IF YOU CHANGE NOTHING, NOTHING WILL CHANGE.

THE UNIVERSITY OF
SYDNEY

The University of Sydney
2016–20 Strategic Plan

March 2016

Foreword

On behalf of the University of Sydney Senate, it is our pleasure to present the University's 2016–20 Strategic Plan.

While this plan itself sets out our direction for the next five years, it is important that it is understood as part of a trajectory, beginning with our foundation almost 170 years ago and building on our 2011–15 Strategic Plan. It is true to our essential character as an institution, as we have refined our understanding of how we will most effectively achieve our vision.

The 2016–20 plan is unashamedly aspirational, aiming to position the University of Sydney as the best university in Australia and a leading institution globally. To do this, it concentrates on maximising our extraordinary strengths: depth and breadth in our disciplines, a deeply held commitment to challenging ordinary thinking, and a genuine desire to do good in the world.

The plan will stretch us, as any valuable strategic plan must. It commits a significant amount of new funding to research and education and, for the first time in the University's history, establishes a set of institutional values that will, when embraced by our community, enrich our working lives.

We are confident that the extensive internal and external consultation process undertaken in the development of the plan, and the deep commitment it evinces to supporting education and research, will secure the support and advocacy of our staff, both academic and professional, and our external partners.

We would like to thank all those who have taken part in the development of this plan, from the Senior Executive Group to the thousands of staff, students, alumni and members of our wider community who contributed their views, and we look forward to implementing this exciting set of initiatives to distinguish the University in years to come.

Belinda Hutchinson AM (BEc '76)
Chancellor

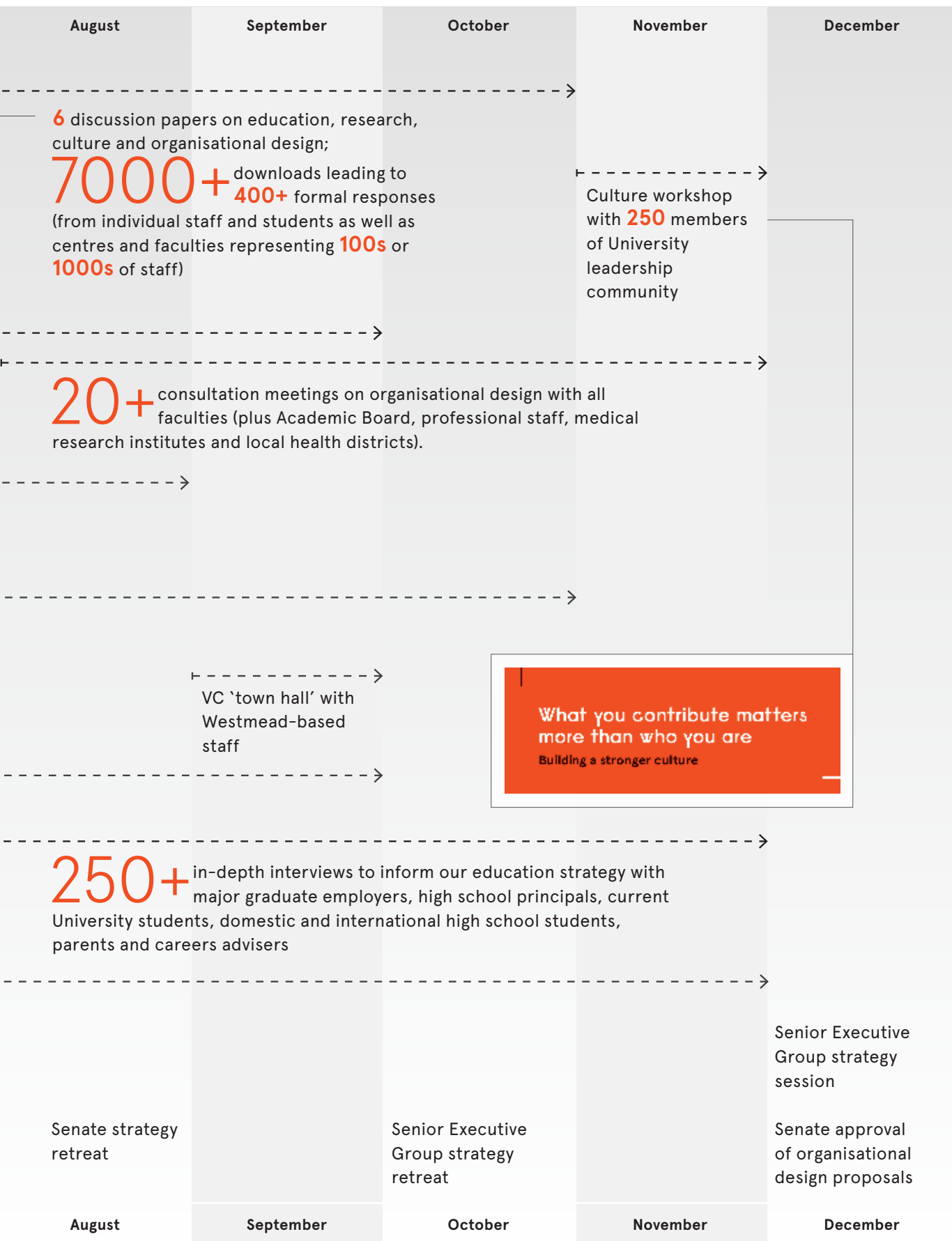**Dr Michael Spence (BA '85 LLB '87)**
Vice-Chancellor and Principal

Contents

The University is on every measure in a stronger position, both academically and financially, than it was in 2011.

1   The strategic planning process: 2015 consultation timeline

March	April	May	June	July

5000+ responses to staff and student strategy survey

600+ staff and student attendees at four open focus groups on education and research discussion papers; **3** supporting online Yammer forums for staff

Should we move to a four-year liberal studies degree?

Leadership is a vision

The first discussion paper in our 2016-20 planning process is open for your comment until 6 July.

sydney.edu.au/strategy

THE UNIVERSITY OF SYDNEY

400+ staff and students participated in dedicated values workshops

Regular strategy presentations to Academic Board, heads of school and discipline, faculty managers, Alumni Council, Campaign Board

1200+ staff attended **11** VC 'town hall' meetings across faculties and professional staff portfolios

8 strategy meetings with staff unions; **4** strategy presentations to Student Consultative Committee

Other external consultation and engagement with research partners, industry and business organisations, community organisations, SMEs, employers, recruiters, entrepreneurs, government representatives, overseas alumni, technology and telecommunications firms

Senior Executive Group strategy retreat

Senior Executive Group strategy session

Senior Executive Group strategy session

March	April	May	June	July

August	September	October	November	December

6 discussion papers on education, research, culture and organisational design;

7000+ downloads leading to **400+** formal responses (from individual staff and students as well as centres and faculties representing **100s** or **1000s** of staff)

Culture workshop with **250** members of University leadership community

20+ consultation meetings on organisational design with all faculties (plus Academic Board, professional staff, medical research institutes and local health districts).

VC 'town hall' with Westmead-based staff

What you contribute matters more than who you are
Building a stronger culture

250+ in-depth interviews to inform our education strategy with major graduate employers, high school principals, current University students, domestic and international high school students, parents and careers advisers

Senior Executive Group strategy session

Senate strategy retreat

Senior Executive Group strategy retreat

Senate approval of organisational design proposals

August	September	October	November	December

2   Vision

We aim to create and sustain a university in which, for the benefit of both Australia and the wider world, the brightest researchers and the most promising students, whatever their social or cultural background, can thrive and realise their potential.

Our strategic goals for 2016–20 focus on …

We aim to:

Our strategies are to:

By concentrating on:

a culture of research excellence	a distinctive Sydney education	a culture built on our values
be the leading, research-intensive university in Australia with outstanding researchers, networks and partnerships that improve the lives of our local and global communities	deliver an undergraduate education that is unique in Australia so that our graduates have the skills, knowledge and values to lead in a rapidly changing world	foster an aspirational culture that enables each member of the University to thrive
– invest in research excellence – attract and develop outstanding researchers – partner for impact	– transform our undergraduate curriculum – transform the learning experience for our academics and students	– develop our leaders – embed our values – break down institutional barriers
– tripling our current investment in research – supporting researchers at all stages of their careers – our research infrastructure – partners with mutual goals – our performance and impact	– enabling our academics to foster excellence and innovation in teaching – developing a full suite of experiential learning – innovative and aligned physical and digital environments	– improving ways of leading and managing our University – celebrating our performance and our diverse community – strengthening policies and practices to align with our values.

Our work will be guided by the pursuit of **excellence**, **engagement** and **simplification.**

It will be underpinned by values of **courage and creativity**, **respect and integrity**, **inclusion and diversity**, and **openness and engagement.**

In this plan, you will read about our intention to triple our current investment in research; research that will allow us further to capitalise on, and harness, a breadth and depth of disciplinary excellence unequalled by any other Australian university, to solve the most important problems facing society and to explore new ways of living.

You will read about our deep commitment to undergraduate education, and our intention to transform that experience, so that our students will graduate with skills that prepare them not only for the careers they can envisage now, but for a future that none of us can at this moment imagine.

And you will read about our insistence that the University's culture must enable our strategy for excellence in education and research by creating an environment in which our staff and students can flourish.

3   Strategic themes

The University of Sydney's 2011–15 Strategic Plan was built on a clear statement of purpose, and a vision of the University (reproduced opposite) that would fulfil that purpose. At the time of writing the strategy, we acknowledged that in some senses the vision would never be fully realised, but that our success had to be measured by how far we had moved towards achieving it. We have indeed made very considerable progress.* The University is on every measure in a stronger position, both academically and financially, than it was in 2011.

The key achievement of the last strategy was to show the world the extraordinary social and intellectual impact a university can have when it begins to be a 'university', and not, like most contemporary institutions, a 'loose collocation of academic silos'. We have brought together intellectual resources from across the University to address some of the grand challenges facing society. The Charles Perkins Centre, tackling obesity, diabetes and cardiovascular disease, has pioneered new models for multidisciplinary research that are yielding amazing, and sometimes surprising, results. In other areas of health, the Brain and Mind Centre, the Marie Bashir Institute and the Cancer Network are demonstrating what can be achieved when all the disciplines of the University, not just those traditionally associated with medicine and health, work together. The Australian Institute for Nanoscale Science and Technology brings together expertise from across the University to explore and harness science at the nanoscale. In the China Studies Centre and the Sydney Southeast Asia Centre we have two of the largest concentrations of regional expertise in the world. The Sydney Environment Institute aims to change the relationship between human societies and the world that sustains them, and to help them adapt positively to environmental change. At a smaller scale, our Sydney Research Networks Scheme (SyReNS) kickstarted many research collaborations between groups across the University who had not before worked together.

These new academic activities have, of course, required infrastructure to support them, and our campus has also more generally required renewal to support our mission. During the period of the 2011–15 strategy we invested $1.7 billion to provide state-of-the-art infrastructure for our academic staff. For example, the award-winning 'hub' building for the Charles Perkins Centre is a pioneering design intended to facilitate both multidisciplinary research and new models of technology-assisted laboratory teaching. The Abercrombie Building provides extraordinary teaching facilities for the Business School, and the Sydney Nanoscience Hub has delivered facilities that are recognised as perhaps the best in the world for nanoscale research. More generally, both the physical and ICT infrastructure of the University has been upgraded considerably. At the same time as delivering on this infrastructure program, the University has moved into a significantly more sustainable financial position. This has partly been achieved by more participatory University governance through the Senior Executive Group, a group representing all faculties, and much more transparent financial and research quality information.

This effort has not gone unnoticed, and it is reflected in external acknowledgement from donors, prospective students, government and international rankings. In November 2015, after overwhelming support from our donors, we reached our fundraising campaign goal of $600 million more than two years early, and have extended the campaign with a new target.

