

# Bioproducts Manufacturing Facility

Presentation to the bioproducts industry

22 April 2021



# Addressing a very real need

- New Zealand is a world leader in developing novel biologically based technologies (biorationals, bioproducts) to sustainably manage plant and animal production.
- A bottleneck to commercialisation of microbe-based technologies is a large scale production facility, dedicated to producing microbes at scale and economically for agriculture, forestry and environmental remediation.
- One stop shop – formulation, fermentation, QA/GMP & verification, packaging

## Mission

To commission and operate a production facility here in New Zealand for the development and manufacturing of bioproducts, from biopesticides to biofertilizers and beyond.

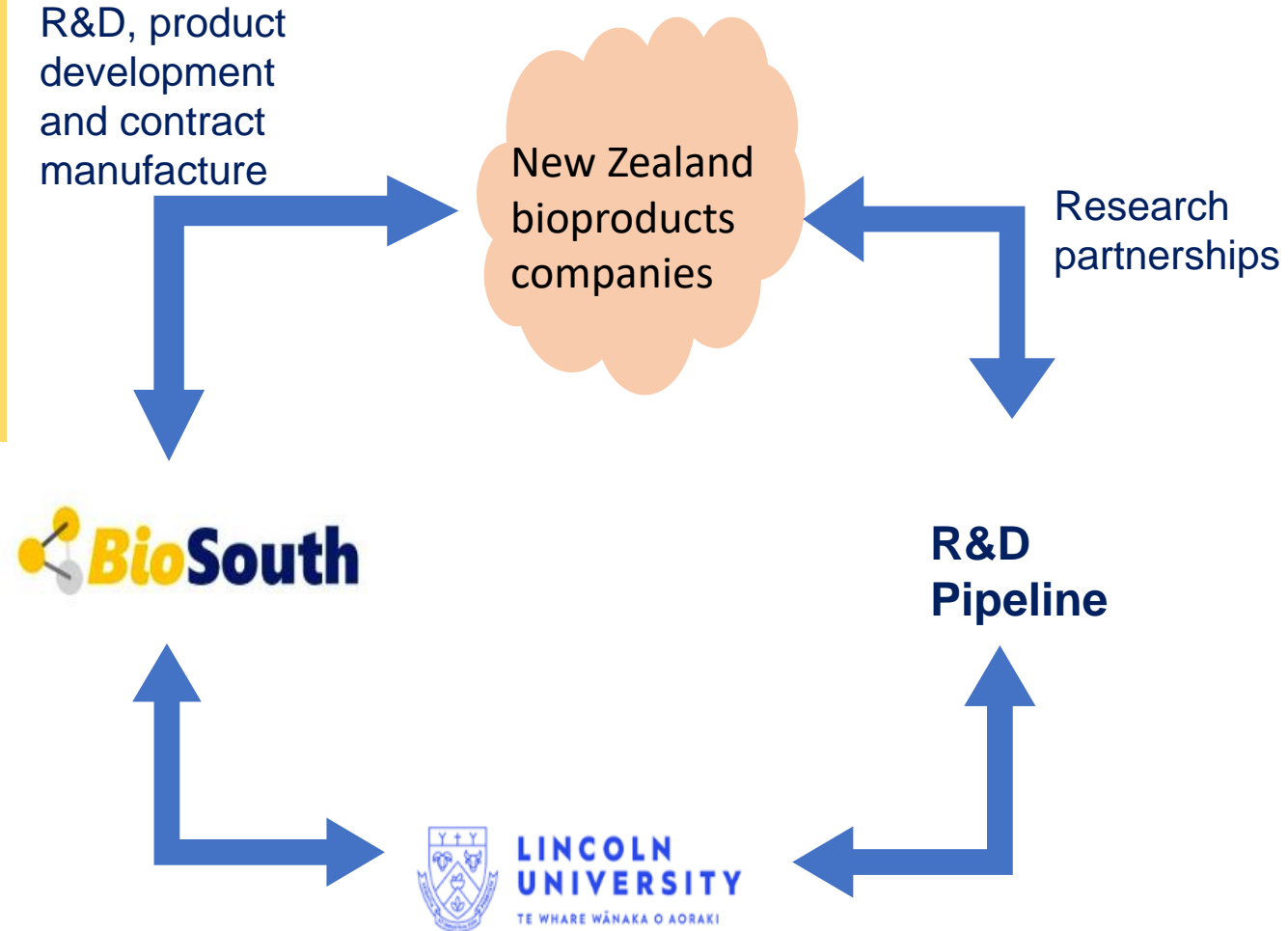
## Vision

To become a world-class centre of excellence in bioproducts development, testing and manufacture, allowing local companies a low-risk and low-cost path to market of new and existing products onshore in New Zealand.

