THE UNIVERSITY OF SYDNEY AND AUSBIOTECH A PROJECT TO IMPROVE INDUSTRY-UNIVERSITY PARTNERSHIPS

Accelerating Health and Medical Research Commercialisation in Australia

+ COMPANION REPORT









## **EXECUTIVE SUMMARY**

In 2021 The University of Sydney, Faculty of Medicine and Heath (FMH), The University of Sydney Business School, and AusBiotech commenced a project to develop a global gold standard framework to improve the translation and commercialisation of health and medical research in Australia.

Extensive consultation with stakeholders from across industry, consultants, independent research organisations, academia, university operations and government were invited to contribute. Strengthening this further, we reached out worldwide to investigate successful models. The result gave birth to ten recommendations that will generate positive, tangible impact.

The framework focusses on identifying changes that would enable industry to access emerging intellectual property, evaluating its commercial potential, strengthen collaborations and grow a skilled workforce.

Participants highlighted the importance of universities having a mission statement which acts as a 'north star' ensuring research commercialisation is a priority and fully integrated into university practices. Metrics related to research commercialisation can focus on research impact and the number of entrepreneurs working in or coming from academic organisations, rather than number of deals, or revenue generated from royalties and spin outs.

Recommendations will also be incorporated into AusBiotech's 'Biotechnology Blueprint: A Decadal Strategy for the Australian Biotechnology Industry' as part of the decadal plan that builds both a thriving ecosystem and develops a sovereign capability for Australia.

Your feedback and collaboration is welcome, as we strive for a national approach across the global stage.









## **PoC FUNDING**

Create a national University proof-of-concept (PoC)
Scheme to support both clinical and
commercial PoC activities.



Inroads have already been made with the Federal Government's \$2.2 billion University Research Commercialisation (URC) Action Plan to supercharge research commercialisation, the Medical Research Future Fund (MRFF), Medical Research Commercialisation Fund (MCRF). Targeted Translation Research Accelerator (TTRA) and Researcher Exchange and Development within Industry (REDI).



We recommend a coherent Australian industry policy which outlines a co-ordinated national innovation ecosystem, and diversification of funding to help bridge the 'valleys of death'.



A unique dedicated model which tests both clinical and commercial PoC can help test and progress promising research as well as encouraging a 'fail fast' approach for technologies which may not have commercial validity.



#### **RECOMMENDATION 2**

### **INCENTIVISE**

Adjust standard career progression metrics for academics who are seeking to explore the commercialisation potential of their research.



Commercialisation requirements are increasingly being factored into grant funding guidelines and assessment criteria.



We recommend baseline harmonisation of metrics nationwide to add value to commercialisation efforts adjacent to publications and citations.



We recommend an 'industry track' to be incorporated into the traditional 40:40:20 model and welcome suggestions and input across all disciplines/industry sectors to develop a workable model.





## **GLOBAL PLACEMENTS**

Industry fellowships should consider global placements in order to access international Research and Development (R&D) infrastructure and maximise the learning opportunity.



REDI Fellowship, APR Intern (Australian Postgraduate Research), URC funding are examples of schemes that partially addressed this.



We suggest collaborating with all international Chambers of Commerce and Australian Government embassies and consulate offices overseas to implement an international fellowship program that could be developed under the banner of a global 'Bridge' program.



We recommend a 20% collaboration premium for the non-fundable tax offset on the R&D Tax Incentive scheme assist in resourcing the program.



#### **RECOMMENDATION 4**

### **UPSKILL**

Improved training and professional development opportunities for commercialisation offices within Australian universities.



There are already schemes that could be better utilised to develop and teach transfer skills and expertise, such as Registered Technology Transfer Professionals (RTTP) accreditation.



We suggest a nation-wide tech-transfer program for skills development and interaction for academics and professionals that folds in educational design and potentially accredited qualifications.





# COMMERCIALISATION INSTITUTE

Partner with AusBiotech on the development of an Australian Commercialisation Institute (ACI) to leverage expertise by forming strategic partnerships to access more sophisticated insights into the commercial potential of university research.



