

The Bionics Institute leads the world in the research and translation of innovative medical devices and therapies that improve human health.

The Bionics Institute is an internationally recognised, independent medical research institute that solves medical challenges with technology.

Our multidisciplinary team comprises world-class scientists, engineers and researchers, and our laboratories are located in St Vincent's Hospital Melbourne, close to our clinical collaborators.

Together we aim to transform the lives of people with challenging conditions, including hearing impairment, epilepsy, Parkinson's, Alzheimer's, Crohn's disease, and rheumatoid arthritis.

The Bionics Institute has an impressive track record of translating medical device concepts into clinical reality, dating back to 1986 when it was founded by Professor Graeme Clark.

Professor Clark led the team that created Australia's cochlear implant, which has given hearing to people with hearing impairment around the world.

Since then, Bionics Institute researchers have developed medical devices that aim to change the lives of people living with challenging conditions, with a focus on translation of research into the clinic to benefit patients. This includes:

- 1. Electrode design for Australia's first-generation bionic eye prototype implanted in clinical trials in 2018 and commercialised through Bionic Vision Technologies.
- 2. Development of an epilepsy seizure monitoring device commercialised by Bionics Institute spin-off Epi-Minder Pty Ltd.
- 3. Development of innovative vagus nerve stimulation device that is currently in clinical trials as a treatment for Crohn's disease, and also being adapted to treat rheumatoid arthritis and epilepsy.
- 4. A clinical trial investigating the use of Transcranial Magnetic Stimulation of the brain to fight memory loss in Alzheimer's.
- 5. Development of novel drug delivery methods for hearing loss
- 6. Development of technology currently in trials to diagnose and guide treatment of infant hearing and tinnitus
- 7. Development of a drug-free therapy for chronic pain using light and electricity to stimulate selected nerves.

In 2021 we launched spin-off company Neo-Bionica, a joint initiative of the Bionics Institute and the University of Melbourne, which combines the engineering expertise and state-of-the-art facilities needed to develop medical devices from initial concept to first-in-human prototypes for clinical trials.

Acknowledgements

The Bionics Institute would like to thank our Med Tech Talks Podcast guests for their contribution to this white paper:

Dr Emma Ball Associate Professor Fiona Brownfoot Dr Chris Burns Dr Jeremy Buzzard Dr Andreas Fouras Dig Howitt Bronwyn Le Grice Sonya Sawtell-Rickson Stephen Tomisich Professor Andrew Wilks Dr Chris Smith

This White Paper continues the conversation about how to build Australia through innovation discussed in the annual Bionics Institute Innovation Lecture. In 2024, the lecture was made possible with the generous sponsorship of the following organisations:





















Thank you to the Australian Institute of Company Directors who kindly gave permission to reproduce the article at the end of this White Paper, first published in Company Director Magazine in September 2024 and titled: Bionics Institute leverages ATO Ruling to appeal to new philanthropists

Australian Institute of Company Directors

Introduction:

Talking about investing in innovation

Over the past three years, the Bionics Institute has been leading the conversation about how we can build Australia through innovation.

Why did we need to talk about this? Because we believe that Australia has so much to gain if we turn to innovation as an essential pillar of our economy.

We started with the launch of our Med Tech Talks podcast, where I interview leaders, investors, researchers and entrepreneurs to explore how we can improve the translation of innovation into commercialisation to change the lives of people living with challenging medical conditions.

I'm proud to say the podcast has had more than 5,000 downloads of nearly 40 episodes and has been streamed in over 70 countries.

The podcast launch was closely followed by our first Innovation Lecture, which has become a highly anticipated annual event convening med tech thought leaders to discuss different aspects of innovation.

Our first White Paper in 2023 drew on the conversations and insights provided by our keynote speakers and podcast guests to elucidate the four ways we can supercharge innovation through: Co-location; skills development and funding; storytelling and persistence; and leveraging mentorship and partnerships.

In this White Paper we are shining a light on investment into innovation: how to source investment; how our investment landscape differs to the United States; how to optimise investment; and finally, how to survive the Valley of Death.

I would like to take this opportunity to thank all our Innovation Lecture speakers and sponsors, our podcast guests, and all contributors to the White Paper for their time and enthusiasm to talk about innovation in Australia.

