



BIOCIDE TOOLBOX

Developing greener biocides



Suppliers' Day 2017

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Our host, partners and collaborating organisations



THE UNIVERSITY OF
AUCKLAND
Te Whare Wānanga o Tamaki Makaurau
NEW ZEALAND



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IDEAS TO LIFE



MINISTRY OF BUSINESS,
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HĪKINA WHAKATUTUKI

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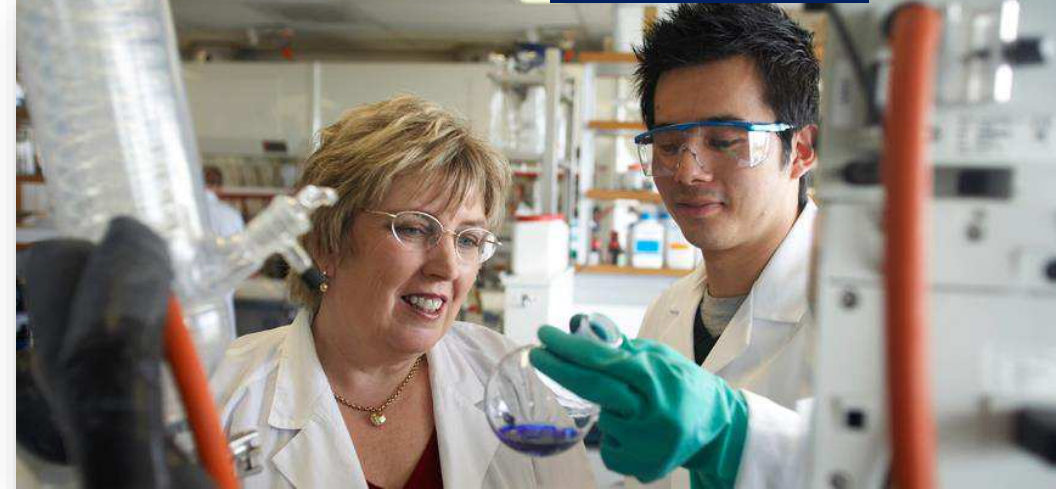
Our Team

17 Leading Scientists
4 Research Institutions
3 Interdisciplinary Faculties
6 Commercial Staffs

MEDICAL & HEALTH SCIENCES

SCIENCE

ENGINEERING



Our Goal

Developing a toolbox of new greener biocides applicable in commercial and healthcare contexts which contribute to NZ export growth



Core Research





Core Research

1. New Designer Biocides



Developing new molecules using biodegradable linkers for reduced environmental impact, higher potency and slower release



New Cyclic
Antimicrobial Agents



New Designer
Bactericidal Polymers



Eco-Friendly Marine
Anti-Fouling Agents



Core Research

2. Natural-Synthetic Hybrids



*Combining synthetic and natural biocides
to use different ranges of potencies
against a wide range of organisms*



