

UNSW: a leader in innovation and entrepreneurship



Delivered \$160m in Knowledge Exchange revenue in 2017



Graduated 110 Student Start Ups in 2017. 96 in first quarter of 2018



Established \$80m silicon quantum computer partnership with CBA, Telstra & Government



Founded first Torch Innovation Precinct outside China. Over \$120m in research contract pipeline secured in first two years

¹Knowledge Exchange revenue, the money received by UNSW from its end-users, provides a robust proxy for engagement. Revenue is received throughout a variety of channels: contract/collaborative research (66%), consultancy/short courses (24%), infrastructure/outreach (5%) & commercialization/IP (5%).

In 2015, UNSW issued its Innovation Statement, setting bold targets to increase the breadth, depth and impact of our innovation efforts and impact.

Innovation is central to Australia's future prosperity – it creates the jobs and industries of the future, improves quality of life and addresses major challenges facing the world. Universities play a key role within the innovation ecosystem. We educate the future entrepreneurs and innovators, we create new knowledge and technologies to make a difference, we engage with industry, government and communities to deliver transforming solutions and we nurture the whole cycle of student startups through to emerging joint venture companies and multi-million-dollar collaborations.

Here we report on UNSW's performance against these commitments and signal future directions.

In August 2016, UNSW established the Division of Enterprise to deliver on UNSW's engagement and entrepreneurship agenda. Over the period of the 2025 strategy, \$60M has been committed to enhance staff skills, infrastructure and partnerships in these areas.

Over the period 2016-2017 engagement with the end-users of our research and education has increased by 25% (20% in 2017 alone) as measured by Knowledge Exchange revenue. UNSW has forged major strategic research-industry initiatives; including the Torch program with China (\$120m) and the Silicon Quantum Computing company (\$80m).

We have also launched Australia's most comprehensive entrepreneurial program. We are on track to deliver our headline goals of doubling engagement activity within five years and bringing entrepreneurship training to every staff and student.

DELIVERY AGAINST COMMITMENTS

In more detail, here is how UNSW has delivered against its commitments in the 2015 Innovation Statement.

ATTRACTING AND NURTURING SKILLS

COMMITMENT	DELIVERY
UNSW will make strategic recruitments in areas aligned with existing UNSW research strengths and areas of national importance.	Since March 2016, UNSW has hired 47 world-leading academics with outstanding track-records in knowledge exchange.
UNSW will establish a 1000 Interns Program to create innovation 'carriers' between UNSW and industry.	In 2017, over 2000 Engineering student interns were placed in industry, deepening our ties with Australia's business community and confirming UNSW as the first choice for employers.
UNSW will continue to develop its student innovation spaces; extending our new Michael Crouch Innovation Centre to a series of Innovation Centres across the campus.	In 2017, over 7500 students visited the Michael Crouch Innovation Centre, fulfilling its goal to serve as a driver of innovation and entrepreneurial spirit.

EMBEDDING AND EMPOWERING AN INNOVATION CULTURE

COMMITMENT	DELIVERY
UNSW will develop engagement metrics to incentivize, track, recognize and reward researcher engagement with industry.	UNSW now routinely measures revenue across all Knowledge Exchange channels, research outputs and education avenues. Engagement is now recognized by UNSW as a promotion criterion, and financial incentives are being put in place to reward Faculties and staff for generating knowledge exchange.
By embedding Knowledge Exchange specialists in faculties, UNSW will increase our capacity to identify, nurture and rapidly translate research discoveries which have applied potential	UNSW has invested over \$35m in a range of initiatives focused on impact and translation, including specialist Knowledge Exchange Business Partners in Faculties, key account management, and the development of a platform capability in continuing professional development. UNSW has started an iPhD program with CSIRO to support industry-led research projects.
UNSW will emphasize the importance of innovation across its educational programs and seek to provide in-depth opportunities for increasing numbers of students to develop relevant skills and experience.	In 2017 over 8000 students took part in facilitated entrepreneurial programs. UNSW has coordinated its entrepreneurial offerings in the Founder program, the apex of which is the Founder 10X program, begun in November 2017. A Founder Fund has been established to invest directly in student startups.