Best wishes

Robert Klupacs
Bionics Institute CFO

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Foreword

From HESTA CEO Debby Blakey

Investing in Australian healthcare innovation makes good financial sense, creating long-term value for businesses and investors while strengthening the nation's economy for future generations.

I'm incredibly honoured to introduce this year's White Paper from the Bionics Institute, which has made significant contributions to medical research and life-saving technology in Australia for nearly 40 years.

This paper highlights the extraordinary potential of Australia's med tech sector and the crucial role institutional capital can play in driving further transformation.

Australia boasts a globally recognised capability in innovation.

We are the home to world-leading universities, research facilities, teaching hospitals and engineering capabilities. Australian researchers have consistently delivered groundbreaking solutions, enhancing quality of life for individuals and families worldwide while positioning our nation as a beacon of excellence.

And we know there are more exciting breakthroughs to come.

In an era of rapid technological advancements, Australia must continue to leverage its innovation capabilities to stay ahead.

Long-term investment is key to harnessing Australia's research and development strengths and further developing our healthcare sector as a global innovation hub.

It is encouraging to see the Federal Government's steps towards cultivating Australia's med tech ecosystem, including 2024-25 Federal Budget measures to support the Medical Science Co-Investment Plan and a focus on medical manufacturing through the National Reconstruction Fund.

With their large pools of patient capital, the \$4.1 trillion* (and growing) Australian superannuation industry and other institutional investors are uniquely positioned to support this growth.

HESTA is a \$91 billion* industry super fund dedicated to serving the health and community services sector. Through Super with impact TM , we aim to generate strong long-term returns for our one million-plus members while also having a positive impact, including on health and wellbeing.

Our deep relationships in the health tech sector provide HESTA with a unique investment perspective. Our investments support innovative Australian companies in commercialising cutting-edge medical breakthroughs, while creating jobs of the future in the industries where many of our members work.

Encouraging greater institutional investment at scale in one of the fastest-growing sectors of our economy can contribute to strong long-term returns for Australians and positive health outcomes for the community.

The potential for institutional capital to catalyse med tech innovation is immense, with benefits extending far beyond financial returns. Investing in Australia's med tech industry is more than a financial decision; it is a commitment to fostering a healthier, more resilient society and a more diversified economy.

^{*} Correct at time of going to print: January 2025

Collaboration is the cornerstone of progress. To truly harness Australia's potential, investors, government, businesses and research institutions must work together to catalyse innovation.

Combined with the right policy settings, forging strong partnerships can help break down the barriers that have historically hindered the flow of private capital into Australian research and development.

Australia has the opportunity to create an ecosystem where innovation thrives, and researchers and businesses can access the resources they need to turn discoveries into market-ready, commercial solutions. This will help create a strong pipeline of investment opportunities with the appropriate risk-return profile investors seek to deliver strong long-term investment performance.

I commend the Bionics Institute for its leadership and look forward to continued collaboration in fostering Australian med tech innovation, driving economic growth, and delivering life-changing benefits to people around the world.



Debby Blakey HESTA CEO









Debby Blakey biography:

Debby Blakey is the CEO of HESTA, the \$91 billion* industry super fund with more than one million members, dedicated to Australia's health and community services sector.

She has more than 25 years' experience in the super and financial services sector and led HESTA's responsible investment strategy, which is on target to achieve net zero by 2050. Debby is the President of the Australian Council of Superannuation Investors, a Director of the International Corporate Governance Network and Chair of the 40:40 Vision initiative.

Talking about: Funding Australian innovation

ANDHealth's Bronwyn Le Grice reminds us not to worship the false idol of research for research's sake. She says: "Sometimes there's this feeling that 'we don't want to tarnish what we're doing with the idea of money', but the reality is every researcher I know wants to impact as many patients as possible."

Ms Le Grice says publications don't change patient's lives. Commercialising, creating a product, putting it on a shelf, that's what changes patient lives.

The only way to impact millions and millions of patients is through commercialisation. Put aside the money – even if you get rich, you can give it away, that's not the point. The point is to get to tens of millions of patients with impact globally you need to follow a commercialisation pathway.

Non-dilutive funding

Ms Le Grice is optimistic about the local landscape. "In Australia we have access to large amounts of non-dilutive funding, especially in medical research," she says. "Through the Medical Research Future Fund (MRFF) commercialisation initiative, more than \$180 million has been made available in the past five years. That money has gone through programs like ours and others that invest it as if we're a private investor, but without the hooks of equity."