Grape Tannins Based Active Plastic Materials



Fungus Derived Antimicrobials



Core Research

3. Surface Presentation



Enhancing antimicrobial activity of surfaces

Optimal presentation of actives to targets

Achieving long term biocidal activity



Solid/Biocide/Bacteria
Interface Imaging



Antimicrobial Polymeric
Surfaces

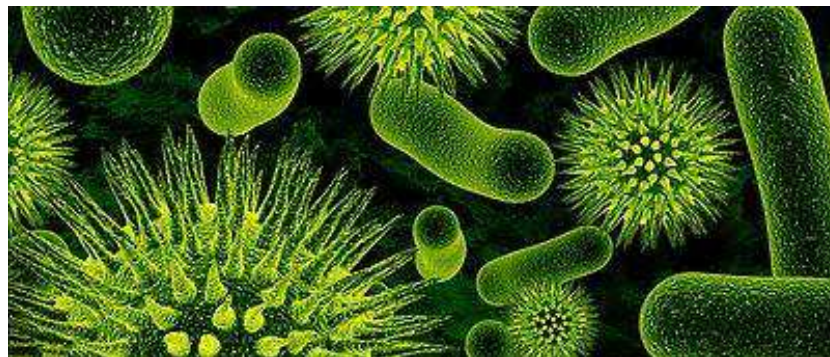


Absorption of Antibacterial
Polymers to Metal Surfaces



Core Research

4. Microbiology



Understanding biocidal mechanisms and targets

From lab testing to real life applications

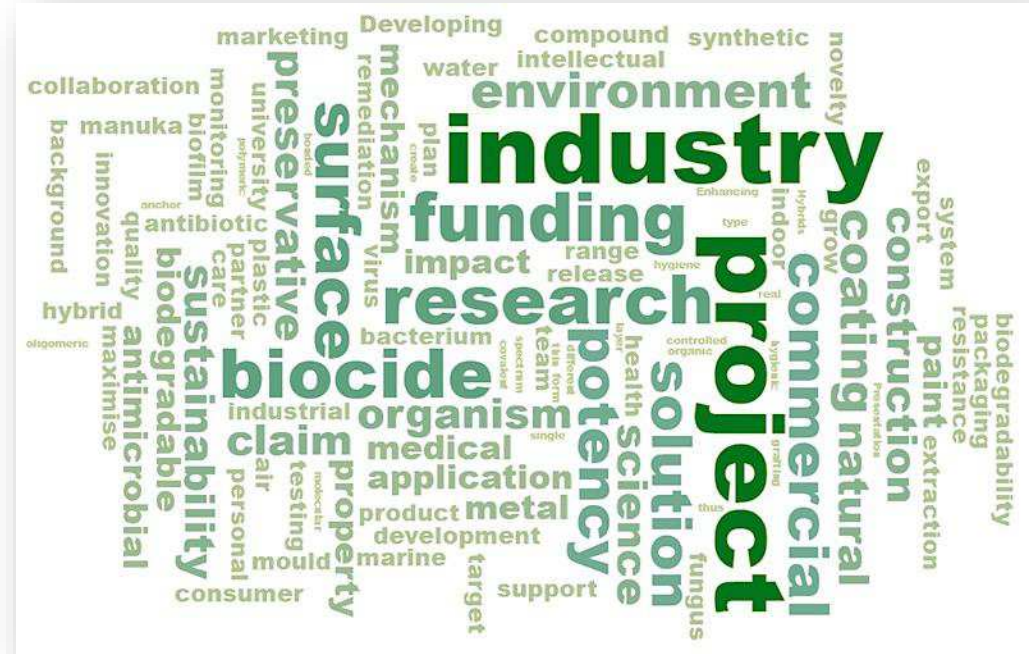
Measuring activity and environmental impact



Mechanisms of Action of Biocides



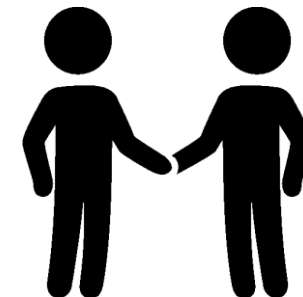
Biocides Options to Control
the Transmission of Pathogens





Industry Projects

- Listen to YOUR needs to take your R&D or your products to the next level
- Discuss the most appropriate Research pathway considering the timeframes and resources involved
- Find the best funding options available
- IP, licenses and all project details agreed upon upfront