---

*   *The University of Sydney 2011–15 Strategic Plan Performance Report,* available through sydney.edu.au/strategy

CHAPTER 6
2015

We believe that the 17 strategies that we have outlined in this White Paper both flow from the purpose and values of the University and set a clear course for the next five years.

Of course, each of the initiatives that we have outlined here will have key performance indicators to measure the attainment of our strategic goals. But it is important that, at a high level, the University has a core set of indicators of its performance, of the extent to which we may be said to be travelling well. The beauty of the '1:5:40' slogan that the University adopted for several years was that it set a high-level measure of the health of the institution. We propose that the metrics outlined in Appendix 2 be used as such a 'dashboard', and be made available to Senate on an ongoing basis.

However, the real measure of whether the University is travelling well is the extent to which our staff, students, government, alumni and friends find in it the institution that is entailed in our statement of purpose, our values and strategies. This is the vision of an institution in which there is freedom for individual researchers to pursue their own lines of enquiry, but also an evidence-based understanding of our research strengths and an institutional ability to invest strategically in research and education projects (particularly large-scale, cross-disciplinary projects) of national, regional and international importance. It is the vision of an institution in which students and researchers have a sense of belonging to a single community of scholars, of being engaged together in learning and enquiry, and in which excellence in research is prized. In this vision, the community of scholars is marked by its diversity, by its global orientation, and by its commitment to working in partnership with Indigenous Australia. Researchers and teachers are drawn from all over the world, some on flexible employment arrangements with other institutions, and both staff and students from overseas are impressed by the cosmopolitan nature of the academic community that they find. The University is well connected and regarded in a series of local, rural and international communities, and has grown its links with China. Its alumni are actively involved in the life of the institution and financially support it.

In this environment, students have a rich campus life and their experience of dealing with University administration is seamless from first enquiry to alumni engagement. They have opportunities for both formal and informal learning, in classroom and community-based contexts, in Australia and overseas. Teaching is stimulating and constantly refreshed by new thinking about pedagogy disseminated broadly across the institution. Curriculum delivers on our graduate attributes in ways that can be measured and the suite of the University's degree offerings is coherent and well coordinated, allowing students ease of movement between faculties, particularly in the generalist undergraduate degrees.

Administratively, the University in this vision is marked by a commitment to transparency and shared governance. Resources and costs are allocated in a way that ensures the financial and academic sustainability of the institution. Planning and decisions are made on the basis of evidence, in fora in which the different academic communities of the University are equitably represented and decision-making is informed by appropriate expertise. Administrative services are effectively and efficiently delivered and the working conditions of staff, and our digital and physical infrastructure, are first rate.

In short, the University delivers on its mission of being a place in which both academic quality and community engagement are valued, in which ideas are not only intrinsically important, but also important because of the difference that they can make in the world. It is a place of both engaged enquiry and mutual accountability, in which the brightest researchers and most promising students can thrive and realise their full potential.

Of course, there are ways in which the work of the University already matches this vision. And to some extent we will never fully match it. But the strategies outlined in this White Paper are directed towards realising that vision, and it is against that goal that our success over the next five years must be judged.

We remain the University of choice in NSW for the brightest prospective undergraduate and postgraduate students, attracting more secondary school graduates with the maximum ATAR of 99.95 than any other university, and we have produced outstanding alumni who have contributed to our national and international communities in a variety of disciplines. Through our *Wingara Mura – Bunga Barrabugu* strategy, we have seen a 40 percent increase in the number of Aboriginal and Torres Strait Islander students commencing at Sydney (2004–14), and lead the Group of Eight universities (Go8) in the number who have graduated. Since we established our Early Offer Year 12 (E12) scheme in 2012 for students who have suffered educational disadvantage, we have increased the number of alternative entry offers through that scheme by more than 250 percent.

One measure of research performance, the Excellence in Research for Australia (ERA) report, has consistently demonstrated the University's significant contribution to the nation's quality research output. In the third ERA report, released in December 2015, all of our research was assessed as being at world standard or above, with 82 percent performing above or well above world standard. These results clearly demonstrate the breadth and depth of our research excellence, with outstanding results achieved across disciplines including the humanities, information and computer sciences, life sciences, mathematics, medical and health sciences, physical sciences and social sciences.

Our international rankings reflect our reputation for global leadership in research and education. The University is ranked 45th in the world in the 2015-2016 QS World University rankings; first in Australia and 14th globally in the QS Graduate Employability Rankings 2016; 56th in the 2015 Times Higher Education World University Rankings; in the 101-150 band of the 2015 Academic Ranking of World Universities (ARWU); and 51st in the 2016 US News and World Report Best Global Universities Rankings. Individual disciplines also rank highly – QS ranked the University first in Australia in English Language and Literature, Medicine and Veterinary Science, and in the top 20 in the world in Law, Architecture/ Built Environment, Civil and Structural Engineering and Accounting and Finance.

The vision that informed our 2011–15 strategy, and the tremendous work from across the University that has gone into its implementation, has clearly delivered very pleasing results. During consultation for this subsequent strategic plan, we were heartened by the extent to which the statement of purpose and vision of the 2011–15 plan continued to resonate with both the University community and the broader communities we serve. Of course our understanding of that statement of purpose, and its implications, have been enriched by, and matured over, our experience of the last five years. But it remains true: "We [continue to] aim to create and sustain a university in which, for the benefit of both Australia and the wider world, the brightest researchers and the most promising students, whatever their social or cultural background, can thrive and realise their full potential."

For this reason, *The University of Sydney 2016–20 Strategic Plan* represents a continuation of, and indeed a deeper commitment to, this vision. We are at an exciting point where we are building upon the foundations it laid, but now with a focus and a determination that will deliver not a gradual improvement in performance, but an immediate and fundamental change. As Australia's first university, we should aim to be among the top 20 universities in the world.

In this plan, you will read about our intention to triple our current investment in research; research that will allow us further to capitalise on, and harness, a breadth and depth of disciplinary excellence unequalled by any other Australian university, to solve the most important problems facing society and to explore new ways of living. You will read about our deep commitment to undergraduate education, and our intention to transform that experience, so that our students will graduate with skills that prepare them not only for the careers they can envisage now, but for a future that none of us can at this moment imagine. And you will read about our insistence that the University's culture must enable our strategy for excellence in education and research by creating an environment in which our staff and students can flourish.

Our last plan was about remembering what it is to be a University, how together we can have real impact in our nation and our world. This plan takes that vision further by providing an undergraduate model of education in which every undergraduate will have not only deep disciplinary expertise, but also access to training from across the University in skills as

diverse as cultural competence and data analysis, and to opportunities for real-world problem solving. It demonstrates how we can both strategically invest in building specific areas of research strength and continue our pace-setting work in addressing the grand challenges. And it sets a challenge that we should be a community faithful to our founding values in all that we do internally, with the partners that we will need to fulfil our vision, and in bringing change to the world in which we live.

The University of Sydney 2016–20 Strategic Plan shares three themes with its predecessor, themes that also underpin our proposals for the University's research, education and culture. These are worth highlighting at the outset. They are: excellence, engagement and simplification.

Excellence

The first key theme of this strategy is a commitment to fostering and recognising excellence, and to identifying it in a particular way. Excellence in universities can be measured in many different ways; by performance in league tables of one kind or another, by lists of publications, by the impact of research, by graduate destinations and the like. Each of these has its place, and the University should pay attention to them as a part of its routine institutional self-assessment. But our vision of excellence is more fundamental than can be captured in any individual measure. It focuses on the qualities of our staff, and the culture in which they work.

Central to that vision are the qualities of our academic staff. The term 'academic staff' is chosen deliberately over 'researchers' and 'teachers': while some academic staff will have responsibilities for either research or teaching, the position of researcher-teacher remains normative at the University, and it is important to remember that most academic staff are involved in both of these complementary aspects of our mission to create and disseminate knowledge, skills and understanding. Excellence in a university will be found where academic staff are supported over the course of their career to develop five key qualities in their work in both education and research:

– *Academic expertise and scholarship:* our academic staff should have an ongoing commitment to the pursuit, discovery, creation and application of new knowledge and understanding, and to its dissemination through high-quality publications and, where appropriate, through engagement with key end-users. They should participate in education as a process that benefits from innovation, experimentation and iterative re-design, and that is alive to new developments in pedagogy and advances in knowledge. In both research and education they must ask important and difficult questions and be bold in challenging existing paradigms and dogma.
– *Leadership:* our academic staff should aspire to develop a national and international reputation for quality teaching and research in a given field, should help to nurture the skills of others, and should make an active and demonstrable commitment to sustaining a positive and dynamic research, education and workplace culture within the University.
– *Engagement:* our academic staff should, where appropriate, bring the issues confronting the broader community into our research and education, partnering with external organisations and individuals of diverse kinds, and ensuring that knowledge and understandings developed in the University inform public discourse and policymaking.
– *Integrity and professional conduct:* our academic staff should have an unswerving commitment to academic honesty and give expression to the shared values of the University in all their interactions with both staff and students.
– *Cultural competence:* our academic staff should participate effectively in intercultural settings in research, in the classroom, and in the day-to-day life of the University. They should be open to a diversity of ways of being, doing and knowing, as well as looking for, and understanding, the context of those engaged in, or affected by, our research and education.

Alongside these aspirational qualities for academic staff may be placed a complementary set of graduate qualities for our students that found wide resonance in the consultation around our educational strategy. These qualities, outlined in the Education chapter, are aspirational for our coursework students, and particularly our undergraduates. A further set of qualities for

our higher-degree-by-research students is to be articulated as part of the new framework for research training proposed in this strategy.

Excellence in the professional services that support our academic staff and students is a necessary precondition to their success. High-calibre professional staff, technically able and personally committed to both the work of the University in education and research and to its institutional values, are essential to our work.

To build this vision of excellence, the University must work to build a culture in which all staff and students can flourish, a culture built upon a consistent and coherent set of values. A paper addressing our values as a University found widespread support in the consultation process. Chapter 6 of this plan, 'A culture built on our values', details the strategies designed to promote those values in the way in which we live and work together. While it focuses on the responsibilities of staff as the long-term culture bearers of the institution, work over the life of this strategic plan will ensure these values also inform all our interactions with students.

Engagement

The University's 2011–15 strategy was built around a notion of 'engaged enquiry', where 'engagement' was defined as holding together three aspects of the work of a research university that are sometimes disconnected: education and research; the work of the various academic disciplines; and the work of the University and the life of the various communities – local, national and international – of which it is a part.

We have rediscovered over the last five years how keen our various communities are to engage with the University and the extent of the goodwill that exists for our work. This has involved research partnerships, partnerships in education, and financial support. The incredible success of our INSPIRED fundraising campaign, that has set the standard for university philanthropy in Australia, demonstrates how wide a variety of people believe in what we do. In this next period, we intend to deepen our relationships with our alumni, partners and friends.

We have had real success in building University-wide initiatives to address global challenges, and have in many ways set the pace in this area. We remain committed to this focus and propose a program of new ventures, such as creating the **Sydney Centre for Translational Data Science** and the **Sydney Policy Lab**. These stand alongside projects such as the development of a new model for integrating research, teaching and healthcare at Westmead, and the creation of a **Sydney Knowledge Hub** to accommodate industry and community partners. All of these efforts will bring our work closer to the direct needs of the communities we serve.