ANDHealth works on programs where we can write cheques for up to \$5 million per company – a meaningful amount of money when you consider that it's largely directed to companies that already have proof of concept and are in commercialisation stages. That non-dilutive funding can often be the validation for professional investors to come in behind that technology because they know that the programs like ours have already done significant selection and due diligence processes."

She also says a recent Federal government funding announcement is another positive step for nurturing growth of the ecosystem. "The National Reconstruction Fund's \$1.5 billion industry growth program [for medical manufacturing] and medical science – it's not a bad place to be in Australia at the moment for funding."

Investing for impact, returns and learning

Institutional investors such as superannuation funds are in a position to play a critical role here. HESTA defines its approach as 'Super with Impact™', supporting Australian innovation through strategic investments into promising companies, including via venture capital firm Brandon Capital.

HESTA Chief Investment Officer Sonya Sawtell-Rickson said in the AFR in June 2024 after Brandon Capital launched Fund VI with an initial close at \$270 million: "Through our life sciences investments, we're supporting innovative Australian companies to commercialise cutting-edge medical breakthroughs and improving health outcomes while helping create the jobs of the future in the industries where our members work."

Dr Chris Smith, a partner at Brandon Capital, brings a wealth of global biotech experience to his role. He explains that he dives deep into the technical data to assess the potential of startups. "As a biotech investor, our role is to identify research innovations with the potential to save lives and enhance wellbeing while generating strong commercial returns for the superannuation funds entrusted with securing the financial future of Australians in retirement.," he says.



He echoes others by saying 'unmet need' (medical condition for which there is no adequate treatment available, leaving patients without proper care or relief) is a must-have for med tech, on top of strong, defendable IP.

"Researchers need to consider who will ultimately pay for their product. In Australia, it's the PBS; in the UK, it's the NHS; and in the US, it's insurance companies. No matter how innovative the product, it won't succeed if there's no one willing to cover the cost."

Dr Smith's other advice for med tech entrepreneurs is to realise that investors have different mandates and that "it's completely normal that you might approach 100 investors before you get one yes". He adds that cold calling investors is challenging, and entrepreneurs should focus on securing introductions. "Also, you don't need to come in and sell on day one – come in and be inquisitive and have a chat. Get to know people and make sure they're the right fit." For all of that, there's a high failure rate in VC, which is why they operate on a portfolio model. "It may sound counter intuitive, but having failure is a really important part of our business because it shows we are investing in high risk, high return opportunities," explains Dr Smith.

Dr Smith stresses that breakthroughs don't come from safe bets – which is why it's important for governments, philanthropists and funds such as Brandon Capital to invest in startups with yet to be proven concepts. "Conservative, incremental advancements don't significantly improve human health. If you think about what biotech has achieved over the past 40 or 50 years, the impact has been phenomenal, but the success of each individual innovation is never guaranteed, that's simply how the industry operates."

Dr Smith says in the 12 years he's been in venture investing he has seen a cultural change in Australia around embracing failures as a necessity.

"What people may not realise is for first-time entrepreneurs the probability of success is not very high, but it almost doubles on their second time," he says. "We are having conversations to reframe 'failure' as a hypothesis, and it didn't work out. It's only a failure if you haven't learned something, so be prepared to share what you would do differently next time when you're talking to investors."

Hope for the future

Co-Founder of Kali Healthcare, Associate Professor
Fiona Brownfoot believes that what has changed –
pleasingly – is the path to onshore commercialisation.
"The commercialisation landscape in Victoria has changed
substantially since we started this as a research project in
2018," says Dr Brownfoot. "In that time, I've seen a shift in
the Victorian start-up ecosystem – it seems that there is a lot
more funding, especially in the pre-seed stage."

Kali Healthcare is developing technology to make pregnancy monitoring easier and more accessible via a wearable device that tracks key maternal and foetal health metrics. It aims to improve clinical workflows with reliable monitoring to provide timely insights into potential pregnancy complications. Kali Healthcare closed \$1 million of funding from LaunchVic's Alice Anderson Fund for female-led startups, the Genesis Fund at the University of Melbourne and private investors. Now Kali is on the commercialisation journey, with researchers using it and clinical trials next. The wind at their back, she says, is that it's an easy study to recruit for, with many patients eager to be involved. "We've got to get this technology to the patients – the whole reason we're doing this is to get better outcomes for women and babies."