Industry Projects

➤ FUNDING MODELS

- **Getting Started Grant** – *receive up to \$5k for a small scale project*

- **Student Grant**



- ✓ Supervision
- ✓ Monitoring
- ✓ Administration

\$15k pa contribution on average

PhD -

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Industry

- ✓ Stipend
- ✓ Host Fee
- ✓ Travel Allowance

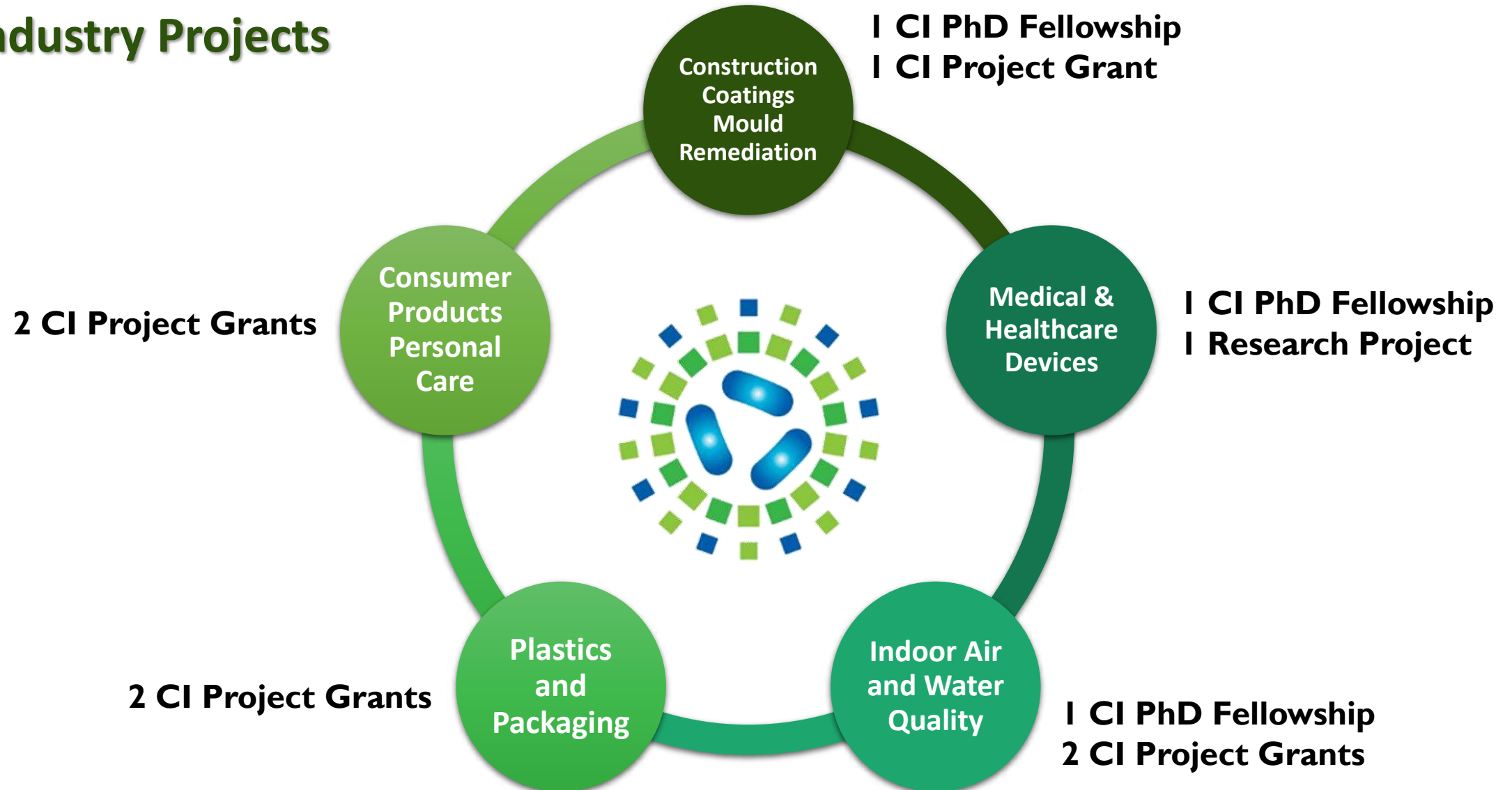
- ✓ In-kind Support
- ✓ Tuition Fees
- ✓ Consumables

On average \$150k total over 3 years

- **Project Grant** - *receive 40% of your eligible R&D project costs*



Industry Projects

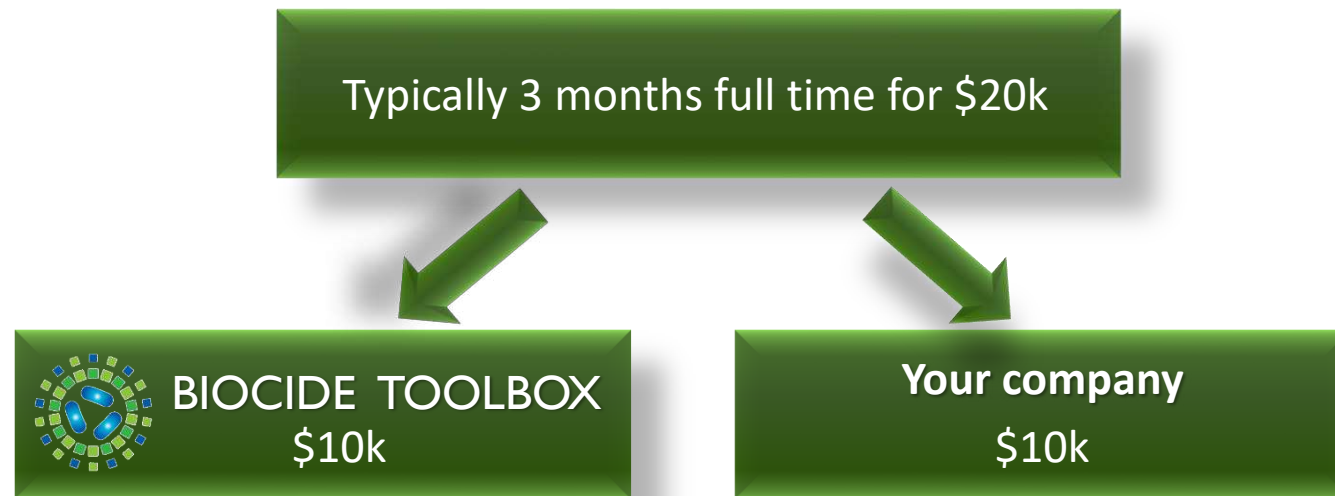




Industry Placements

➤ Subsidised Product Manager in Industry Placement

Short term employment of PhD graduates with the relevant expertise



- **Further down the track** – core PhD students to spend 6 months in Industry
 - ✓ after they have handed their thesis
 - ✓ as part of their scholarship



Contact

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