Nevertheless, while we have had success in our work on global challenges such as obesity, diabetes and cardiovascular disease, we still have work to do in systematically facilitating research engagement with the private sector and civil society, and in creating opportunities for our students to be involved in real-world problem solving and to develop links with organisations outside the University. At the moment many parts of the University deal with this interface, interacting with communities as diverse as multinational technology corporations and Aboriginal and Torres Strait Islander community organisations. That is appropriate. But we need to coordinate these activities better and develop ways of ensuring that our staff and students can easily and effectively move across boundaries between the University and our external partners. We also need to ensure that organisations seeking to deal with the University have a simple initial point of contact, allowing them to engage more quickly and effectively with those groups in the University most likely to be able to partner with them. For this reason, the University is establishing the position of Vice-Principal (External Relations), whose portfolio will include not only marketing, communications, media and government relations, but also industry and community relations. The recently created post of Pro-Vice-Chancellor (Global Engagement) has also been charged with the task of more clearly focusing University-level engagement with our overseas partners.

Simplification

A central focus of the 2011–15 strategy was that we should become a less fragmented institution, more able to make decisions for the University as a whole, and better served by a suite of simple and intuitive professional services. We have made real advances in this area over the last five years. In particular, the establishment of the Senior Executive Group (SEG) to represent each of the faculties in decision-making, and the significant improvements to our financial and research quality information, have enabled us to make stronger decisions for the institution, with a higher degree of cross-institutional participation.

However, the structure of the University and its academic leadership, our administrative processes and procedures, and our internal governance all remain bewilderingly complex. Staff and students are still burdened by our processes, and our current structure makes navigating the University unnecessarily time-consuming and difficult for staff, students and external stakeholders. The picture becomes even more complex when the internal organisation of our current faculties is taken into account; for example, there is very little consistency in the authority and responsibilities of similar roles across different faculties and schools. Finally, while SEG has been useful in building cohesion between the faculties, and between the faculties and professional services, SEG itself is very large, an unwieldy plethora of SEG committees and subcommittees has evolved, and the comingling of strategic and operational governance in SEG has meant we have lacked an effective structure for operational governance.

For this reason, at the end of 2015, following an extensive consultation process as part of our strategic planning, the University's Senate took the decision to reduce the number of faculties from 16 to six, with three additional schools reporting directly to the Provost. Four of the six faculties will be:

– Arts and Social Sciences
– Business
– Engineering and Information Technologies
– Science.

In addition, in the area of health and medicine, there will, for the time being, be two faculties:

– Health Sciences
– the current faculties of Medicine, Dentistry, Nursing and Midwifery, and Pharmacy.

It is anticipated that these will become one faculty when the Faculty of Health Sciences moves to our Camperdown–Darlington Campus from its current location in Lidcombe.

Alongside these six faculties we will have three standalone schools:

– Architecture, Design and Planning
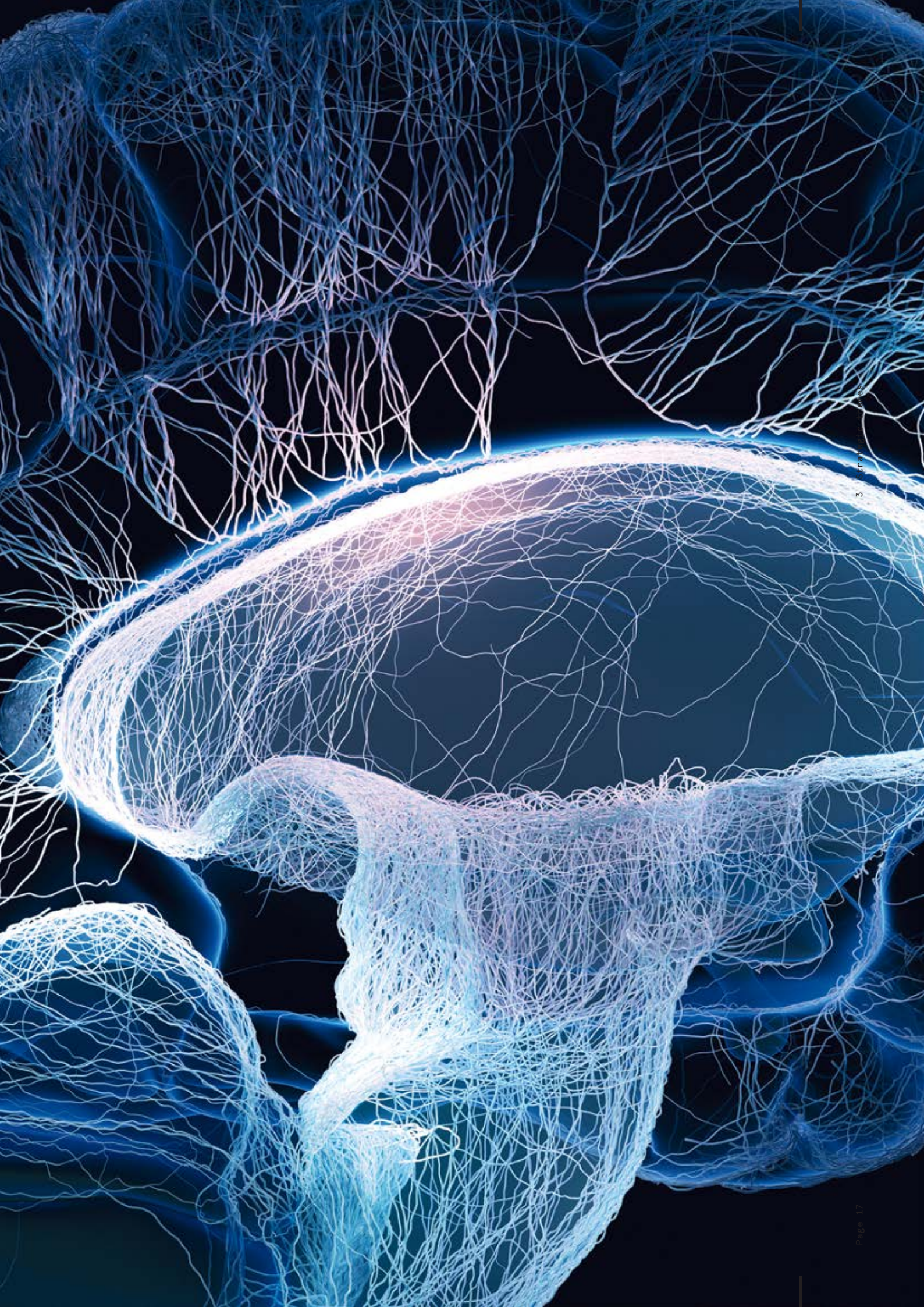– Law
– Sydney Conservatorium of Music.

For governance purposes these units will have the status of schools, rather than faculties and, given their size, will be encouraged where possible to share administrative functions. However, their heads of school and deans will report directly to the Provost in the same way as the deans of the faculties.

Planning for the implementation of the new organisational structure, including governance, will be a major task for 2016, during which year current arrangements, save for the recent abolition by SEG of the divisional boards, will remain in place. The new arrangements will take effect from the beginning of 2017. However, for the five current health faculties, implementation of the new structure will follow an external review of how existing disciplines might most effectively be organised in the proposed new faculty. The report from this review is expected early in June 2016.

Subsequent consultation, development and planning may mean that the new health structure is implemented after the other faculties.

In addition to these changes, each new faculty will be required, by 2017, to have adopted either a school-based or discipline-based internal structure, as well as a standard faculty leadership framework, of the type outlined in the consultation paper *Improving our organisational design*. In addition, SEG will be reformed so that new and simpler strategic and operational governance structures are in place by the beginning of 2017, with consideration given to the greater involvement in University decision-making of both heads of school and faculty managers.

Alongside this work in simplifying the University's faculty structures, faculty internal organisation, and University governance, work in improving the efficiency and effectiveness of our processes and professional services, together with the funding mechanism through which we support outstanding academic performance by disciplines, schools and faculties (the University Economic Model (UEM) review) will continue and, indeed, intensify. It is clear from widespread staff and student feedback that creating processes and services that are simpler and easier to navigate should be a pressing University priority.

We will invest in and drive research excellence across the University.

4   A culture of research excellence

The University of Sydney is both a distinctly Australian university and a truly global one. We have had, from our beginning, a mission to pursue the discovery and dissemination of new knowledge and understanding, attuned to the aspirations of society. We remain committed to that mission. And more than 160 years later, our aim remains clear: to harness our research intensity and comprehensiveness – a breadth and depth unique in Australia – to address some of the major global challenges of our time. Many universities aspire to such an agenda. We are doing it.

In our 2011–15 Strategic Plan we identified grand challenges to which we are bringing the combined depth and breadth of our expertise and the passions of our researchers: in obesity, diabetes and cardiovascular disease; nanoscale science and technology; mental health and neurosciences; as well as a distinctive whole-of-institution focus on China and Southeast Asia. This represents almost $1 billion of targeted investment for interdisciplinary research over the past six years. No other Australian university has made such a commitment, and it places the University of Sydney among the leading universities globally pursuing this grand challenge agenda.

In this 2016–20 strategy, we will pursue three interrelated strategies that will help us to achieve our goal of becoming the leading comprehensive, research-intensive university in Australia and among the very best in the world. Together, they form a coherent vision for research at the University of Sydney.

We will invest in and drive research excellence across the University. This means strategically prioritising resources where further investment in targeted areas, including in both disciplinary and multidisciplinary domains, will help us achieve our ambitions for research. We need to use our fundraising efforts to support our objective to become the leading comprehensive, research-intensive university in Australia by setting targets that link our philanthropic goals to our research excellence agenda. Therefore, in our next campaign we will seek the support of our donor community in creating at least 20 transformational new chairs in areas of research strength and potential, including in our schools and faculties, and in our multidisciplinary initiatives.

We will attract and develop outstanding researchers in ways that enable them to fulfil their full potential, as well as establish new programs and mechanisms for the recruitment, retention and development of researchers at all stages of their careers, to create and sustain a culture of research excellence across the institution. We will also proactively recognise excellence, including outstanding research leadership that contributes to the creation and sustainability of a dynamic, productive and respectful research culture.

And we will expand and develop new partnerships, both locally and globally, that enable our research to make a difference, improving the lives of Australians and others around the world.

Strategy 1: Invest in and drive research excellence across the University

Over the next five years, we will sharpen our focus on the quality and impact of our research. We need to ensure that we enable *all* of our academic staff to pursue and produce their best work possible – including tackling the most difficult questions in their fields, publishing in the highest quality places, working with the best partners both inside and outside the sector and addressing the major challenges our communities face. This requires a commitment on the part of faculties, schools, disciplines, research groups, centres and institutes to set clear expectations about research performance and, at the same time, create the mechanisms to support and develop a culture of research excellence.

Initiative 1.
Establish agreed benchmarks for research performance

The Academic Planning and Development (AP&D) process has provided a clearer picture and structure for evaluating the research, teaching and service being conducted by our academic staff. It has provided for a greater emphasis on peer mentoring and advice on academic performance and development. We have introduced new guidelines for probation and confirmation that will clarify the expectations and thresholds required for continuing appointments.

Every academic staff member has a role to play in achieving the research ambitions outlined in this plan. As we demonstrated in our discussion papers, as a University, we need to improve the quality and impact of our research output. The next step is to establish clear publication and engagement benchmarks for all academic staff at each stage in their career (levels A–E) that reflect our ambition for research excellence, including the qualities we seek to develop in all of our researchers. These will not be minimal standards, but rather aspirational goals aligned with our focus on excellence. The benchmarks will be established in close consultation with disciplines, working with deans, heads of school, discipline chairs and centre directors, and informed by the relevant advice from the Research Portfolio, including national

and international comparisons. These benchmarks should then be woven into our confirmation and promotion processes.

In addition, we will work with the Academic Board and SEG to ensure that appropriate international comparisons are included in Academic Board/SEG reviews of faculties and schools. This will involve the introduction of international experts in the review process.