Talking about:The lure of the United States

Australia has a rich field of extraordinarily talented researchers and innovators creating startups with the potential to make a hugely positive impact. The lure of international markets - particularly the US - has historically seen a brain drain of some of our most promising med tech founders and their companies.

Dr Jeremy Buzzard, co-founder of Induction Bio, and former US partner at McKinsey & Company, is one who left Australia for the US. He's one of our most successful med tech expats – having worked on more than 25 major deals with an aggregate value of USD\$58 billion – and has lessons to share.

"There's a cultural fear of failure in Australia that is somewhat destructive for the med tech environment," says Dr Buzzard. "In the United States the motto is: fail fast, fail often and take multiple shots at goal."

No one suggests it's easy, including Dr Andreas Fouras, CEO and CTO of 4DMedical, a respiratory imaging company with unique systems to improve outcomes for lung disease patients. He shared his founder's journey in a keynote at the Bionics Institute's 2023 Innovation Lecture and on the night changed his lecture title slide to, 'It's OK that it's hard: but it feels harder than it has to be'.

Dr Fouras bluntly lamented the "missing zeroes" in funding in Australia, saying "it's costing this economy, this country ... tens and hundreds of billions of dollars – in my opinion \$50 million solutions are not how you solve \$100 billion problems". He said that for Australia to achieve its potential to harness innovation and incentivise top companies to stay onshore, the processes around funding need to be innovative, too. "We can do better and we owe it to the people coming through to make it easier – if we do that, they will reward us 10 times over."

Australia is challenged by the small size and scope of our VC sector and the disparity of tax incentives. "I could talk about policies that really discourage people from investing in things outside of, for example, real estate in Australia but I don't want to turn this into a discussion about negative gearing," Dr Fouras said in his keynote. 4DMedical is ASX listed and has most of its staff in Australia, but to attract the needed capital from US investors relocated with his wife and five children to Los Angeles in 2016. He still describes his company as driving Australian-led change for lung health. Of his 140 employees in 2023, 18 were in the US. "Every time we can hire in Australia we do, so we are overwhelmingly an Australian company," Dr Fouras said. "And when we win these hundred million-dollar and billion-dollar contracts, that money will be flowing into our business here."

As proudly Australian as he is, Dr Fouras backed himself with an American attitude to risk. He sold his house, used his savings and has had to put payroll on his credit card on three separate occasions. "The time that hurt most was having to call my father-in-law and ask to put payroll on his credit card," he said.

It explains his passion to make things easier for med tech entrepreneurs – and why Australia has to improve how it tends to the many exciting green shoots in the local sector.



3. Talking about: **Keeping innovation onshore**

We have some stellar success stories as well as some anguishing tales of brilliant discoveries being taken offshore and out of our grasp. Every time that happens the loss is not just for the individual entrepreneurs but for the local med tech ecosystem and the national economy. To grow a vibrant med tech ecosystem, Australia needs a critical mass of startups to progress to become successful companies, and support throughout the journey.

Professor Andrew Wilks and Dr Chris Burns are two drug research leaders who have that story to tell. They invented a molecule that inhibits the growth of enzymes in the rare bone-marrow cancer myelofibrosis. In 1998, they co-founded biotech company Cytopia and together co-invented and led the team that delivered what was to become the cancer therapeutic Momelotinib.

And yet they did not, nor Australia, reap the benefits of their work.

The company listed on the ASX in 2004, and by 2009 had very promising early data to support ongoing patient trials. Then GFC hit and they couldn't raise the cash needed to progress the trials and were acquired in 2010 for USD\$10 million by Canada's YM Biosciences.

Following that, Gilead Sciences bought YM Sciences for \$US510 million in 2013. In 2023 the FDA approved Momelotinib, almost 35 years after Professor Wilks published his first paper in 1989. Momelotinib has demonstrated great potential to treat a large cohort of myelofibrosis patients globally, yet despite its Australian roots the economic rewards will not flow to Australia.

Professor Wilks estimates that "at least" hundreds of millions have been spent on getting the drug to market. "It is one of the problems with the Australian ecosystem – we have some cash to do the early-stage stuff but getting those hundreds of millions of dollars to do the final touches that's not really available to us and that's why Australian companies tend to do deals with Big Pharma." Professor Andrew Wilks and Dr Chris Burns were recognised for their outstanding contributions to Australian drug discovery and development in October 2024, when they received the Prime Minister's Prize for Innovation at the Prime Minister's Prizes for Science 2024.

