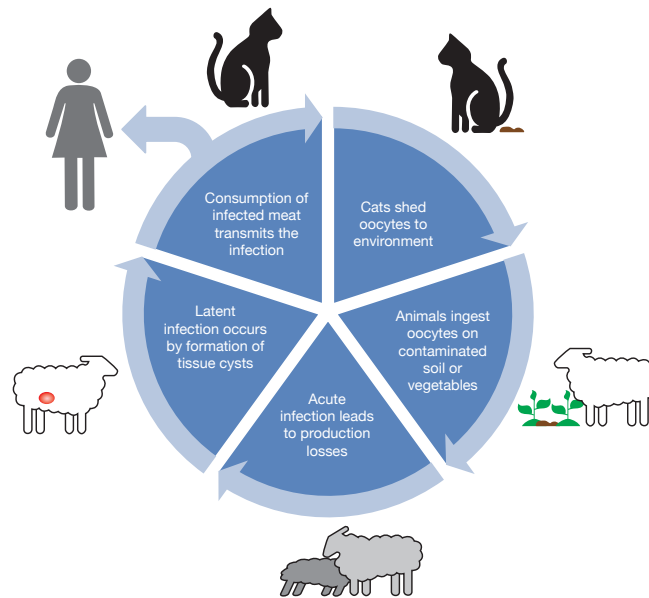


A Stable Efficacious *Toxoplasma* Vaccine

- ▶ *Toxoplasma* infection causes huge livestock production losses
- ▶ Current vaccine technology has poor stability
- ▶ Our strain prevents acute and chronic infection

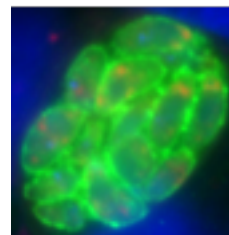
The opportunity

Toxoplasma infection caused by ingestion of food contaminated with cat faeces leads to huge livestock losses from abortion, particularly in sheep flocks, and results in chronic infection from formation of tissue cysts. Ingestion of meat containing cysts transmits the infection. Currently there is no treatment for chronic infection and an agricultural vaccine is only available in some markets.

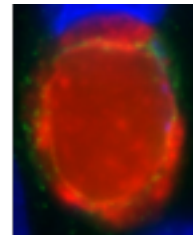


The technology

We have developed a genetically defined attenuated *Toxoplasma* mutant that cannot regulate its energy storage and hyperaccumulates starch. The strain is an excellent vaccine candidate as it elicits a complete immune response and is safe because it cannot form stable cysts and cannot cause chronic infection.



WT stable cyst



Modified strain – unstable cyst

Opportunities for partnership

Our goal is to develop a stable, safe and efficacious vaccine for toxoplasmosis that can be used in livestock worldwide.

We have:

- A safe *Toxoplasma* strain, with easily scalable growth, for vaccine development
- Provisional patent application
- An exceptional team with expertise in *Toxoplasma* biology

We are looking for a partner to:

- co-develop a novel livestock vaccine, assist with veterinary trials and advise on regulatory issues
- commercialise and market this novel vaccine for toxoplasmosis in livestock

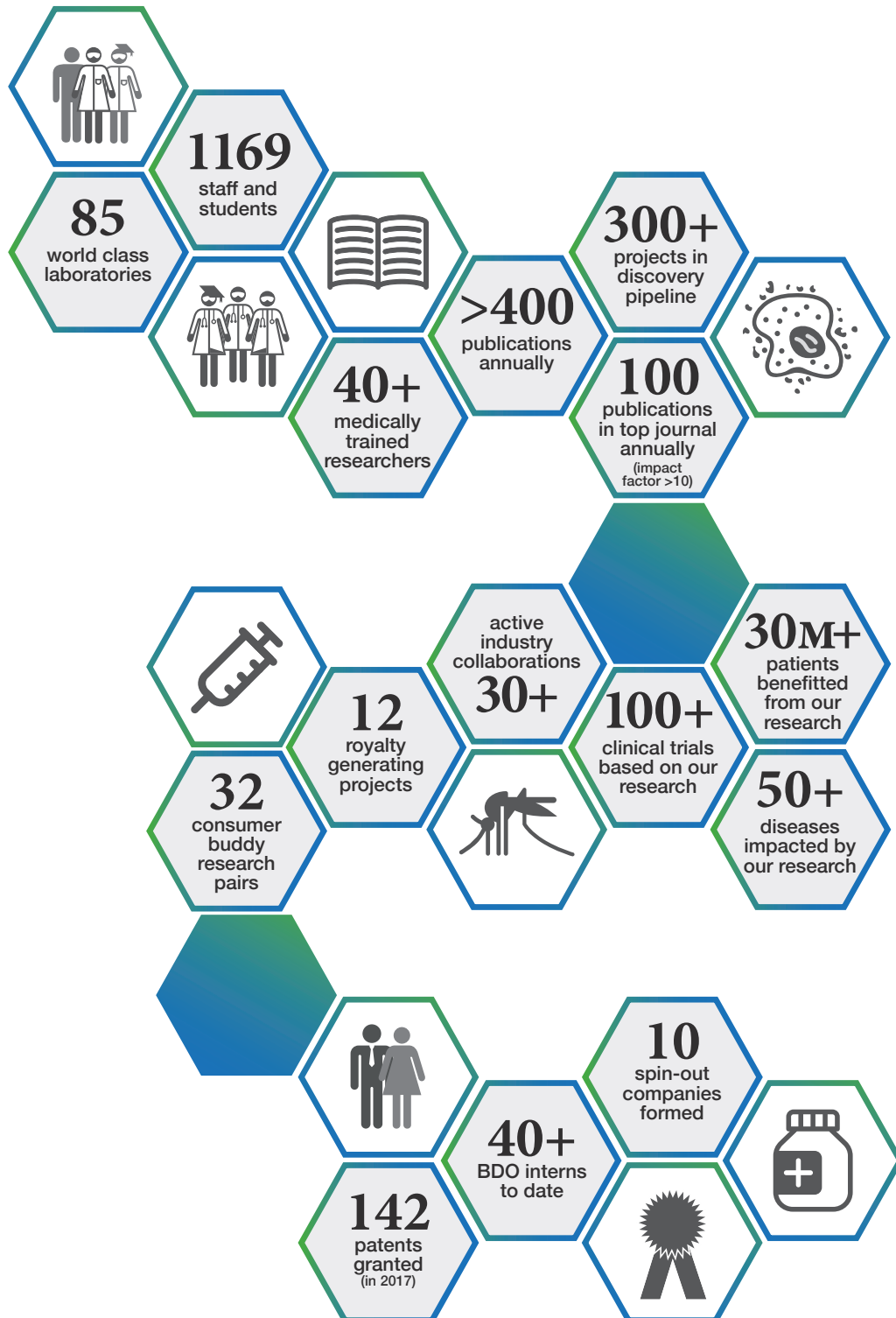
Scientific team

Associate Professor Chris Tonkin

Laboratory Head, Infection and Immunity Division

Walter and Eliza Hall Institute of Medical Research

At the Walter and Eliza Hall Institute our multidisciplinary research teams are focused on solving complex biological questions by integrating expertise in bioinformatics, clinical translation, computational biology, epidemiology, genomics, medicinal chemistry, proteomics, structural biology and systems biology. Our innovative science expands and improves the understanding of human biology and enables the translation of this new knowledge into novel therapies that benefit patients worldwide.



To discuss partnering opportunities, please contact **Dr Anne-Laure Puaux**, Head of Commercialisation, by email puaux.a@wehi.edu.au or phone +61 3 9345 2175.