Initiative 2.
Launch the Sydney Research Excellence Initiative

We will launch the **Sydney Research Excellence Initiative** (SREI) in 2016 to strengthen support for our research. By 2020, the program will provide for a strategic investment of $150 million per annum; a tripling of our current investment. The SREI will fund strategic investment in our researchers and the research environment that enables their work. A fund of this scale will propel us to achieve national and international pre-eminence in areas of research priority for the University: recruiting and developing outstanding research talent, building critical mass and creating dynamic and supportive research environments, including by engaging with communities beyond the University. Investment will be based on the criteria discussed during the consultation period and which reflect the objectives of our research strategy (see Table 1).

The SREI is an initiative designed to lift our performance and build on existing and emergent strengths, but it should also seed research that can be successfully targeted at external funding opportunities – including federal and state government support, and industry funding. We will evaluate cases for investment in disciplinary and multidisciplinary areas through an open process that will be driven by rigorous analysis and academic judgement; one that allows for the diversity of our research strengths to be represented.

It will align with our cultural and equity objectives to ensure that we are investing in individuals and teams that demonstrate outstanding performance and a commitment to an inclusive, diverse and respectful research and workplace culture.

Table 1. Criteria for determining strategic investments in disciplinary and multidisciplinary activities

Attribute	Indicative criteria for strategic investment
Quality	– Existing excellence
	– Emerging excellence
	– Multiplier effect
Social impact	– Societal impact
	– National and global priorities
Reputational impact	– Opportunity to lead
	– Recruitment of high quality UG and PG students and staff
	– Potential to attract quality partners
	– Rankings value
Resources	– Availability of talent
	– Likely availability of future funding
	– Existing collaborations and partnerships and current scale of collaborations
	– Positive existing research culture (in the discipline)
	– Spend required to be number 1
	– Opportunity to diversify funding
	– Broader benefit to the University

The Campus Improvement Program has seen approximately $1.7 billion invested in new capital infrastructure across the University over the past six years. From this foundation it is now possible for us to commit to funding new, contemporary research infrastructure – both equipment and technical expertise – in areas of exceptional research performance, together with those areas that demonstrate the greatest potential. As a result our staff will be able to pursue the cutting-edge work they are committed to doing.

In the same way that the Sydney Research Excellence Initiative will finance strategic investments in people and expertise, it will also finance the research infrastructure plan. The University's *Decadal Plan for Major Research Infrastructure* sets out an ambitious program of rolling investment in core research facilities over the next period that will benefit all of our faculties, including the natural and physical sciences, the life sciences, creative arts, the humanities and social sciences.

For example, we will invest in major new capabilities for our core research facilities, including the library, that will provide our researchers with the infrastructure, tools and technical support to pursue research excellence. This will include investments in our *Research and Prototype Foundry*, located in the new Sydney Nanoscience Hub, which will provide it with foundational capabilities for our researchers from the Australian Institute for Nanoscale Science and Technology (AINST) and the broader university community to integrate design, fabrication and prototyping of devices, structures, and systems at the nanoscale.

Building on our work to design best-of-type laboratory suites at the hub, we will invest in state-of-the-art capabilities in microscopy through **Sydney Microscopy and Microanalysis**. This will transform our ability to measure and correlate structure and function of materials at the atomic and molecular scale. Such structure-function

relationships underpin discovery and design across many disciplines – from materials science and engineering to the biomedical sciences and biotechnology.

We will invest in critical new infrastructure and capabilities for clinical and pre-clinical imaging, making the University of Sydney one of the major research and collaborative centres for imaging science and technology in Australia. Consistent with this vision, we will invest in a new imaging core research facility, **Sydney Imaging**, which will support the ambitious research agendas of the Charles Perkins Centre, the Brain and Mind Centre (BMC), and of researchers in our faculties and schools, as well as in collaboration with Sydney Health Partners.

We will also make transformational investments in our advanced computing infrastructure, ensuring we are well placed to support our initiatives in translational data science, the biomedical sciences, humanities and social sciences, among others, across the University. This will include a major expansion of our high-performance computing facilities (Artemis), as well as the creation of new Discovery Studios – dedicated studios that will enable powerful visualisation, segmentation and quantification analytics of complex data that is increasingly required in a multitude of disciplines throughout the University.

Initiative 3.
Establish the Centre for Translational Data Science and the Sydney Policy Lab as part of a suite of new multidisciplinary initiatives

Over 2016–20 we will identify and support our next whole-of-University multidisciplinary initiatives, building on the success and lessons learned from our most recent investments (the Charles Perkins Centre, Brain and Mind Centre, Australian Institute for Nanoscale Science and Technology, the China Studies Centre and the Sydney Southeast Asia Centre). We will establish new multidisciplinary initiatives that will harness our research excellence for the public good. These initiatives will target domains where we have the most opportunity to build on our strengths and deliver the greatest potential scientific, social, economic and cultural impact. We have applied the criteria outlined in Table 1 and will launch the Centre for Translational Data Science and the Sydney Policy Lab, and identify other areas of focus over the course of the 2016-20 Strategic Plan.

The **Sydney Centre for Translational Data Science** (SCTDS) will harness the extraordinary potential for innovation in data science and machine learning for the nation. It will be a partnership between data scientists, a broad range of research domain experts, and community and industry partners. The centre will deliver a world-class research capacity in data science to develop new methods, technologies and tools, and translate data science to drive new and transformational advances in the life, physical and social sciences, and tackle society's complex problems.

The **Sydney Policy Lab** (the Lab) will promote the development of transformative public policy across a range of domains, connecting experts from across the University to focus on vital policy challenges. To be housed in the new Faculty of Arts and Social Sciences building, the Lab will bring together researchers and students from the social and natural sciences, humanities, health, architecture, business, science, engineering and other disciplines, in collaboration with government, industry and non-profit sector partners to improve the policy research and development for some of the major challenges facing our city, nation and region. The Lab will serve as a portal for our partners to access the policy expertise at the University, as well as lift our capacity for policy innovation.

Strategy 2: Attract and develop outstanding researchers

Our staff development programs are at the heart of our strategy to build a culture of research excellence across the University. We need to invest in and develop the careers of those who are already here. But we also need to continue to recruit outstanding researchers, and so we will initiate a **Strategic Recruitment Project** that not only scans the globe for outstanding research leaders and emerging talent in our areas of priority, but that also investigates and addresses the barriers to recruitment that we face in Sydney, including housing affordability and more flexible and family friendly career development.

We want to recruit, retain and develop outstanding researchers at all stages of their careers. We will embrace a whole-of-University approach to researcher development in which the faculties will partner with the Research, Education and Human Resources portfolios to ensure the development of the research community is coordinated both locally and through central programs and funding.

This will begin with our higher-degree-by-research (HDR) students. We will deliver a tailored training and career development program that includes a focus on the highest quality research output, innovation, impact and community and industry engagement. Our ambition is to produce both outstanding researchers and leaders of the future.

In every case, we will use the opportunities for career development that come through established and successful groups and networks. Again, this is aimed at all of our academic staff. Critical mass is an important element of research success. The more our researchers have the chance to be part of a well-led and dynamic research group or network, the better our research culture and performance will be. Research groups such as these provide increased access to resources and peer support, as well as opportunities for greater connectivity to other researchers and community, industry and global partners.

The Sydney Research Excellence Initiative (SREI) will serve as the primary mechanism to encourage and support the formation of high-performing research groups in areas of existing and emergent research strength. Furthermore, we will target

and develop potential candidates for prestigious fellowships to build new successful research groups (including Future Fellowships, Laureate Fellowships and NHMRC Senior Fellowships), as well as leaders of new collaborative research networks and whole-of-University interdisciplinary initiatives.

Initiative 1.
Remodel the pathway to the PhD

We need a new approach to research training. Research students are not only a critical part of the University's overall research activity; they are the future of our disciplines and a vital part of Australia's innovation ecosphere.

In consideration of the feedback received during the strategic planning consultations, we will create a new research-track coursework master's degree as the preferred pathway to the PhD. This will consist of a 72-credit point program, with the possibility for flexible and innovative 'vertical integration' with our new liberal studies degrees and our PhD program. We will provide a more structured training and support framework to enable our students not only to produce high quality research, but also to build broader competencies in project management, research integrity and ethics, commercialisation, entrepreneurship, research leadership, translation and public engagement, and teaching.

Initiative 2.
Attract and invest in the best PhD students

Scholarships are critical for recruiting outstanding international and domestic PhD students. The University of Sydney has one of the largest stipend scholarship programs of any institution in Australia, and about 70 percent of full-time HDR students are currently in receipt of a stipend scholarship paid through the University. However, many of our Go8 competitors are increasing the number of scholarships they offer to international students and we are simply missing out.

For the first time, we are committing to scholarships for the best PhD students in areas of true research strength. Over the course of this strategic plan, we will increase the number of scholarships available for outstanding international PhD students. We will support the most outstanding students, irrespective of their fee status, and we will review the scholarship allocation process to give effect to this imperative. We will review and consider repurposing existing schemes and invest an additional $10 million annually in scholarship support to ensure that outstanding

students can be supported while undertaking a Sydney PhD.

We will also allocate a proportion of our HDR scholarships to areas of agreed research priority. The SREI funding will include support for additional PhD stipends and top-up scholarships in targeted areas, for example, and we will highlight our multidisciplinary initiatives as a means to attract and support exceptional international and domestic PhD students. Once implemented, the recent Watt Review's recommendations about Commonwealth funding for research training* will provide us with more flexibility, within our funding allocation, to support our strategic priorities.

For many of our PhD students, it is vital that we provide exposure to a range of settings outside of the University in order to broaden their world view and consider the potential applications for their research at an early stage. Consequently, we will streamline and create new opportunities for joint PhD programs and HDR student mobility with our leading global partners in business, industry and in community organisations. This will include opportunities for our HDR students to spend time working with industry and community partners, both local and global, and the possibility for more industry sponsored PhD (including health and civil society organisations).

As a companion initiative, we will commit to providing greater support for our PhD students and staff, including greater access to participation in start-up and incubator programs, to develop skills in entrepreneurship, commercialisation, intellectual property and community engagement.

Initiative 3.
Create a new fellowship scheme targeted to outstanding early career researchers

We will develop a pathway towards continuing teaching and research positions for at least 50 of our most outstanding early career researchers on internally and externally funded fellowships, tentatively titled the **Robinson Fellowship** (named after the University's first Nobel Prize winner, Sir Robert Robinson). Fellows will be identified on the basis of merit and potential, as well as their ability to help us achieve our strategic vision, including our commitment to excellence, engagement and

_____
* The Commonwealth Review of Research Policy and Funding Arrangements (The Watt Review)

realising the attributes we seek to develop in all of our academic staff. Another important aim of this scheme is to help support outstanding younger academics at critical points in their careers where balancing scholarship and family commitments can be particularly challenging.

For a five-year period, the Robinson Fellows will have access to a mentoring and development program that will equip them with the necessary skills to achieve the performance standards set as a condition for confirmation in a continuing position. Faculties and schools will be supported in the transition from external fellowships to continuing roles.

Initiative 4.
Establish the Sydney Outstanding Academic Researcher (SOAR) program as the flagship researcher development scheme

We will bring together, for the first time, a whole-of-University approach to researcher development. The program will coordinate, create and make visible the full range of development activities and resources to enable our researchers to grow at every point in their career. Through our faculties and research institutes, all our researchers will have access to development programs at the local level. At the University level, we will establish institution-wide schemes for our most outstanding researchers. Schemes will include shadowing, mentoring, publication masterclasses, tailored programs and coaching that develop leadership, entrepreneurship, commercialisation and collaboration skills.

The **Sydney Outstanding Academic Researcher program** (SOAR) will be the flagship development scheme for researchers. Entry to the two-year program will be based on merit and an analysis of future potential together with a recommendation from deans, heads of school, and centre and institute directors. At full scale, up to 100 researchers per year will be supported through this whole-of-University program.