Reinvesting to thrive over the long term

In contrast, among Australia's stellar commercial success stories in med tech is an invention that became an international med tech juggernaut and was the reason the Bionics Institute came into being.

The Bionics Institute was founded in 1986 by Professor Graeme Clark – inventor of the multi-channel cochlear implant – to translate concepts for medical devices into clinical reality. His invention was commercialised through Cochlear Limited and changed the lives of more than a million people around the world.

"We are a technology company and innovation is the core of what we do, going right back to the inspiration from Professor Graeme Clark," says Cochlear Limited CEO Dig Howitt. "We continue to invest significantly in innovation today but also recognise that lifetime relationship that we have with all of our recipients around the world and the responsibility that places on us to continue to provide them with technology."

Mr Howitt has been with Cochlear Limited since 2000. He is proud to work for the extremely purpose-driven company that he rightly sees as a shining example of "taking a wonderful invention and turning it into a successful therapy that helps people all around the world", he says. "We have to reinvest in our technology and in our business to make sure that we continue to thrive over the very long term."

Shifting the narrative

"There are all these amazing Australians doing amazing things," says ANDHealth's founder and CEO Bronwyn Le Grice. "The only people who tell us that we are bad at commercialisation are ourselves. We need to stop the negative talk, which is exhausting."

She does have a pet peeve that can be easily solved. "I would like Australia to be the biggest consumer of our own innovation," says Ms Le Grice.

"At the moment, if you're an Australian digital health company you are more likely to get major sales in the US than Australia. That we do not procure and buy our innovation until America does is ridiculous. The single biggest thing we can do for our companies is give them revenue by using our healthcare spend to preference the purchasing of Australian innovation."

Stephen and Angela Tomisich, co-founders of Trajan Scientific and Medical, left successful corporate science careers to go all-in on their own business in 2011. Trajan listed on the ASX in 2021, today employs more than 650 people around the world and reported revenues of \$162 million in 2022/23.

Stephen says that when he and wife Angela lived in California for four years the fact that failure is a part of the innovation journey became embedded in their psyches. "In the US you'll be asked, 'What have you failed at?' In Australian culture we sometimes have the opposite point of view."

His philosophy is to "have a go at many things, just a little bit, and think about the things that resonate and seem to work", he explains. "Kill all the others off and then double down on the one that has merit. Along the Trajan journey we've had far more failures than successes – that's part of what the culture needs to be in order to be successful."

Mr Tomisich encourages his teams to "think about innovation beyond technology innovation and to think about holistic business-model innovation". Trajan's growth to become an ASX-listed success has been via acquisitions – both pre- and post-IPO – as well as natural growth. "One of the things we realised in the Trajan journey was our core competence wasn't just technology competence, it was business-model competence and the ability to collaborate."



He believes there needs to be a shift in the Australian innovation ecosystem to support developing sovereign capability and keeping it onshore.

"Australia doesn't have an innovation problem, but we do have a momentum problem," says Mr Tomisich. "If you take a country like Finland, manufacturing is 15 per cent of their GDP. Australia's was 15 per cent in 1990, it's now 5 per cent. Unless we fix that fundamental profile of our economy you don't get momentum – instead you have start-stop activities. The stop comes either because the innovation failed or because a multinational liked what they saw and took it offshore. Off that innovation goes and then you have to start all over again."

Mr Tomisich says he gets on his "soapbox" about changing the way our local ecosystem functions. "One of the things I'm quite passionate about is how you change that model so that we don't just have government- and academic-funded innovation," he says. "We build a momentum that has industry as part of that then builds for a future that can drive world-leading innovations, growing skills and creating jobs for Australians – and growing sovereign capability and sustainable economic growth."

4. Talking about:

Navigating the valley of death

The tech sector's infamous Valley of Death - aka the VoD - is the challenge virtually every startup must traverse. The VoD is the sometimes dreamending trek between ideas and research and commercialisation and profit. For passionate entrepreneurs hunting for patient capital, the right talent and a market niche, it can feel like a winding road with plenty of potholes and roadblocks.

But while the VoD is no picnic, it's an essential part of the startup ecosystem, says Dr Emma Ball, Head of Ecosystem Development at US-headquartered genomics company, Illumina.