DELIVERY AGAINST COMMITMENTS

CREATING AND GROWING PARTNERSHIPS WITH INDUSTRY

COMMITMENT	DELIVERY
UNSW will improve the gateway for industry and business partners to engage with its staff, students and resources through the Easy Access Innovation Portal.	In 2017 UNSW increased its Knowledge Exchange revenue from external partners by 20%, across all research and education channels.
UNSW will scale up its successful student start-up program with the aim of creating more than 100 start-ups per year.	In 2017, 118 startups graduated from our Founder program schemes. In the first quarter of 2018, 92 startups have graduated from the Founder Program.
UNSW will introduce a first step Voucher Scheme for SMEs, entrepreneurs and start-ups to use to purchase engagement with the university.	Since 1 July 2016, the Techconnect project has offered more than 30 NSW Government Techvouchers to eligible SMEs.
Each year, UNSW will host up to 50 multi-disciplinary interactive “sandpit” programs with researchers and industry to stimulate novel thinking in topics of national importance.	Strategic partnerships with Industry Growth Centres have yielded in excess of 100 engagements with potential industry partners in Q1 2018.
In partnership with NSW Health, UNSW will open an internationally accredited Scientia Clinical Research Facility.	The Scientia Clinical Research (SCR) commenced operations in June 2017. SCR is currently conducting over 25 clinical trials in healthy volunteers and patient groups in various therapeutic areas.

BUILDING INFRASTRUCTURE

COMMITMENT	DELIVERY
UNSW will intensify and extend the number of enhanced industry incubators across the UNSW Campus. UNSW will focus on areas of strategic research strength and industry demand, including energy, advanced materials, biomedical engineering and sustainability.	UNSW has invested over \$20m in research/industry incubators, including the Solar Industrial Research Facility (SIRF) and the joint UNSW/HCCL materials technology lab. UNSW has also invested \$2m in the microfactories and is exploring pathways for a nationwide roll-out of this “waste to resource” infrastructure concept.
UNSW will develop a major new Innovation Park adjacent to the UNSW Randwick campus by 2020, building on UNSW’s existing national and international industry network and emerging partnerships from the industry incubator activity on campus.	UNSW has already become home to the first Torch Innovation Precinct outside China, with over \$120m in the research contract pipeline.

DELIVERY AGAINST COMMITMENTS

FORGING PARTNERSHIPS FOR INNOVATION

COMMITMENT	DELIVERY
UNSW will play a leading role in establishing a New Academic Health Science Partnership across Sydney	The SPHERE Health partnership was successfully launched in 2018. Since its launch it has attracted approximately \$9 million in funding.
UNSW will support the establishment of the National Universities Innovation Group, and work to ensure it enables the next major step forward in research commercialization.	UNSW was a founding participant in the IP Group's launch of its Australian/NZ VC investment fund and has made 14 disclosures to the fund in its first 12 months.
UNSW will continue to leverage its existing role in other successful sectoral technology partnerships such as ATP Innovations and UniSeed.	In the past year, UNSW has doubled its disclosure rate to UniSeed. The UNSW spinout, Smart Sparrow, has become one of UniSeed's most exciting ed-tech prospects.
UNSW will establish Commercial Research Consortia to bring transformational research to market such as solar energy, quantum computing and biomedical devices.	UNSW played a lead role in establishing the \$80 million Silicon Quantum Computing (SQC). UNSW also established a \$20m JV with HCCL to develop and manufacture graphene power cables.
UNSW will play a leadership role with other NSW-based universities and research organizations in support of the State Government's long-term objectives for the development of the Bays Precinct.	UNSW initiated a broad University-based consortium to respond to the Bays Precinct opportunity. That spirit of collaboration led to the development of the Silicon Quantum Academy with UTS, Sydney Uni and Macquarie Uni, targeted as fostering a world-leading local ecosystem in quantum technology.
UNSW will play a leadership role in driving innovation in the nation's capital in areas such as cyber security and space through its Foundation Membership of the Canberra Innovation Network.	UNSW Canberra launched the Defence Research Institute in February 2018 and formed the SkyKraft space research spin out in September 2017.

DELIVERING AN INNOVATIVE FUTURE

The Division of Enterprise remains committed to continuing its successful rollout of an ambitious agenda core to the promise of the UNSW 2025 Strategy: the creation of a more innovative outward facing university that delivers increased social progress and economic prosperity for the Australian community.

We are firmly committed to ensuring that our innovative research, and education is translated into commercial outcomes that create jobs and a better quality of life for all. We are infusing an entrepreneurial ethos into our student population and researchers alike, with the aim of building a new generation, forward thinking and engaged; and most of all ready to work with industry and government, who have been indispensable delivery partners in our achievements so far.

We are also building world-class infrastructure and encouraging its collaborative and cross sectoral use to ensure the best possible outcomes.

We will continue working hard on the commitments we have made in the UNSW Innovation Statement and will continue to work with our partners in industry, government and the community to deliver for the benefit of the entire nation.

For further information email enterprise@unsw.edu.au