Our investment in researcher development, including SOAR, will be guided by the set of key academic staff qualities and qualities outlined in the introduction. They will guide the way we recruit, develop, retain and support our staff. In particular, all of our staff need to be capable of contributing to high-performing, diverse and supportive research teams. Collaboration and partnership at all levels will be critical to our success.

Strategy 3: Develop partnerships that enable our research to make a difference, locally and globally

Sydney has a long tradition of innovation and engagement with industry, government and civil society. From the beginning, we have discovered new technologies, techniques and medical treatments, and transformed social, cultural, economic and political thinking.

We are committed to helping realise a new national vision for innovation. Whatever our ambition for industry and community engagement, our most fundamental contribution to this vision lies in the open intellectual inquiry that drives the most successful research. High quality research is the seedbed of innovation. We need to support the full spectrum of research – from basic through to applied and translational – as well as research conducted with community partners. Doing so fundamentally alters and enriches our research endeavours, as well as making a major contribution to the public good.

Initiative 1.
Promote the importance of industry research

We need to diversify our sources of research funding. We have historically prioritised category 1 research funding as a measure of research excellence. But excellent research is excellent research, no matter from where funding is derived.

The federal government's shift of focus to innovation, as demonstrated by the National Innovation and Science Agenda, together with the recent Watt Review, will also change the way we are funded for our research. Based on the recommendations of the Watt Review, from 2018 the Research Block Grant funding formula will change to reflect a greater emphasis on income received from non-category 1 funding sources – that is, from industry, government (non-ARC and NHMRC) and community sectors. The next Excellence in Research for Australia (ERA) research assessment exercise will also be amended to include an evaluation of the impact of our research. This means that we must find ways to bolster our research that directly addresses the problems of industry.

We need to improve our category 2–4 research funding by providing the right incentive and reward mechanisms for staff to pursue industry and community engagement and commercialisation activities, and deliver the appropriate administrative infrastructure to effectively manage the partnerships and projects, and support our staff to develop a better understanding of principles of commercial interaction. We will, therefore, invest in our Commercial Development and Industry Partnerships team to embed new business development expertise in our faculties. In 2016, we will focus on the faculties of Science, Medicine, Health Sciences, Arts and Social Sciences, Engineering and Information Technologies and the School of Architecture, Design and Planning, with more to come in future.

Within the University we will increase our proof-of-concept fund to provide researchers with the resources they need to progress their ideas for the next phase of commercial development. In addition, we have become a partner in Uniseed, an external venture fund dedicated to commercialising university research. Uniseed provides financing for capital-intensive commercial projects and promising technologies across a range of sectors. Our participation in Uniseed will offer access to new sources of commercialisation advice, and opportunities for our researchers to develop sound commercialisation expertise.

Initiative 2.
Create the University of Sydney Knowledge Hub as a dedicated collaboration space with industry and community partners

The co-location of researchers and industry and community partners is vital for creating a dynamic environment genuinely geared towards invention and innovation. As part of the next phase of our Campus Improvement Program, we will develop a dedicated innovation precinct at the centre of our Camperdown-Darlington Campus.

The **University of Sydney Knowledge Hub** will be purpose-designed and built to foster co-working and collaboration between our leading research groups and their industry and community partners. The Knowledge Hub will be a space where our staff, students and graduates can share ideas with peers, industry leaders and the wider commercialisation and start-up community.

Spokes of the Knowledge Hub will be established in new facilities currently being designed and built for the Faculty of Engineering and Information Technologies, our health faculties, the Faculty of Arts and Social Sciences, and at our Westmead campus.

Initiative 3.
Invest in and expand our footprint at our Westmead campus to maintain it as a leading international centre for research and innovation

A key focus of the University's next period of strategic growth will be in and for Western Sydney. Building on our already strong presence with the foundation disciplines of medicine and dentistry and our substantial research activity at Westmead, we will continue to work with the NSW Government and all of our partners in the precinct to develop, by 2030, a genuinely multidisciplinary campus with 6000 students – an increase of 4800 students from our current state – and a commensurate increase in our academic capacity. We will invest $50 million in infrastructure alone over the life of this strategy, with a long-range financing target of around $500 million over the next 15 years.

We will begin by investing in three core academic areas: diagnostic sciences and technologies, sustainable health, and patient-centred care. These areas build on existing capacities at Westmead and will complement and support University academic strengths at all of our sites. We will build strong links between our existing multidisciplinary institutes and Westmead, including the Charles Perkins Centre, the Marie Bashir Institute and the Centre for Translational Data Science, each of which already has a presence at Westmead, as well as our deep commitment to Sydney Health Partners and affiliated medical research institutes.

Initiative 4.
Partner with Aboriginal and Torres Strait Islander communities for research in real-world intercultural settings

As Australia's first university, we have a particular commitment to conduct research that supports and serves Australia's first peoples. Building on our current *Wingara Mura – Bunga Barrabugu* strategy, we will invest both in people and partnerships in the following ways.

We will commit to three new regional partnerships with Aboriginal and Torres Strait Islander communities that provide learning opportunities for students to undertake and translate their research in real-world intercultural settings. As we have done in our partnership with the Murdi Paaki Regional Assembly in far-west NSW, we will bring together local and regional community priorities and targeted innovative and pioneering service research.

Our aim is to create four **Wingara Mura – Bunga Barrabugu Visiting Fellowships**, to bring the most promising and talented Indigenous researchers, nationally and globally, to enrich new or existing interdisciplinary research at Sydney. We will also establish the tentatively titled **Gibbs and Ferguson Scholars program** to support four talented mid-career scholars currently working at Sydney whose research and focus has the potential to significantly shift thinking or impact around Aboriginal and Torres Strait Islander and/or Indigenous peoples around the world. The program will support the scholars to pursue their research intensively with the objective of producing seminal works that both shape their career and their field of study.

Initiative 5.
Develop a focused approach to global engagement

Higher education is inherently global, and universities contribute through networks and partnerships with collaborators and colleagues around the world. Our commitment to a global orientation also brings advantages – it means that our community is more diverse as we recruit talented staff from overseas, and our students benefit from the global perspectives that are brought to our classrooms and campus life. We need also to consider the experiences we can offer our students and our staff around the globe, and the role overseas facilities might play in the future.

Given the very nature of the way academic research is conducted today – often through extensive global networks and consortia – we must identify and invest in those strategic international alliances and, in particular, those partnerships that best align with our multidisciplinary agenda. This will help us attract and retain leading researchers from around the world, including the very best PhD, postdoctoral and early career researchers, to help realise our vision.

We will create institutional-level strategic alliances that deliver the greatest opportunity for staff mobility, research and educational cooperation, student exchange and in-country educational and research experiences. In line with Initiative 1 of Strategy 3, we will also focus more strategically on sourcing new funding from our international partnerships and alliances. Beginning with China as a priority country, we will identify between 15 and 20 preferred global partners that are aligned with our strategic objectives for research and educational engagement. Our criteria for identifying these strategic partnerships will both mirror and build on our criteria for strategic investment generally.

For the first time in the University's history, an overseas centre will be established in Suzhou, China, in 2016. This centre is a key plank of the University's broader China strategy, and will serve as a research and education hub for the University to increase intellectual exchange and collaboration. Together with the China Studies Centre in Sydney, the Suzhou centre will help ensure that we are able to sustain meaningful, long-term, and effective relationships with our diverse Chinese partners. It will act as an incubator for joint Australia–China research programs, and facilitate research and industry collaboration and liaison. It will support mobility and exchange by offering assignments for academic staff from the home campus and their collaborators from local partner institutions, as well as serving as a host site for research seminars and conferences, in-country language programs, and student internships and placements.

Alongside this focus on China, we will form partnerships in Southeast Asia, Northeast Asia (Japan and Korea), Europe and North America that build on and reflect our strengths, as well as explore opportunities for greater links in South Asia. We will create alliances with universities that share complementary strengths in research, to forge new pathways for academic mobility and create collaborative networks for educational and curriculum innovation.

In particular, we will connect our whole-of-University multidisciplinary initiatives with similar initiatives around the world – building a global network of universities concentrating on the great challenges of our time – including in public health, nanoscale science and technology, brain and mind science, China, Southeast Asia, and in those new areas that emerge over the course of this plan.

We have radically rethought our approach to undergraduate education, offering a model that is unique in Australia.

5　A distinctive Sydney education

Since its foundation in 1850, the University's enduring educational mission has been to equip the most promising students with the knowledge, skills, values and purpose to serve society at every level and to lead the way in improving people's lives. We remain committed to that mission, and now give it contemporary expression: our mission is to provide graduates with the skills, knowledge and values they need to thrive and lead in a rapidly changing world. To deliver on that mission, we have radically rethought our approach to undergraduate education, offering a model that is unique in Australia.

We remain steadfast in our belief in the value of undergraduate learning as the foundation for a life well lived. We recognise that graduates not only need to master a coherent body of contemporary knowledge in a chosen domain of expertise. They also need the foundations and the capacity to continually deepen and broaden their knowledge and use it creatively and collaboratively. As one business leader put it, successful graduates need to be able to "constantly reinvent themselves".

To provide the best educational experiences to achieve these outcomes, we will innovate in the use of new technologies, tools and resources for learning. To promote advanced learning outcomes, we will challenge our students at the boundaries of their developing expertise. In doing so, we will exploit the exceptional breadth of expertise within the University and, through our partners, in a wide variety of external research, industry and community settings.

Collaboratively, we will create learning experiences that guide students to apply knowledge in ways that, while informed and sensitive to context, question and build understanding. Some of these learning experiences will sit firmly within disciplinary domains; others will be at the points where disciplines intersect. In their most challenging forms, they will involve authentic and novel opportunities and problems that require inventive responses, raise questions of ethics and values, and drive students to integrate their developing knowledge, skills and values.

Our unique model of undergraduate education offers three differentiated streams to cater for what our students tell us are the broad pathways they wish to follow:

- a professional career track for those students who are clear from the outset about their future direction
- a more open track, for those who want to study a wider range of subjects at undergraduate level and contemplate more open career opportunities before deciding either to move directly into employment or to pursue a more focused postgraduate degree that readies them for a particular profession
- a research track, for those who ultimately want to study at doctorate level.

Strategy 4: Transform the undergraduate curriculum

As society confronts emerging and ever more pressing challenges, graduates must have the capacity to contribute to and provide leadership in dynamic, changing and globalised environments. Our undergraduate curriculum must prepare our students for careers and lives that will require of them a broad range of academic expertise and skills, as well as exceptional personal qualities and values.

Initiative 1.
Embed new graduate qualities and a new curriculum framework in all undergraduate degrees
We will adopt a set of graduate qualities that reframes in contemporary terms the enduring purpose of an undergraduate education at the University of Sydney and reaffirms the University's aim to serve our communities, by providing students with the best possible foundation for future leadership. These qualities, described in Table 2, will be embedded as learning outcomes in all undergraduate degrees.