"The fact is not every idea is a good one, not every team has the knowledge to deliver, not every product has a market and not every solution has a problem waiting to be fixed," says Dr Ball.

In her role, based in Melbourne, Dr Ball builds partnerships to accelerate genomics innovation. She is also an experienced angel investor with a focus on impact investing. "When I'm looking at an investment opportunity, I often refer back to the Six Ts, which I learnt about through investor Professor Pedram Mokrian, who works with Stanford University and the Wade Institute in Melbourne."

Dr Ball explains the Six Ts:

- 1. Team Are the founders highly driven with an intimate connection to the problem that they're trying to solve? We're not looking for founders running a business to fund other aspects of their lifestyle. They must be absolutely all in.
- 2. TAM or total addressable market. Is the market large, growing, accessible and strategic?
- 3. **Technology** Is the product or business model disruptive, novel and hard to copy?
- **4. Traction** Is there evidence that the product or service meets an unmet need, and will customers pay for it? From a clinical perspective, a proxy could be the ease of recruitment into clinical trials to show there's an unmet need.
- **5. Trends** Why now? What's happening in the macro environment to make this product or service attractive now and in the future? Are there platforms available today to enable your idea that weren't available, say, 18 months ago?
- **6. Terms** The legal matters that make this investment attractive or not attractive. Does the startup have rights to foundational IP? Who else is on the cap table? What terms did they invest on, and do they get priority in the event of an exit?

"There's a high natural attrition rate in startups and that's not a bad thing," says Dr Ball. "The key is to fail early and fail fast. Learn, iterate and move on. Resources are finite. Every dollar you spend or activity you undertake represents something that isn't being done instead. So, the quicker you can terminate a project, or an unviable activity means that you can turn your attention and investment dollars to something else more worthy. Embrace the Valley of Death!"

5. Bionics Institute leverages ATO Ruling to appeal to new philanthropists

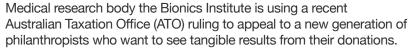
Impact investment in med tech research at the Bionics Institute via a private or public ancillary fund (PAF/PuAF) was the focus of this AICD Company Director Magazine article in September 2024.

The ruling allows PAFs and PuAFs to make a concessionary loan towards research at the Bionics Institute that can be repaid in cash or other consideration, such as equity in a spin-off company. It also allows for foregone interest and any portion of the loan that is written off to be deemed a part of a PAF or PuAF's annual mandatory distributions.



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Bionics Institute leverages ATO ruling to appeal to new philanthropists (aicd.com.au)



The Bionics Institute aims to solve medical challenges using technology, particularly devices that interact with the nervous system. With past successes including the cochlear hearing implant, the institute works on conditions such as Alzheimer's, Crohn's and Parkinson's disease, hearing impairment, chronic pain and arthritis.

The Bionic Institute's CEO Robert Klupacs says the institute is targeting donations from private ancillary funds (PAFs), a tax-effective vehicle through which high-net-worth individuals can donate to charity.

When a wealthy person or family establishes a PAF, they receive an immediate tax deduction for the amount they put in the fund. PAFs are a particularly useful tax-effective vehicle for individuals who have received a windfall, such as from a business sale, because they can leave the money in the fund and distribute it in years to come, rather than having to decide and do it immediately. PAFs are also appealing to a new generation of philanthropists, who want to have more say over how their money is spent.



"One of the reasons we targeted them was that we can see that segment of philanthropy is growing in a big way," says Klupacs. "We're seeing a lot of people wanting to make a much bigger impact."

Donors, many of them entrepreneurs, put the funding proposal "through the wringer" when they provide funds. The Bionics Institute is well-placed to appeal to this style of donor. Many universities and medical institutes are focused on discovery and knowledge generation, which can take a long time to translate into a clinical product — or even into a clinical concept.

"Where we're different is that we're very focused on taking these product concepts and moving them as fast as we can into the clinic to see whether they have the potential to work and be commercialisable," says Klupacs. "Because in the end, we have a very strong philosophy that the reason we do what we do is because we want patients to benefit."

As much as the institute is pleased to receive one-off donations, it also needs guaranteed longer-term funding to support specific projects, which can take several years. The institute believed it could achieve this by receiving loans from PAFs and sought an ATO ruling to help it do so.