## Values

- Collaboration and knowledge sharing
- Commitment to GMP throughout R&D and production
- Innovation
- Cultivate strong science partnerships to guarantee commercial success
- Commitment to working with government, agencies and private sector

# Building a value chain for bioproducts R&D and production in New Zealand



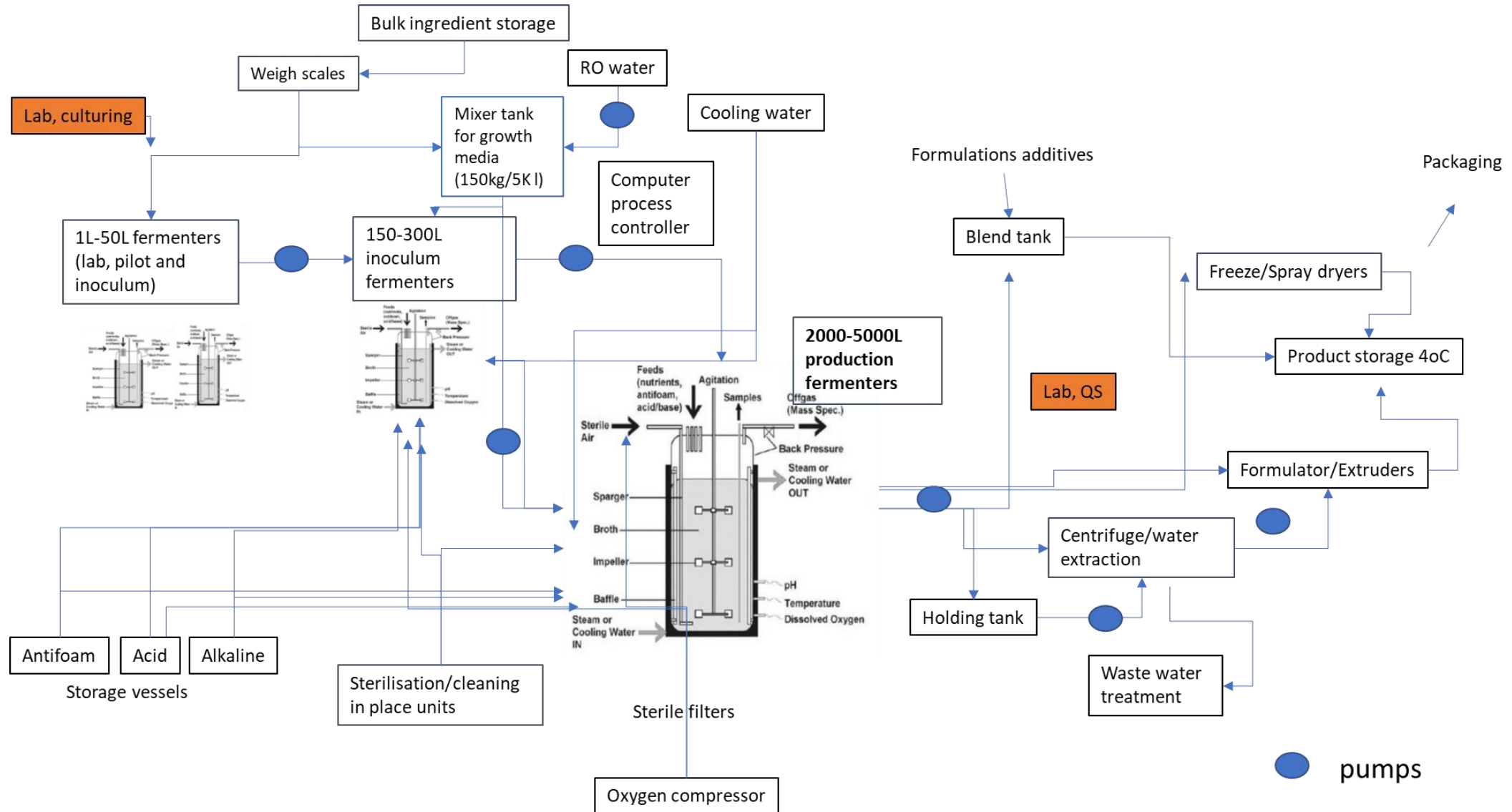
Solving the one thing that's missing – a production facility in New Zealand

# The Facility

- Full product development capabilities, from lab scale through to scaled production, capable of formulating a range of microbial-based products for New Zealand and international companies.
- Located on site at Lincoln University.
- Fermenters from 1 litre to 5,000 litres
- Laboratory and production facility suitable for a wide variety of bioproducts
- Equipment includes a range of fermenters from small test size to commercial scale, extruders, centrifuge, freeze dryer
- Test batch to commercial scale production



# BioSouth Facility – Preliminary Design



# A commitment to GMP

- BioSouth’s facility will have full quality and regulatory compliance around GMP
- CFR’s 9 & 21
- Full pharmacopeial requirements for multiple markets:
  - USP
  - EU
  - Japan



# Project team



- **Travis Glare**

Director of the Bio-Protection Research Centre at Lincoln University. Professor of Applied Entomology at Lincoln and extensive experience at AgResearch in the field of biopesticides.