Table 2: Qualities of the Sydney graduate: foundations for leadership

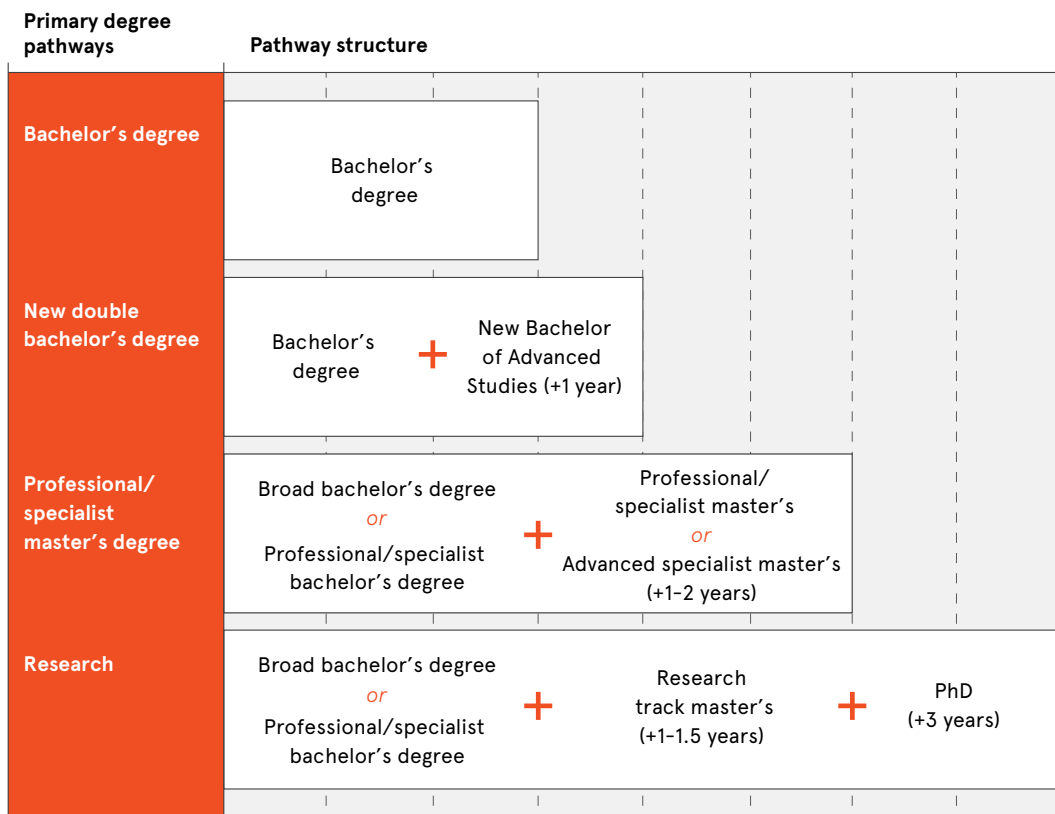| Graduate qualities	Purpose
Depth of disciplinary expertise	To excel at applying and continuing to develop expertise in the graduate's chosen discipline or disciplines
Broader skills: – critical thinking and problem solving – communication (oral and written) – information/digital literacy – inventiveness	To increase the impact of expertise, and to learn and respond effectively and creatively to novel problems and opportunities
Cultural competence	To work productively, collaboratively and openly in diverse groups and across cultural boundaries
Interdisciplinary effectiveness	To work effectively in interdisciplinary (including inter-professional) settings and to build broader perspective, innovative vision, and more contextualised and systemic forms of understanding
An integrated professional, ethical and personal identity	To build integrity, confidence and personal resilience, and the capacities to manage challenge and uncertainty
Influence	To be effective in exercising professional and social responsibility and making a positive contribution to society

Attaining these graduate qualities will enable students to make productive, innovative and ethical contributions to society as they take on positions of intellectual and professional leadership after graduation.

To ensure graduates acquire these qualities, we will adopt a new curriculum framework that sets out a structure for the educational experiences to be offered in all bachelor's degrees.

The framework is designed to balance depth of disciplinary expertise with broader capabilities, by providing an understanding of broader intellectual landscapes, offering more authentic, 'real-world' educational challenges, and promoting the integration of knowledge with professional and personal ethics and values.

Under this new degree architecture, principal pathways open to students are shown schematically in Figure 1.

Figure 1.

Primary degree pathways	Pathway structure		
Bachelor's degree	Bachelor's degree		
New double bachelor's degree	Bachelor's degree +	New Bachelor of Advanced Studies (+1 year)	
Professional/ specialist master's degree	Broad bachelor's degree *or* Professional/specialist bachelor's degree +	Professional/ specialist master's *or* Advanced specialist master's (+1–2 years)	
Research	Broad bachelor's degree *or* Professional/specialist bachelor's degree +	Research track master's (+1–1.5 years) +	PhD (+3 years)

Building on the University's existing curriculum structures, the framework will have these **core requirements**:

– a sustained and coherent program of study in the major discipline or broader field of study

– a coherent set of learning experiences that build disciplinary knowledge, skills and methods for enquiry, as well as skills for communication, analysis, critical thinking, problem solving, ethical reasoning and cultural competence

– collaborative learning activities and assessments in which students acquire the capacity to work effectively in team contexts

– interdisciplinary and inter-professional learning experiences

– experience in working on authentic problems that arise in industry, community or research settings, where the solutions are of genuine and potentially pressing interest, and

– every degree will culminate in a final-year project or practicum that allows students to apply the knowledge and skills acquired across the undergraduate program to an authentic opportunity or problem and demonstrate the attainment of graduate qualities. This project will provide challenges, novelty and the opportunity to develop creative solutions.

Complementing the framework's core requirements are **enrichment opportunities**. Students will be encouraged to choose from these in ways that serve their individual interests, aspirations and emerging capabilities to develop:

– deep expertise in more than one field of study and hence the opportunity to be creative, especially at the intersecting boundaries of their fields of expertise

– advanced research skills

– curiosity, and exploration of broader interests and self-direction

– broader literacy in skills beyond the primary field of enquiry

– deeper and broader intercultural skills, including through expanded mobility opportunities, and

– skills for community contribution and leadership.

This new curriculum framework maps directly to the graduate qualities, so that they are embedded as learning outcomes in all undergraduate degrees. Details are shown in Appendix 2.

Initiative 2.
Establish a unique undergraduate degree and vertically integrated degree pathways

We will establish a new architecture for our degrees, unique to Sydney, to provide more navigable pathways and the best possible outcome for every graduate in their chosen pathway.

The Bachelor of Advanced Studies

While we will refresh and retain our three-year undergraduate courses, such as the bachelor's degrees for arts, science and commerce, we believe that for students seeking a career outside a profession that requires specialist training, or in research, these should normally be combined with a new degree, the **Bachelor of Advanced Studies** (BAdvStudies). Students will be able to complete the combination of an existing three-year degree and the BAdvStudies within four years. It will give them the opportunity to study two disciplinary areas in depth, as well as the requirement to undertake multi-disciplinary and real-world problem-solving activities, often, but not always, embedded in industry and community settings. They will also be able to take courses from an 'Open Learning Environment' that will cover more generic skills and disciplines (see Initiative 3, page 36). We believe that this combination will better prepare students for the work-world of the future by providing the skills that contemporary employers require, and can also provide excellent research training.

As well as the breadth of intellectual development afforded by completion of at least two majors, the key advantages of the double bachelor's program, which is open to all students, will be:

– advanced-level study in their primary field, with further development of broad skills for critical thinking, problem solving, communication, digital literacy, inventiveness and collaboration

– sustained development of skills for 'real-world' project work, and the broader learning outcomes that brings

– greater opportunity to explore fields of study prior to deciding on programs, majors and/or minors

– substantial opportunity to undertake studies in other disciplines and/or in a multidisciplinary program, enriching the capacity for breadth of knowledge and perspective, and

– access to a pool of core professional units.

For students seeking a career in research, an 'honours' track will also be available, either in its current format or embedded into the new four-year double degree.

The BAdvStudies can also be taken with a professional or specialist degree of four or more years in length, such as the Bachelor of Music. In these cases, the BAdvStudies will broaden students' intellectual foundations by allowing an additional major in any business, humanities, social science or science discipline. Because two years will be cross-credited between the primary degree and the new degree, the double degree program is only a year longer than the primary professional or specialist degree.

Introduce new vertically integrated degree pathways
For students seeking a career requiring specialist professional training, we are exploring the possibility of offering more vertically integrated double degrees. This accelerated double-degree model allows students to commence a master's degree while completing their (professional or specialist) bachelor's degree, enabling a step-change in our ability to prepare students rapidly for a changing career environment.

The model ensures students are increasingly challenged each year and builds on their knowledge and skills to deliver deeper and more advanced learning outcomes. By taking advantage of the knowledge and skills gained in the bachelor's degree to accelerate learning in the master's, vertically integrated double degrees are only slightly longer than existing double bachelor's degrees, optimising their educational value to students and the community. And because these degrees will be more challenging, entry will be restricted to students demonstrating high levels of achievement; they will need to have demonstrated their potential to succeed, either in their qualifying studies or in the early years of the bachelor's degree itself.*

Provided students have demonstrated the required level of performance, and subject to funding agreement with the Commonwealth, they will be able to select the integrated pathway as a Commonwealth-supported place option, either from the beginning or during their course.

We will therefore seek permission from the federal government to transfer a fixed number of Commonwealth-supported places to support integrated bachelor's/master's combinations.

Introduce the Dalyell Program for high-achieving students
Both our double degree combinations – the BAdvStudies option and the vertically integrated double degrees – will include access to advanced streams for high-achieving students. These streams have tentatively been named after our alumna Elsie Dalyell, a pioneer resident medical officer at Royal Prince Alfred Hospital and the first female full-time academic in the medical faculty. She subsequently travelled to London on a scholarship and, after serving in the First World War, worked as a senior clinician in a Vienna-based research team studying deficiency diseases in children.

One of these streams will focus on depth of learning, whether for interest or as preparation for a specialist career or a PhD, and will include access to the accelerated four-year integrated bachelor's/master's programs just described.

The second will provide the foundations for a global career. It will offer access to advanced courses, interdisciplinary seminars on global issues, a mobility experience, and broad choice for talented students seeking to develop expertise in several distinct disciplines. With a focus on self-awareness, community contribution and leadership skills, the program will seek to develop vision, adaptability, breadth of perspective, and a high level of capability in operating across disciplinary and cultural boundaries.

Streamline degree regulations and undergraduate degree profile
The final aspect of the new degree architecture is an overhaul of the myriad definitions and rules that have evolved through the years and now complicate our course offerings. We will introduce common definitions of course components and common course rules for degrees in the humanities, social sciences, business and science.

---

* We will continue to offer stand-alone professional bachelor's degrees that are currently available, such as engineering, primary teaching, social work and physiotherapy, thereby continuing to provide a direct path into the relevant profession.

Initiative 3.
Establish a curriculum development fund to expand learning opportunities for our students

To deliver the new curriculum framework and offer an educational experience of the highest quality, we will institute a series of initiatives, outlined below, that will require significant investment. We will therefore establish a **Curriculum Development Fund** of $50 million to support both competitive and faculty-negotiated investment to embed the curriculum framework and develop units of study and modules that realise our ambitions for experiential learning.

These new commitments include:

– *Project-based learning*: The addition in each undergraduate program of two third-year units of study: one to integrate and apply disciplinary knowledge and skills, and another in which students will be required to apply disciplinary knowledge and skills in an interdisciplinary context. Every Bachelor of Advanced Studies student will also complete a research, entrepreneurship, industry- or community-related project of between 12 and 36 credit points.

– *Interdisciplinary experiences*: We will develop new units of study – Sydney Research Seminars – in which multidisciplinary staff teams collaborate with participating students to co-develop and work on tangible research questions in response to an interdisciplinary opportunity, problem or issue. These units are a joint Education and Research initiative to provide an environment in which students can actively participate in the process of research exploration, and will be funded on a competitive basis.

– *The Open Learning Environment*: All students will have access to an Open Learning Environment (OLE) which will provide short, modular courses and learning resources that allow students to acquire, in flexible ways tailored to their specific learning needs, the foundational concepts and methods of other disciplines. Courses will be delivered

in a broad range of areas, and may include topics in areas such as data science, research techniques, entrepreneurial thinking, ethics, team leadership, design thinking, intercultural communication and project management. The OLE will be accessible in an online on-demand mode or in a workshop-supported blended learning mode on a no-credit or small-credit (eg two credit points) basis, emulating the contemporary open global learning environment. It will be populated with courses developed by our staff that are of particular value and interest to our students as they identify new skills and knowledge they need to acquire.