The ATO arrangement

In a 2022 ruling, the ATO determined that when a PAF makes a loan to an NFP, the difference between the interest it charges the NFP, and a commercial rate of interest is counted as a donation. Additionally, if the PAF forgives the loan, then the loan is also counted as a donation. This is important because PAFs must distribute at least 5 per cent of the market value of the fund's net assets each year.

The ATO also ruled that PAFs can accept another consideration aside from cash when the loan is repaid. It means that as an alternative to forgiving a loan at the end of the term, PAFs have the option of taking equity in the commercial spin-off their money has supported, should one eventuate.

This appeals to many PAF trustees, says Klupacs. "A lot of them, because they're entrepreneurial, love to invest directly in early-stage companies. But they know they're very high-risk. Our model allows the charitable structure to donate to an area of work that could be translatable, which could lead to something that's investible."

The institute expects that most loans made through a PAF structure are forgiven — or if they are converted into an equity stake in a startup, it hopes that the PAF would recycle some of the gains from a successful startup back through the institute to support other projects.

There's another incentive for the PAF trustees to donate. The trustees have the opportunity to invest their own personal funds alongside the investment by their PAF. Typically, by this stage, the trustees have already gained a good understanding of the nascent commercial venture, thanks to six-monthly updates to the PAF and their interactions with the PAF.

"As entrepreneurs, they can see an opportunity that might come about because of what they've done," says Klupacs. "It gives them a chance to be more involved, to learn more about it and get to know the people. One way of looking at it is as a lengthy due-diligence process."

Delivering donations

The institute has changed its approach to seeking donations following the ATO ruling. It is working to progress some of its projects to take them closer to commercialisation so the institute can say to potential donors, "Look, we've got an early-stage program, but if we can incubate it further, it is highly likely to be commercialisable".

"The last thing we want to do is necessarily have a loan agreement from the PAFs for something that's really interesting, but is not going to lead to a product," says Klupacs. "We want to make sure we can put projects up for this type of funding that are likely to play to the strengths of it."

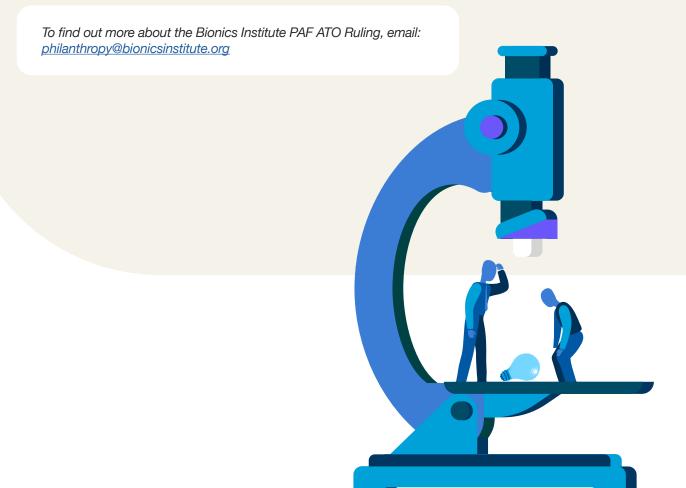
The institute has already received one loan from a PAF for an Alzheimer's project and has three other sufficiently advanced projects. Klupacs acknowledges that many of these projects will ultimately fail, as this is the nature of early-stage commercialisation, but he hopes that with support from PAFs and wealthy individuals, some will get additional funding or list on the stock exchange, thus allowing the institute to exit and recycle the proceeds for other projects.

Bionics Institute board member Michael Coleman FAICDLife notes that PAFs are particularly useful for those charities aiming for a specific outcome. "This is a very innovative structure," he says. "I don't know that anybody else has used it [as convertible donations]. Unless you're anticipating an outcome — something that is commercialisable — then it's probably just a convenient source of longer-term funding and perhaps a way of encouraging your donors to have a longer vision when they're putting the money into your charity."

With their trustee-supervised structure, running a PAF is not dissimilar to running a self-managed super fund, says Michael Hutton, a wealth-management partner at HLB Mann Judd in Sydney.

"It's not something to be feared as a great unknown," he says, adding that many people use PAFs as a vehicle for donating to charity while they're still alive, rather than leaving bequests.

In the decade to FY21, donations to private ancillary funds grew from 15 per cent to 27 per cent of individual giving. Over that period PAFs have donated \$11.4b and have distributed their funds at an average rate of eight per cent per year, according to Productivity Commission data.





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