



MASSEY UNIVERSITY
COMMERCIALISATION

POLYBATICS

PolyBatics



Tracy Thompson & Professor Bernd Rehm

Inventor of PolyBatics' revolutionary biobead technology, Professor Bernd Rehm, attributes his commercial success to "the right team, the right time and outstanding technology".

PolyBatics' unique, platform technology harnesses the natural power of cells to create nano-sized, biodegradable polymer beads, with functional proteins attached, that can be used for medical and industrial purposes. They could, for example, be used to produce safe vaccines or to reduce the cost of producing enzyme-rich washing powders. PolyBatics can produce these beads with proteins attached in a single step, which is more efficient than the synthetic method used by drug companies. The PolyBatics technology is a low cost, low toxicity, multifunctional alternative to conventional resin beads with huge potential for development.

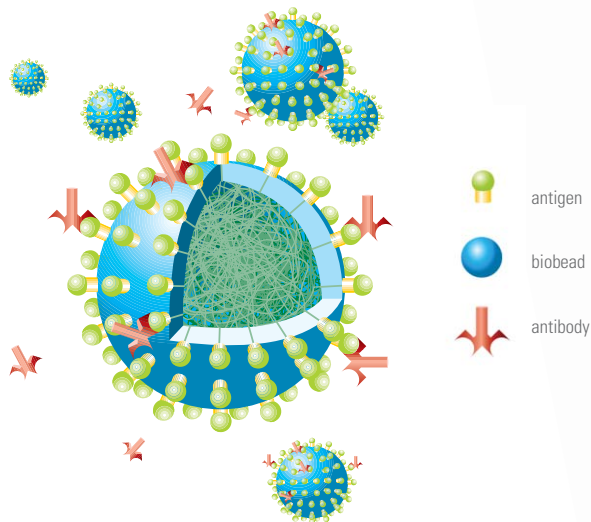
As with many scientific breakthroughs, Prof Rehm's discovery was serendipitous. When investigating microorganisms that could produce biodegradable plastics, he discovered that biobeads, or natural bionanoparticles could be functionally maintained outside the cell after extraction.

"with PolyBatics, we now have the potential to supply the world with vaccines directly from Palmerston North"

Massey University continues to provide support by investing in equipment, ongoing research and well-qualified people to assist in the progression of PolyBatics technology and its applications.

In the words of Prof Rehm himself, "with PolyBatics, we now have the potential to supply the world with vaccines directly from Palmerston North". That's the sort of impact this technology could have.

While interest in the application of PolyBatics' technology is flooding in from world-leading manufacturers and multinational organisations, Massey University continues to provide support by investing in equipment, ongoing research and well-qualified people to assist in the progression of PolyBatics technology and its applications.



Custom Prototyping: Ligands can be custom tailored to increase specificity of binding, reducing the number of downstream steps required in production.



For more information about commercialisation contact the Massey Commercialisation Team
phone (06) 356 9099 or visit www.massey.ac.nz/commercialisation



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THE COMMERCIAL JOURNEY FROM LAB TO MARKET



IDENTIFY

PolyBatics' unique, platform technology harnesses the natural power of cells to create nano-sized, biodegradable polymer beads, with functional proteins attached, that can be used for medical and industrial purposes. They could, for example, be used to produce safe vaccines or to reduce the cost of producing enzyme-rich washing powders. PolyBatics can produce these beads with proteins attached in a single step, which is more efficient than the synthetic method used by companies. The PolyBatics technology is a low cost, non toxic, multifunctional alternative to conventional resin beads with huge potential for development.

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PROTECT

Prof Rehm's situation was unique, as he approached Massey's Commercialisation Office having already filed patents for his technology. Massey expressed interest in owning the

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intellectual property and developed a strategy to enhance the IP, which included worldwide coverage. That enhancement also included IP generated through collaborative projects between Massey and other research partners, leveraging on experience that has led to protection across a broader range of potential applications than would otherwise have been available.

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MARKET

With such novel technology there were no obvious commercial partners, so the decision was made to commercialise the technology via a start-up company. This start-up was formed with the BioCommerce Centre and Tracy Thompson, a successful life science entrepreneur with experience in a number of US start-up companies. Massey and Prof Rehm remain foundation shareholders in the company.

...“you don't have to be an expert in everything, but you do need a team of experts”

Prof Rehm and Thompson are currently in negotiations with major multinational organisations as they look to take the technology global.

Both Prof Rehm and Thompson are positive about Massey's partnership with the BioCommerce Centre. Strong industry and investment network connections are key to any successful commercialisation and the BCC brings both these elements to the partnership, while Massey brings a vital understanding of the technology.

As Thompson says, “you don't have to be an expert in everything, but you do need a team of experts”. That's what PolyBatics now has thanks to Massey and its commercialisation partners.

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