– *Cultural competence and broader skill development*: In collaboration with the National Centre for Cultural Competence and through a shared commitment to a more collective, relational model for learning and teaching, we will embed the development of cultural competence in the curriculum. We will also ensure broad student access to the University's rich cultural and language offerings, including for Aboriginal and Torres Strait Islander cultures and languages, and develop culturally rich experiential learning opportunities in conjunction with community and industry organisations in Australia and overseas.

– *Mobility experiences*: We will encourage our students to take advantage of mobility opportunities and increase the ease with which they can study for periods of time at other institutions. We will do this through cohort-based exchange arrangements with international universities in Australia and overseas, and maximise the opportunities provided by our new China centre in Suzhou. We will continue to develop dual and joint educational offerings with international universities and open summer and winter periods to intensive cultural learning experiences. By 2020, our aim is that 50 percent of our students will undertake a short- or longer-term mobility experience.

– *Support for career transition*: Finally, we will support career development as part of an integrated framework of activities that develops, assesses, and demonstrates the qualities of the Sydney graduate and supports transition to employment or further study. In part, this will be achieved by stronger, broader and more coordinated engagement with external organisations through experiential learning collaborations. We will also adopt a more strategic and whole-of-University approach to supporting the transition to work and further study through an appropriate and coordinated mix of central and faculty-based assistance and activities. A cross-portfolio working group will develop an integrated curricular and co-curricular framework for students' career development.

Our students will not learn in a vacuum. Their learning will be responsive to the needs and context of industry and community partners. In order to facilitate real-world experiences, we will also build a deeper set of external relationships to create a model of engagement that is responsive to the needs and context of industry and community partners and ensures broad educational value. This model requires collaboration with partners to identify potential projects and creation of teams of students to undertake the project, under academic supervision and with potential involvement of the partner as an expert resource.

Under the broad direction and overarching coordination of the Vice-Principal (External Relations) and in collaboration with the Research Portfolio, we will create a small industry and community engagement team, operating on a hub-and-spoke model, to provide education-focused coordination, relationship management and facilitation services to faculties to support the sharing of good practice and multidisciplinary engagement, expanding opportunities for project development, internships, placements and integration with research activities.

Initiative 4.
Develop a University-wide approach to assessing graduate qualities
We already monitor students' educational experience through informal feedback and formal surveys, but we must also monitor educational outcomes. To track progress, we will develop a University-wide approach for assessing the degree to which graduate qualities have been attained. Ideally, these will be assessed through a final project or placement and use a to-be-developed common rubric that will also be used by students for self assessment. Over time, this rubric will enable students' perceptions of their own progress to be calibrated with the views of their teachers and other external assessors.

Additionally, we will monitor student retention and progression, students' success in accessing further study pathways and employment outcomes, and make a significant effort to track graduates and their longer term career outcomes.

Strategy 5: Transform the learning experience

Initiative 1.
Develop interactive and collaborative learning designs that foster excellence and innovation

To achieve educational excellence across the full breadth of the curriculum, we will make more extensive use of the interactive, experiential and collaborative pedagogies that most advance learning and enrich the student experience. Each academic and teaching team will develop approaches that are both creatively theirs and guided by evidence. In this way, we will build learning designs that engage and challenge students and serve as a springboard for graduates' ongoing learning and for their transition to competitive, fluid and challenging work environments.

We will also design experiences that promote learning at multiple levels, from the unit of study to the whole degree, and will ensure coordination by mapping intended learning outcomes across the curriculum and aligning activities and assessment, in order to build an integrated and coherent body of knowledge and skills. A number of these experiences will involve expertise across disciplines and the engagement of the University's many research, industry and community partners.

Introducing new, more interactive learning experiences into existing units of study will entail changes to existing learning designs, including greater use of pre-readings, pre-recorded videos, and brief, ideally automated, diagnostic assessment of understanding of core concepts and themes. Students will be made aware of the changing expectations on them as we adopt new pedagogical approaches, and will be led to take greater responsibility for their own learning.

Importantly, we will invest in the design of students' early university learning experiences, taking advantage of evidence on effective first-year practice, to provide a first-year experience that sets students' expectations, creates engagement with a new form of learning environment and introduces students to the process of discovery to inspire a different approach to learning. The focus for this work will be the large, compulsory classes and will include: curriculum redevelopment to devote more class time to discussion and interaction with peers and staff and enquiry-based learning activities;

technology-enabled improvements that enhance class interaction, collaboration and enquiry, building greater engagement and a sense of belonging to the class; and the development of high-quality and engaging learning resources and activities such as simulations and virtual reality labs.

The existing Educational Innovation Grants scheme will be expanded to fund strategically aligned educational innovation and excellence initiatives on a competitive basis. An **Educational Technology Incubator** (ETI) will be expanded to extend our capacity to create video, animation, visualisation and simulation for teaching purposes, and to support the development and assessment of new tools, technologies and strategic innovation projects as well as the University's development program for massive open online courses (MOOCs). With expanded and timely reporting of teaching and learning indicators, these steps will ensure accelerated improvements in our students' learning experience.

Initiative 2.
Create contemporary environments that enable flexible and interactive learning

We will create physical and virtual teaching and learning spaces that enable a richer array of face-to-face and virtual interactive forms, including small and large group discussion and informal interaction between teachers and students.

Taking advantage of our experience with the award-winning X-lab in the Charles Perkins Centre research and education hub, we will maximise the effectiveness of higher cost, well-equipped teaching spaces such as laboratories and studios by finding ways to share space, equip it flexibly and to a high standard, and increase usability. As we make greater use of enquiry- and collaboration-based educational approaches, we will create additional informal learning spaces that are equipped to support diverse and changing forms of access to resources, tools and technologies. All new building projects, including those already in planning, will emphasise the development of more flexible, collaborative, connected, informal spaces.

Through a planned sequence of ICT projects, we will also ensure a single, integrated, enterprise-level virtual learning environment that is agile and supportive of innovation. The environment will support the development of a 'virtual extended classroom' for every unit of study, to facilitate

learning interactions within and beyond the class. The Open Learning Environment (see Strategy 4, Initiative 3 for more detail) will support self-directed on-demand access to a pool of learning resources for all students, as well as access to workshop-supported modular courses on topics of likely interest to many students.

As we build these environments, we will emphasise the integrity and effectiveness of assessment while seeking to reduce its volume. We will incorporate richer systems and approaches to analytics that provide feedback to teaching staff and students on gaps in engagement, understanding and skill, and drive adjustments in educational approaches to yield learning benefits for students. Through the Educational Innovation Grants, we will support staff in their efforts to harness analytics, prioritising developments that put actionable information in the hands of staff and students to drive rapid and continuous improvement. The full potential of learning analytics is a lively field of current exploration, and we will engage in research as we explore its uptake.

We will also seek to inject more flexibility into the learning environment for students by increasing the number of units of study offered on a Commonwealth-supported basis in the summer and winter teaching periods. This will give students increased flexibility to engage in fieldwork, research and entrepreneurship experiences, as well as to enable their participation in paid employment. This move will deliver the capacity to add certain types of distinctive learning experiences, such as intensive curricular or co-curricular opportunities and mobility experiences, in a way that does not interfere with the rest of the teaching program. It will provide a diversity of educational experience for students, as well as of teaching experience for staff, which can be especially engaging.*

Initiative 3.
Build a new professional learning and support environment

To develop a culture that values teaching and supports, sustains and rewards educational excellence, we will recruit, retain and support at every stage academics who are and can become outstanding teachers.

To promote and support outstanding teaching, the Educational Innovation Team within the Education Portfolio will create a refreshed framework for professional learning. The framework will be responsive to staff and faculty needs, supportive of strategic innovation and quality improvement, and provide access to effective and appropriate professional learning opportunities, including for sessional and casual teaching staff. Integrated professional learning opportunities will be offered at a whole-of-University level as well as through carefully targeted faculty- and school-based activities. This arrangement will accommodate the realities of academic work through flexible and timely engagement.

We will also ensure that our commitment to educational excellence permeates our systems for the recruitment, confirmation, performance, development, promotion and recognition of academic staff. As part of this process, we will ensure the academic performance and development process has access to student evaluation data, as agreed by the Senior Executive Group (SEG) in May 2014. We will also develop the means to incorporate peer review into the evaluation of teaching.

---

* Summer and winter units would not add teaching load to individual staff members and may free up longer periods of high-quality time for research.

Our organisational culture must challenge us to be the best that we can be.

6   A culture built on our values

A distinctive feature of the development of this strategic plan is that it has involved extensive conversation within the University about our shared values. Culture is inevitably in part the product of history, but it can also be shaped by shared reflection and by a commitment to evincing particular values in the ways in which we relate to one another and to the external world.

We need only look, for example, to how we have changed our culture in the Aboriginal and Torres Strait Islander higher education space. Not that long ago our culture was to leave most of the work in Aboriginal and Torres Strait Islander higher education to the few, and most in our community saw these efforts as a risk, or at best, unrelated to their roles in the University. Over recent years we have to great effect encouraged staff across our faculties and professional service units to lead local initiatives in support of our University-wide goals. This has resulted in new support from leadership across the University community for staff to teach cultural competence, an enriched curriculum that has won national recognition for excellence in learning and teaching, and the award of new research grants.

In order to give life to our ongoing statement of purpose, our organisational culture must enable each member of the University to "thrive and realise their full potential". It must deliver safe and respectful campuses and a supportive learning, teaching and research environment. And it must also challenge us to be the best that we can be, in order to achieve the excellence that is a theme of this strategic plan.

This aspiration to a culture that is both supportive and challenging was a consistent theme in the consultations that we held around our shared values. Those consultations yielded values of courage and creativity, respect and integrity, inclusion and diversity, and openness and engagement – values that have much in common with the aspirational academic qualities that were outlined in the introduction. Further, they resonate deeply with the themes of this strategic plan, those of **excellence**, **engagement** and **simplification**. Thus the themes of this strategic plan, our aspirational academic qualities, and our shared values are mutually reinforcing.

The value of 'courage and creativity' includes, but is broader than, the concept of academic freedom. This value constitutes a commitment to intellectual and ethical independence of mind, both of reason and imagination. It is a commitment to pursuing our best understanding of truth, and our highest conception of the good and the right, wherever it may lead.

'Respect and integrity' relates to how we deal with one another. On the one hand, our dealings must be marked by integrity, both in the sense that they must be honest, and in the sense that all our values are routinely respected in the processes of University decision-making and in the behaviour of both staff and students. On the other hand, respect means that all members of the University should be treated by one another as full and equal participants in the University community. This does not mean denying that members of the University bring different skills and expertise to our collective life, and are charged with different responsibilities. Rather, it means acknowledging the value of the contribution that each has to make. Central to our consultations around this value were discussions about what it means to disagree well, to disagree respectfully.

'Inclusion and diversity' is a value given explicit emphasis in our statement of purpose in its affirmation that we should be a community for people from a wide variety of social and cultural backgrounds. We are committed to the notion that an institution marked by diversity of many different kinds is a stronger institution, more likely to achieve its ambition of excellence. Moreover, this value entails a commitment that the University should be a place in which every person is valued for the contribution that they can make to our collective success, rather than for who they are, or their position in the institution.

'Openness and engagement' involves a particular orientation to the communities outside the University itself. It involves valuing connection with those communities and ensuring that our work is as accessible to those communities, and as responsive to their needs, as is possible. The themes of this strategic plan around 'engagement and simplification' reflect our commitment to this value. We will never be able to engage effectively with our partners while our structures and processes are so complex.

This has been the most difficult section in the development of our 2016–20 strategy in which to identify concrete actions for the realisation of our goals. This is because culture change is an ongoing process that will require the participation of the whole University community and take time to achieve. Our behaviour will be shaped over time through shared reflection and discourse. Nevertheless, we believe that this chapter outlines steps that we can take as we begin the course of cultural change.

