

DESE Higher Education Research Commercialisation IP Framework Consultation paper: Cruxes Innovation's response

[Cruxes Innovation](#) (Cruxes) welcomes the opportunity to provide its views on mechanisms to improve Australian higher education research commercialisation and translation. For the last five years, Cruxes' co-founders [Emily Chang](#) and [Jonathan Lacey](#) have designed and delivered structured coaching and mentoring programs to over 700 Australian researchers to help them develop skills, support and confidence to drive commercialisation and translation of their research by founding spin-outs and/or in partnerships with industry. Jonathan Lacey has decades of personal experience in IP commercialisation, as a researcher/inventor, spin-out CEO, and commercialisation professional.

Cruxes supports the development of a framework for intellectual property (IP) management and negotiation. We note, though, that IP management is only one barrier constraining university research commercialisation. An IP framework will only be effective in enabling more higher education research commercialisation and translation if it is accompanied by Federal government action to address the other barriers identified in [our URC submission earlier this year](#):

- Limited Australian industry innovation and researcher engagement capability
- Limited Australian researcher industry engagement, entrepreneurship, and project management capability
- University promotion of researchers that does not incentivise industry collaboration or research commercialisation and translation.

Cruxes' response to the IP Framework discussion questions is limited to questions 2, 10 and 11 only. Cruxes consents to its submission being made publicly available.

2. What parts of standard agreements must allow changes to accommodate variation? Why? How?

We strongly support the HERC IP Framework's goals of reducing transaction complexity, time and cost, and providing an entry point for negotiation. We agree that this is especially important for SMEs and startup/spin-out founders, and we agree that the standardised starting point provided by the IP Framework will achieve this. However, we also recognise that each transaction will have its own unique characteristics, so we support the idea of allowing the negotiation of *limited* changes to the standard agreements to accommodate these. We recommend that the IP Framework defines a range for key agreement parameters such as equity share and royalty rate. We recommend that these ranges are based on recent examples of agreements that enabled rapid finalisation and led to successful outcomes. These might come from universities that use publicised, standard terms.

10. What unique aspects of specific sectors and commercial situations should be accommodated in the HERC IP Framework? Why? How?

11. What would make the HERC IP Framework attractive to collaborating and investment partners?

We recommend that the IP Framework specifically provides a standardised starting point for IP agreements with university spin-out and startup companies. Building successful spin-out and startup companies based on university IP typically takes 5-10 years of commitment by founders and investors, and involves significant technical and market risk. We work with many researcher-founders who are developing truly disruptive innovations. The translation and commercialisation of IP from fundamental science and research breakthroughs into usable products and services is often highly capital-intensive. In addition to this large technical investment, startups commercialising university IP often must also make similarly large investments to shift existing markets to enable these innovative products to be adopted. While many such founders are motivated by a desire to make a significant difference in the world, they and their investors also need a financial incentive, clearly visible from the start of the venture, to take on this risk, and to persist over this period.

While the path to market for startups in medical devices and pharmaceuticals is usually clear and well-defined when they are founded, this is not the case for startups commercialising university IP in other sectors. The founders of these startups need the autonomy to change the direction of the company if needed. Often they find success pursuing market opportunities very different from those envisaged when the company was founded and the initial IP agreement was reached.

For all these reasons, we recommend that the HERC IP Framework requires that IP agreements with university spin-out and startup companies result in the university or research organisation owning a small equity share, no more than 10%, or an entitlement to a small royalty payment, no more than 2% of net sales, and/or give the startup an option to buy the IP at a pre-agreed price; and no governance rights. These arrangements are common in other countries with a more established university startup culture, such as the US. This approach will be challenging for some universities, who see themselves as having taken on significant risk in generating the IP, and further risk in committing to a single, unproven commercialisation path for it. We recommend that the latter concern is addressed by including in these agreements a clause that gives the university the ability to claw back the IP if the startup or spin-out has not made progress (raised capital or earned revenue) in 2-3 years. While this approach will require some universities to accept a significantly smaller equity or royalty share than they currently expect, it will accelerate agreement with founders and savvy investors, and lead to more successful ventures.