

Institute for Molecular Bioscience

Where the next cure begins

In two decades, UQ's Institute for Molecular Bioscience (IMB) has become one of the world's most influential and innovative research institutes. In Australia, we are the nation's number one research institute for research outputs, and the top research institute for commercialisation activity.

It started 20 years ago with funding from the Queensland Government, philanthropists Chuck and Helga Feeny, and the University of Queensland. The vision was bold and innovative: to position Queensland as a global epicentre for drug discovery.

Whether it be for common diseases such as COVID-19, chronic pain, cancer and stroke, or for diseases in agriculture, IMB is where the next cure begins.

To start a conversation about the IMB and to change the world, please contact

Professor Ian Henderson
Director, IMB
director@imb.uq.edu.au

At IMB we have a vision: **to create a world with a cure for every disease.** Our approach to drug discovery and agricultural innovation is unique and world-renowned. We harness our knowledge of nature to create sustainable cures for diseases that plague people, animals, and plants.

Our researchers use **Australian venoms, plants, and soils** to stop superbugs in their tracks, to create better cancer treatments, to ensure patients survive strokes and heart attacks, to solve inflammatory diseases such as Parkinson's and Alzheimer's, and to develop environmentally friendly and effective pesticides. We strive to make treatments more affordable, and accessible to regional and remote communities across the globe. Our research outputs and global partnerships have made Queensland a global destination for drug discovery and development and positioned the University of Queensland in the **world's top 50** universities.

Our entrepreneurial culture and collaborative approach also set us apart. Our research has led to **12 spin-out companies**, which have had an impact internationally, and brought considerable wealth and investment to Queensland. International and national pharmaceutical, biotech and agricultural companies



#1
Australian research
institute



>400
staff and students



12
spin-out companies



>20% of patent families
at UQ are derived from
IMB research



1454
international collaborators
from 48 countries

preferentially partner with us, delivering Australia's largest-ever biotech deal, a Nasdaq listed company, and 50% of the University of Queensland's patent income.

IMB is a crucial player in the local economy, providing **over 400 jobs and training places.** We are a cornerstone for delivering the highly-skilled, **STEM-educated, entrepreneurial workforce** of tomorrow. Connecting Queensland to our world, our alumni are entrepreneurial leaders in Australia, executive leaders in multinational companies, policy makers in international organisations, and highly sought-after opinion leaders.

At IMB we dare to discover a healthy and sustainable economic future for Brisbane and Queensland.

Inspiring the Next Generation of Scientists

With 75% of the fastest-growing occupations requiring STEM skills, educating and inspiring young Queenslanders with science and discovery is critical. As one of the world's most influential and innovative research institutes, we at UQ's Institute for Molecular Bioscience (IMB) have taken this challenge to heart.

Through our citizen science projects and our schools outreach programs, we are showing young Queenslanders that science starts in their own backyards. Whether it be finding new antibiotics from soil, stopping cane toads, or understanding gene sequencing, we are helping the next generation connect with STEM careers.

And if not us, then who?

Through our myriad of outreach programs we are inspiring the next generation of medical researchers, providing a valuable education resource for teachers and students and connecting Queenslanders with the extraordinary value of the land beneath their feet.



Cane Toad Challenge is another successful IMB citizen science project.



Soils for Science is an Australian-first citizen science program dedicated to finding new antibiotics in the backyard.

Soils for Science citizen science project—inspiring the next generation of scientists

IMB researchers are teaming up with students, teachers and farmers across the state to spark an interest in science and careers in STEM. Through citizen science project, Soils for Science, Queensland students will help grow IMB's *Living Library*—the world's largest library of potential new medicines sourced from soils, bacteria, fungi, plants and venoms. Soils for Science will build an understanding of biology, chemistry, analytics and IT around a compelling issue—how can you help us stop superbugs?

Training teachers and inspiring students with discovery

By providing schools with state-of-the-art Oxford Nanopore Genome Sequencers, training teachers in their use, and providing curriculum linked activities, we will help the next generation understand just how relevant science is to their lives.



Workforce capability

Since we opened our doors in 2000, we have trained over 400 local and international PhD students who have gone on to create new drugs, launch start-ups and make breakthrough discoveries that have saved lives and transformed treatments. We are a recognised source of expertise and staff for local and international pharmaceutical companies. Our trailblazing researchers, past and present, are having a global impact across discovery, industry, policy and innovation.