistic pathway towards the clinic**. While a clinic endpoint may not be achievable within the proposed project or, given the very nature of research, may turn out not to be attainable at all, we do expect the research team to identify clear potential for transition to early clinical trial or implementation, and to devise a work programme that will focus their efforts on advancing down this pathway.

Research proposals **must include a named clinician** among the investigators.

Breast cancer diagnosis: Early Detection and Screening

Early breast cancer detection is fundamental to reduce the impact upon the individual, their families, and communities. Increasingly resource-limited healthcare systems need innovative approaches across technology, education, engagement and strategy to ensure all patients can be diagnosed as early as possible.

This can include, but is not limited to, novel imaging techniques/approaches, screening programmes, intelligent triage, liquid biopsies, multi-omics approaches, risk-based models, AI and machine learning automation/process optimisation, digital health technologies, and patient education.

Personalised treatments for greater efficacy (improved survival) and fewer toxic side effects

Innovative and targeted treatment/s have the potential to transform breast cancer care by offering more effective, personalized, and less toxic therapeutic options.

Applications for translational studies, clinical trials (including decentralised trials for a more equitable approach) and pilots are welcome. Areas of interest include, but are not limited to: surgical advances, bioengineering/novel materials, personalised treatment, genomic assays, prevention of metastasis, innovations in radiotherapy, immunotherapies, new drug delivery technologies.

Improving patient outcomes through supportive care

Supportive care complements medical treatment and contributes to better patient outcomes by enhancing treatment tolerance, quality of life, emotional well-being, and overall patient satisfaction. It recognises that breast cancer care extends beyond medical interventions and encompasses the holistic needs of the patient.

Areas of interest include, but are not limited to: digital health, new approaches to symptom management; implantables and wearables; e-engagement.

Innovations that address barriers to improving breast cancer outcomes, in the context of predicted long-term growth in demand on healthcare resources globally

Examples of areas of interest include, but are not limited to: intelligent triage, mitigation of workforce pressures and shortage, digital health / telehealth.

Additional considerations:

Commercial partners – proposals from academic and clinical groups may also include commercial partners.

International collaborations – we welcome applications for NZ participation in international or global studies, which may or may not have originated in NZ.

Guidelines for research proposals

The research proposal should provide information on:

- How the research project represents innovation in breast cancer.
- The potential to address gaps in equity, particularly for Māori and Pacific people.
- Excellence in scientific and/or clinical approach, properly scoped and clearly achievable within the specified timeframe.
- The impact of the proposed research programme on breast cancer in New Zealand and the timeframe in which that impact is likely to be achieved. Research programmes that clearly identify a transition to early clinical trial or implementation will be favoured.

- The key members of the research team how they will contribute; why this team is well positioned to achieve the research goal.
- Where this study sits in the international body of research on the chosen subject: what similar or different approaches are being taken overseas; why this work should be done in New Zealand; why there is value in the BCFNZ funding your team to work in this area rather than relying on overseas findings.
- Potential for publication in international, peer-reviewed scientific or medical journals, and a plan for disseminating the results of the research within New Zealand.

Budget

BCFNZ will commit **\$600,000** (plus GST where applicable) to a single project, to be completed over four or five years. BCFNZ will not fund overheads.

As noted earlier, the project is a partnership between BCFNZ and the research team. Annual reviews of the project may determine that a change in the work programme is necessary to meet the project goal. If it should become clear that the work programme can in no way achieve the goal, both parties might need to agree an acceptable alternative goal or project. If no way forward can be agreed that is acceptable to BCFNZ, the partnership would cease.

Reporting

BCFNZ requires the following reporting:

- An annual meeting and written report, detailing progress and highlighting any issues, agreed redirection or changes in timeline.
- A draft and final deliverable report detailing results, key findings and recommendations (including next steps) of the complete programme of research.
- We reserve the right to request a verbal presentation to our Medical Advisory Committee and / or our Board of Trustees at any point.
- We may request a site visit for our executives and / or Medical Advisory Committee.

Further Information

We are very happy to discuss your proposed project with you before you submit your application. Please contact:

Dr Hannah Holtkamp, Innovation Development Manager, Breast Cancer Foundation NZ, 021 0220 9375, hannah.holtkamp@bcf.org.nz

Or

Adèle Gautier, Research & Strategic Programmes Manager, Breast Cancer Foundation NZ, 09 304 0961 / 021 423 353 or AdeleG@bcf.org.nz