This report and Ausbiotech's decadal plan means the conversation has already started.



We recommend an institute that draws on award, non-award and micro-credentials from across Australia and globally.



#### **RECOMMENDATION 6**

# SECONDMENTS INTO INDUSTRY

Secondments for professional staff involved in technology transfer within private equity/venture capital firms to understand their approach to valuing pre-clinical invention disclosures/intellectual property (IP) (an extension of current programs focused on researchers).



There are working models such as REDI Fellowship that could be scaled up to support this recommendation.



We welcome discussion with the Australian Investment Council and/or Venture Capital peak bodies to further explore.



# TRACK COMMERCIALISATION

Further develop metrics to assist in tracking commercialisation progress, complemented by standard term sheets outlining baseline terms and conditions to streamline the negotiation of licence, option or assignment.



Survey of Commercial Outcomes from Public Research (SCOPR) provides a baseline that could be further developed and integrated into mainstream operations and reporting.



We suggest this should include lead, lag and civic society indicators.



#### **RECOMMENDATION 8**

# INTEGRATE BUSINESS KNOW HOW

Additional clarity on the commercialisation potential of preclinical IP via the development of a collaborative national program between business students and academic researchers. A proposed model for how this program could operate at The University of Sydney is described in the main report via the curriculum for the MBA-FMH Seed Fund and the completion of The University of Sydney Commercialisation Template.



The University of Sydney has already started on the journey by facilitating stronger connections between scientists and business students that facilitates PoC for promising pre-clinical IP. See proposal 1 of the main report.



We recommend, in conjunction with AusBiotech, incorporating a model that is fit for purpose in every research institution in Australia. This could also become a deliverable of the Commercialisation Institute.





# ATTRACT THE RIGHT TALENT

Access the global pipeline of Technology Transfer Office (TTO) talent by creating opportunities commensurate with those in the US and UK. This may require re-evaluating the optimal personnel size and resourcing requirements for Australian TTOs, complemented by an Australian association of university technology managers with an annual forum for sharing ideas, trends, and best practices.



There are models such as UK's Higher Education Innovation Fund, and UniQuest that could be emulated to support this recommendation.



We recommend a national Tech Transfer Roundtable to develop a community of practice and an action plan.



#### **RECOMMENDATION 10**

## FREEDOM TO PUBLISH

Industry should ensure publication requirements can be accommodated as part of industry-funded research, as academic journal publication remains an important criterion for grant funding and career progression.



Most industry partners allow publishing within certain delayed publishing parameters.



We recommend as a first step some guidelines for academics to allow them to better articulate what publishing means, where it is published, the audience and potential pros and cons for academics and industry.



## A CALL TO ACTION

Opportunities to improve the quality of life for people around the world are available right here within our grasp. This report provides ten achievable recommendations that have been stress tested through an extensive consultation process with industry.

With the marriage of expert researchers and prominent industry players, new discoveries can be accessible faster and brought to market earlier. Our evolving ecosystem is already contributing billions of dollars to the national economy, helping create new industries, and building the workforce that drives it.

Some of the recommendations are actionable in the short term, while some may require a longer-term approach. We invite you to submit your ideas to complement work already done and collaborate with us.



Join us on this journey...

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### **ACRONYMS**

Acronym	Definition	Acronym	Definition
ACI	Australian Commercialisation Institute	R&D	Research and Development
APR	Australian Postgraduate Research	REDI	Researcher Exchange and Development within Industry
FMH	Faculty of Medicine and Health	RTTP	Registered Technology Transfer Professionals
IP	Intellectual Property	SCOPR	Survey of Commercial Outcomes from Public Research
MCRF	Medical Research Commercialisation Fund	тто	Technology Transfer Office
MRFF	Medical Research Future Fund	TTRA	Targeted Translation Research Accelerator
PoC	Proof-of-Concept	URC	University Research Commercialisation



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