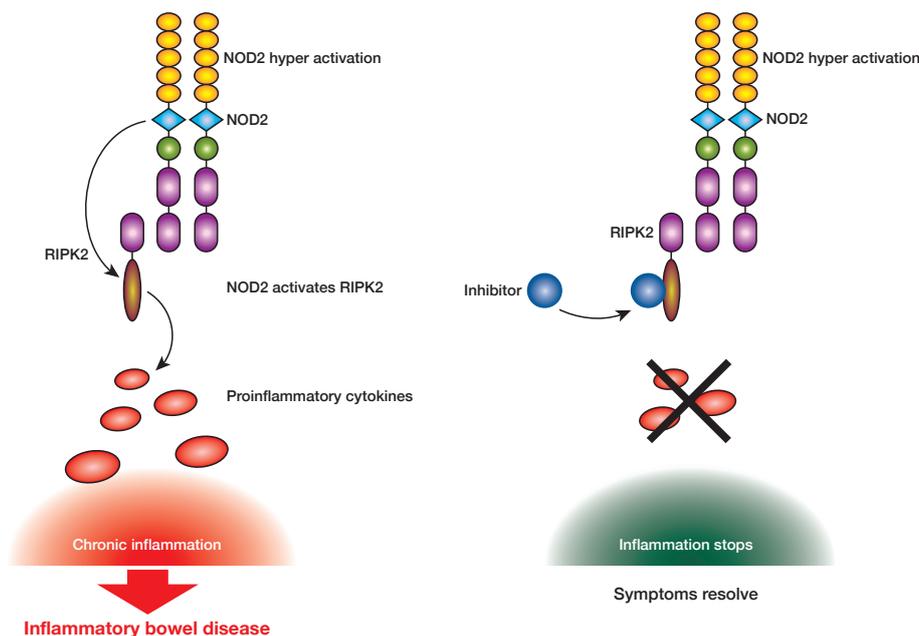


Intercepting inflammation with RIPK2 inhibitors

- ▶ RIPK2 is a key driver of inflammation
- ▶ Potent and specific RIPK2 inhibitor developed
- ▶ Established enzyme assays and models for *in vitro* and *in vivo* testing

The opportunity

Receptor-interacting serine/threonine kinase 2 (RIPK2) signalling drives expression of proinflammatory cytokines and type I interferon. Hyperactivation of the NOD2:RIPK2 pathway is a key driver of inflammatory bowel disease (IBD) and RIPK2 inhibitors show efficacy in preclinical models of IBD. To date, no RIPK2-specific inhibitors have advanced to clinical trials, and as such, there is a first-in-class opportunity to address these significant unmet needs.



The technology

We have developed a small molecule inhibitor of RIPK2, WEHI-345, that has potent anti-RIPK2 activity, high specificity for RIPK2 and good *in vitro* and *in vivo* efficacy. WEHI-345 demonstrated bioavailability in mice and there was no pathology or changes to white blood cells observed at the maximum tolerated dose.

Opportunities for partnership

We are seeking a co-development partner for our structure enabled drug discovery program to generate a potent, specific RIPK2 inhibitor.

We have:

- a lead compound, validated enzyme assays and comprehensive *in vitro* and *in vivo* models for inhibitor validation
- granted patent for the RIPK2 inhibition as a method of treatment for inflammatory conditions, Crohn's Disease and other diseases
- comprehensive expertise in lead optimisation including medicinal chemistry and structural biology

We are seeking investment to complete:

- lead optimisation and medicinal chemistry
- preclinical validation

Scientific team

Associate Professor Guillaume Lessene

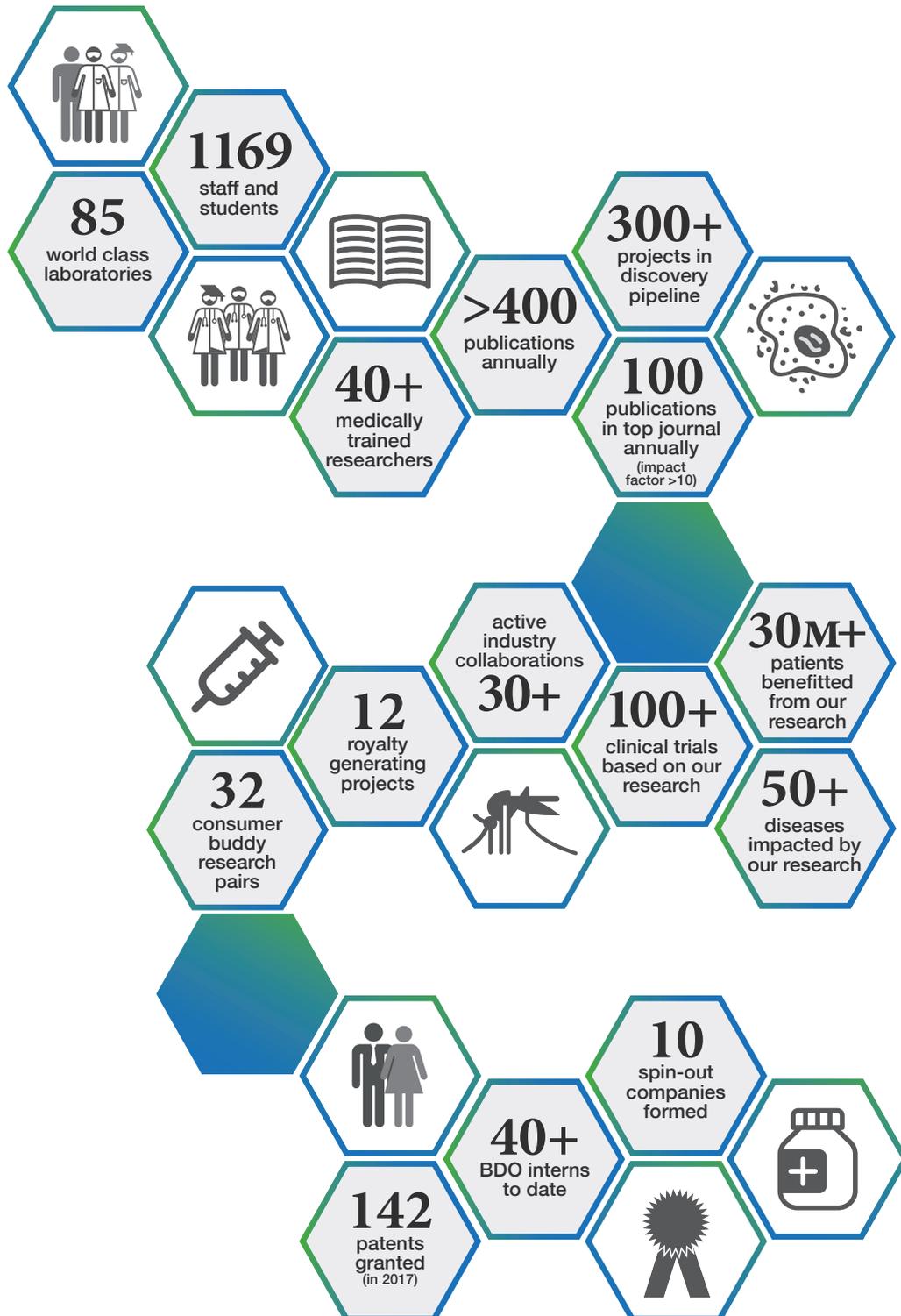
Division Head, Chemical Biology Division

Dr Ueli Nachbur

Senior Postdoctoral Fellow, Cell Signalling and Cell Death 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.