

Centre of Excellence for Biosecurity Risk Analysis

#### CEBRA STRATEGIC VISION

CEBRA plays a vital role in assisting Australian and New Zealand governments to remain at the forefront of practical biosecurity risk analysis by the provision of collaborative, relevant, innovative, and practical research outcomes. CEBRA comprises quantitative scientists from a range of disciplines, including economics, ecology, mathematics, and statistics. CEBRA is governed by a board that includes multidisciplinary independent members and core agency representatives.

Our close relationship with governments enables us to work on topics that are policy relevant as well as scientifically challenging. We invest in a balanced portfolio of challenges, from developing clear and simple solutions to straightforward tactical problems to thinking deeply about how to approach and resolve richer and more complex strategic problems.

CEBRA also contributes directly to the vision of the University of advancing the state and national interest, educating the next generation and making vital contributions to Australia's standing on the world stage. Our direct connections to international regulators and support organisations such as Biosecurity New Zealand, B3 (NZ), USDA, CFIA and DEFRA enable powerful international impact. We publish widely in scientific literature, but in addition almost all our work is freely available on our website. As leaders in biosecurity, we provide research-informed teaching to a number of programs in the Faculty of Science, using our cutting-edge science as the basis for biosecurity training at undergraduate and graduate levels. We strive continuously to be constructive and supportive members of the University community.

We share the knowledge that we create with the wider world. We work with global partners to find solutions to global biosecurity challenges. We focus tightly on biosecurity regulatory undertakings, but our outcomes apply broadly to regulators worldwide. We have a proud history, a strong record of collaboration, and a wonderful opportunity to sustain an exciting future.

Lindy Hyam, Chair, and Andrew Robinson, CEO.

## **CEBRA Strategic Vision** 2021 - 2025

**MISSION** 

We provide strategic thinking and practical solutions across the biosecurity continuum.

#### **OBJECTIVES**

To deliver practical, rigorous solutions and strategic advice related to biosecurity risk analysis, encompassing the assessment, management, and communication of biosecurity risk.

**ACTIONS** 

**PILLARS** 

STRATEGIC

- (i) provide strategic advice and guidance on biosecurity trends and risks, and priority areas for research investment (including new approaches or technologies);
- (ii) deliver a balanced portfolio of research and develop new and improve existing methods relevant to biosecurity risk analysis;
- (iii) engage a range of disciplinary skills relevant to contemporary risk analysis to ensure governments remain at the forefront of biosecurity risk analysis;
- (iv) assist in developing Australia's biosecurity risk analysis research capability, including its collaboration with and connectedness to capabilities overseas;
- (v) engage governments, biosecurity decision makers and the broader biosecurity community in its Research Findings and Outputs; and
- (vi) work to promote excellence in biosecurity risk analysis, including collaborating with end users and other research institutions to increase the adoption and impact of Research Findings and Outputs.

### Research

350+ We employ interdisciplinary journal articles researchers across mathematics, statistics, economics, ecology, and other fields, to develop and sustain a diversified view on biosecurity. We develop and sustain extensive research networks so that we can call on the best scientists to fill any expertise gaps in our direct team.

#### Stakeholder engagement

We collaborate closely with biosecurity regulators, from project development through to completion, to ensure that we have a practical understanding of the policy landscape, and that our research is both academically compelling and can inform policy change.











#### Outreach

We use a range of media and academic outreach platforms to showcase the research of CEBRA and our government

collaborators. These platforms increase the impact of our research by reaching new audiences of academics and biosecurity practitioners, while ensuring that our researchers are across the latest developments in the field and bringing that knowledge back to further improve our work.

resentations

workshops and

media

engagements

# RESEARCH PRIORITIES

#### Offshore/Pre-border:

We help the biosecurity system identify threats through intelligence gathering and pathway modelling, e.g., IBIS, Trade exposure modelling

We guide intervention levels through risk-based surveillance design, e.g., CBIS, International pathway profiles

#### Domestic/Post-border:

We inform preparedness through risk mapping, surveillance design and outbreak and control modelling, e.g., AADIS, SAA modeling, risk maps.

**VISION** 

To be the first-choice research partner for the development of efficient, effective, transparent and resilient analytical biosecurity risk management outcomes.