- Vast experience in biopesticide R&D
- Strong knowledge around plant design and operation
- Extensive networks with key stakeholders



- **Randal Fitzgerald**

Randal has over thirty years of experience in developing technologies for the diagnostic, medical device, pharmaceutical, biopharmaceutical, and agriculture products. Ex-COO of Proliant Biologicals and has led teams for Fortune 500 companies.

- Track record in plant build and commissioning
- Strong science background
- GMP and quality system establishment and audit



# Project team



- **William Wattie**

Currently Managing Director of Astrea Proteins and Fats S.A. in Brazil, an advanced pet food ingredients manufacturer, but with a background in trade development in government and the private sector.

- Greenfield site development and project management
- Multi-party negotiations and agreements
- International business partnerships



- **John Mead**

John has over twenty years of practical experience in delivering on challenging processing plant builds and start-ups in Australasia and around the world.

With experience in food and pharmaceutical-grade plant design, fabrication, build and start-up, he is ideally qualified to lead the greenfield build.

- Track record in pharma-grade plant build
- Agency agreements with key suppliers
- Project management

# Project team

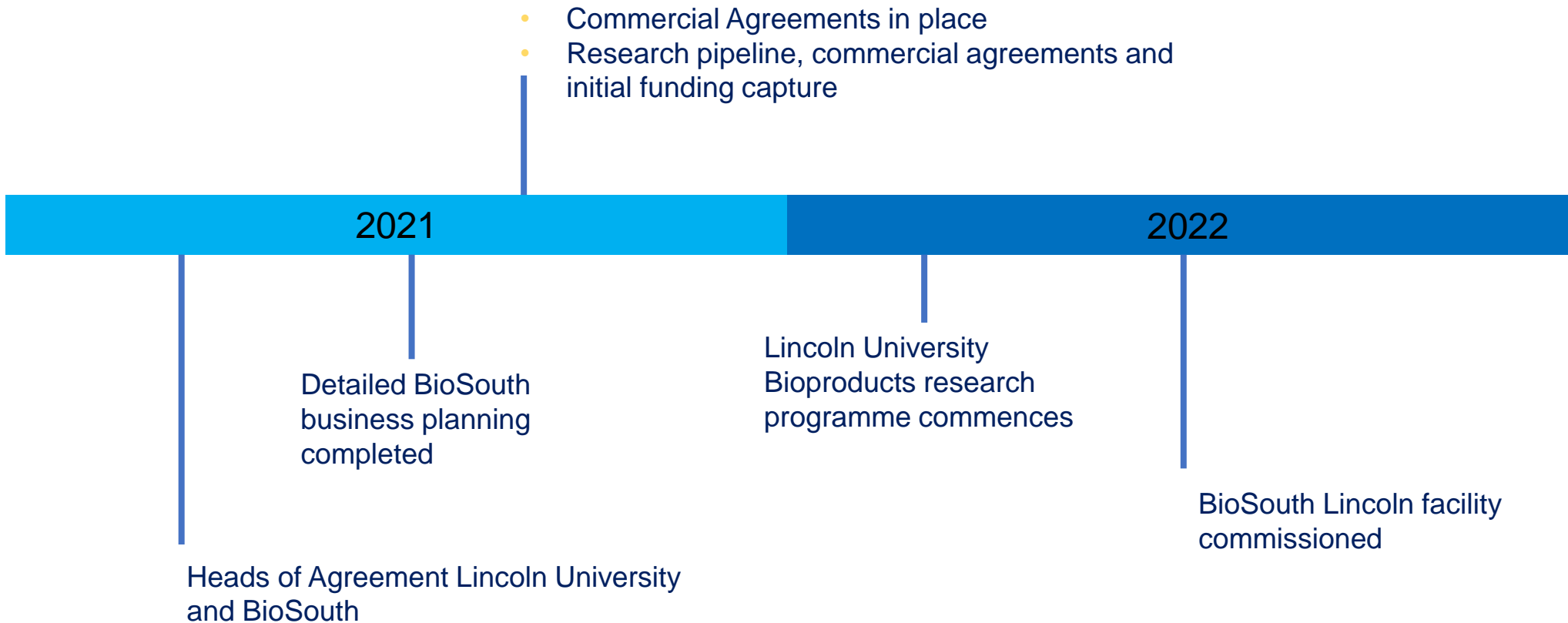


- **Simon Egan**

Simon was previously CEO of Greenlea Meats and a founder of BioArra in the United States, a manufacturer of high-value blood serum products for the scientific and pharmaceutical markets.

- Leadership of high-performance teams
- Product development
- Business growth and development

# Potential project timeline



# Engagement with stakeholders

- Go-no go decision based on expressions of interest from the biopesticides companies
- Two-way NDA and information sharing agreement between BioSouth and potential customers
- No confidential information shared with third parties unless consented
- Discussions with other stakeholders in parallel, including industry bodies, government departments, CRIs, potential offshore partners
- Transparent process and open dialogue
- Preferential pricing and access packages planned for foundation customers
- Business case complete and go/no go decision by 30 June 2021



# Thank you



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