Each of these steps focuses on the staff of the University. Students are important members of our community, and have a powerful effect on its culture. But our staff have a particular responsibility to embed and model these values and to demonstrate leadership in this area. This is not least because, while generations of students join and leave the University, the community of our staff has stability over time and our staff have roles as culture-bearers in the institution.

Strategy 6: Demonstrate leadership at all levels

It is only through a collective commitment to living out our shared values that we will see cultural change. Nevertheless, consultation with our staff revealed a strong sense that this change needed to begin in the formal leadership of the University at all levels.

We are committed to a series of actions to strengthen the skills of staff in formal leadership positions and, in particular, to develop their capacity as agents of cultural change. These actions will be complemented by programs to diversify the leadership of the University, which are discussed in the section of this chapter dealing with our strategy for embracing diversity and inclusion. We believe that an essential part of creating a stronger leadership team is creating a more diverse one.

Initiative 1.
Deliver a development program that supports the University's leaders and future leaders
We will establish a program that offers our leaders – staff with leadership and supervisory responsibility for more than a limited group of others – opportunities to develop their skills and capabilities through training, workplace projects, coaching and other types of support. These programs will be tailored to the University's more general leadership needs: financial, project and human resources management, decision-making and educational and research leadership, as well as building other skills associated with shared leadership and the development of personal insight.

Drawing on the expertise of our own staff across the University, as well as from outside, we will develop a series of customised executive education programs for our leaders. Furthermore, individuals who have demonstrated significant leadership potential will be nominated for participation in these programs, in order to provide them with the knowledge and skills needed for the next step in their careers.

Initiative 2.
Assess leadership performance against shared values

The University community should have confidence that its leadership is committed to cultural change. The most targeted mechanism for assessing leadership performance in this context is to commit to a key performance indicator (KPI) for staff with leadership and supervisory responsibility that requires them to demonstrate commitment to our shared values as a part of the annual performance review process. This KPI should demonstrate the extent to which leaders model the values in their work, their interactions and behaviours.

Initiative 3.
Strengthen policies, processes and practices to enable leaders to tackle and manage poor behaviour

Bullying, harassment, and discrimination have no place in any modern institution. Recent consultation has suggested that behaviours incompatible with the University's Code of Conduct are more tolerated by leaders in the institution than is acceptable. We must strengthen the capability of our leaders to manage poor behaviour within the University and provide them with the policy and procedural framework and practical support to do so. The former will be a necessary part of the leadership development program previously described, and the latter will take the form of a comprehensive review of the relevant policies, processes and practices.

One area in which this issue needs to be managed with particular care is that of the way in which offensive speech is addressed here. A commitment to academic freedom and to robust and vigorous debate is sacrosanct in the University and a corollary of our value of courage and creativity.

However, in the consultation leading to the development of this strategy, it was recognised that there is a difference between 'disagreeing well', even robustly, and discourse that is abusive or derogatory. A failure to take action against this type of discourse risks silencing many of our staff and students; taking inappropriate action against such discourse risks having a chilling effect on debate in the University generally. This is a crucial distinction that we must keep in balance as we equip staff to put these policies into effect.

Initiative 4.
Create a professorial distinction that recognises outstanding leadership and mentorship

Academic leadership that is imbued with teaching and research excellence reflective of our values is a distinctive and critical contribution to the culture and success of our strategic mission. Such a combination of qualities and contribution is worthy of recognition.

We will create a new professorial distinction, tentatively titled the Payne-Scott Professor (named for Ruby Payne-Scott, just the third woman to graduate in physics from the University and who made a fundamental contribution to the development of radio astronomy nationally and internationally), which recognises 20 outstanding leaders in research and education. This category of professor will acknowledge our true leaders in research and education – those whose work is not only recognised nationally and internationally, but who at the same time are helping to develop the careers of others, contributing to educational reform and innovation, and playing a major role in community engagement and public debate.

The appointment will be for a specified period of time and involve a salary supplementation. This classification should never exceed more than a fixed percentage of the overall professoriate.

Strategy 7: Embed our values

Culture change is most effectively ensured when shared values are embraced in each local area, and consequently change local practice. Leaders should model and encourage the behaviours that reflect our values; they should also provide formal and informal opportunities to discuss and receive feedback on the ways in which our values can be given practical expression. The methods used in each area to tackle issues of culture will and should vary. Staff will be encouraged to take account of local circumstances and issues and motivated to share examples of best practice.

However, if this local work is to take root it must be supported by University-wide initiatives to embed our values in academic policies, and in core human resources policies. The process of cultural change should be monitored and overseen at a University level. Only in this way will we see real change. In this section of the strategic plan we commit ourselves to embedding our values in enabling, mediating and communicating processes and decision-making.

Initiative 1.
Align values with recruitment, promotion, retention and performance management
For our values to be meaningful and to define the behaviours expected of staff, they must be embedded throughout the employment lifecycle. During the selection process, applicants for roles will need to demonstrate that they understand and can adhere to relevant values, and we will revise position descriptions and recruitment policies and practices, including in the sourcing of applicant references, to that end.

Orientation will be strengthened to include canvassing of our values. All induction materials will include a statement of our values, and personal objectives and KPIs will be revised to align with them. Consistent with our approaches in selection, orientation and induction, we will revise our promotions criteria so that an applicant's demonstrated adherence to our values will be given attention and appropriate weight in the assessment of merit. Similarly, promotion, leave and mobility provisions for academic staff will ensure that engagement with organisations outside the University is, where appropriate, recognised and supported, as a part of career progression.

We will undertake an audit of our end-to-end human resources policies and processes to ensure that they align with our values.

Initiative 2.
Continue to implement existing programs in the area of Aboriginal and Torres Strait Islander, women's and LGBTIQ inclusion and develop new programs for people of culturally and linguistically diverse backgrounds
The University has had, from its foundation, a strong commitment to inclusion. We have, for example, developed a comprehensive strategy around Aboriginal and Torres Strait Islander inclusion as a part of our commitment to developing a distinctively Australian institution. We have also begun work in the empowerment of women and set targets for women's inclusion in various levels of University employment. We are participating in the pilot of the Australian Academy of Science-led Science in Australia Gender Equity program and are striving for bronze status in the Athena Swan scheme. We have joined the Ally Network to support the inclusion of staff of minority sexual and gender identities. Finally, we have established a leadership sponsorship program for women of culturally and

linguistically diverse backgrounds. However, much remains to be done in this area of the University's work, particularly in the area of leadership and career development for staff of non-European backgrounds. Given the extent to which people of non-European heritage are under-represented in positions of leadership in Australian society at large, this area of our work should be given particular focus in the strategic period.

Initiative 3.
Establish a joint SEG /Academic Board culture taskforce

The Senior Executive Group (SEG) and the Academic Board will together establish a culture taskforce which will include representation from a broadly based group of people across the University. The Academic Board, an elected group of staff and students from across the University, should play a key role in reflecting on, and embedding, our shared values in the life of the University.

Chaired by a member of the University invited by the Vice-Chancellor and Chair of the Academic Board, the culture taskforce should champion and advise on the best way to effect culture change in the institution. Supported by the University's Human Resources department, the taskforce should create a series of indicators that will identify areas of excellence that can be shared with the broader University, and areas where improvements should be supported. It should also serve as a place where case studies can be considered to reflect on the progress of cultural change.

Initiative 4.
Communicate and celebrate exceptional performance

We will introduce a new whole-of-University award program to recognise and bring visibility to exceptional performance in research, education and professional service. In addition to the traditional measures of performance, these awards will recognise impact, leadership, entrepreneurship, mentorship and industry and community engagement. We will also recognise outstanding performance in the support of research and education. These awards will operate on the basis of peer nomination, rather than self-nomination, and should be given weight in promotions processes. It is vital that the University align its reward and recognition system with its strategic direction and values.

Alongside a new awards program that recognises excellence, the University should, in its internal and external communications, and through recognition mechanisms of various kinds, celebrate both individual and team contributions to positive cultural change and communicate successes deeper within the institution. Of course, it is important that we not only communicate out, but continue the conversation we began through the planning process that brought our staff together to share their ideas for positive change.

A part of embedding our shared values is encouraging staff to reflect on each value, to discuss it with colleagues, and to think about ways in which it can shape their participation in the University. While work will continue to embed all our values throughout the strategy, a communications plan will be developed that cycles through the values, giving particular emphasis to one or other of them during any given period. In this way the community as a whole can be encouraged to reflect on each of the values in a sustained and collective manner.

Strategy 8: Promote understanding across institutional barriers

One of the consistent – and most powerful – characteristics of the University community is the shared commitment of its staff to the transformative power of education and research, and to the University's mission. At the same time, connection to the University's mission is not enough: our staff need to feel connected to each other. They need both to understand the work of staff in other areas of the University and to understand the distinctive contribution that different categories of staff bring to our shared enterprise.

Initiative 1.
Expand orientation programs both locally and centrally for all new staff

We will expand our existing orientation programs to align our new staff with the University's values, expectations and culture, to enable them to meet colleagues throughout the organisation, and to provide them with the information they need to operate effectively. In particular, the orientation will introduce staff to the variety and complexity of the University's work. Participation in a University-level orientation program will be required to be undertaken by all new staff, alongside any local induction program.

We will also explore the value of creating an opt-in 'buddy' system for new staff in the early stages of their working life to help them to build connections outside their area, and we will follow orientation with a program of interviews one year into their tenure to assess their experiences and gain their insights into how we can improve and develop our practices at the University. Additionally, we will implement a standard process to ensure exit interviews are carried out whenever staff leave the University.

Initiative 2.
Create pathways so that professional staff can develop careers across the University and between faculty and central services

Increased cross-institutional staff mobility is a key objective of the current Human Resources strategy and a plan for its introduction will be in place by the beginning of 2017. In addition, the consultation paper *Improving our organisational design* outlined potential changes to faculty manager roles. Bearing in mind the feedback on this proposition, faculty managers will now have a secondary reporting line to the Provost to ensure strengthened appointment and development opportunities at the institution-wide level and to embed these roles formally in the University's governance framework. Finally, we will explore a University-wide shadowing program for staff to assist them both in understanding other parts of the institution and in assessing opportunities for career advancement within the University.

Ultimately, it is the staff of the University who are the greatest agents for cultural change within the institution. The values articulated in this chapter emerged from an extensive process of consultation and mesh well with our aspirational academic qualities and the themes of this strategy. As we facilitate mobility of staff around the institution, they not only have the opportunity to develop a more complete understanding of the breadth of our work, but can also bring insights from across the University, as we seek to create a university community in which all can "thrive and realise their full potential".

The initiatives in this strategic plan will place the University at the vanguard of Australian institutions, and firmly secure our place among the best in the world.

7   In 2020

The University of Sydney 2016–20 Strategic Plan sets our direction for the next five years, and it is an exciting path that will see real and measurable change in our core activities of teaching and research. At the same time, it does more: it challenges us all to think more deeply not just about what we will do, but about why and how we will do it. How do we assess if our teaching and research is excellent? Are we sure that our work with the community, business and industry is providing what they need and value? Can we do more to make our students' experience of administration easier and more satisfying? Do we really know what it looks like to disagree well?

By implementing the initiatives in this plan, and answering these questions, we will build upon the work that began with the 2011–15 strategy to create a university true to the vision of our founders, true to our strategic purpose, and embodying our shared conception of the best a university can be.

The University to which we aspire is one in which our academic staff and students can develop key attributes of excellence, ensuring that our work will be ranked highly whatever measure of excellence is used. It is one in which we can make strategic investments in outstanding research, ensuring that our best work – work of national, regional and international importance – is well supported with the right people, equipment, and physical infrastructure. The University to which we aspire is one in which our students receive an education at the cutting-edge of curriculum development, preparing them not only for their first post-university destinations, but for life in a rapidly changing environment in which they will be expected – and are expecting – to lead.

Similarly, the University to which we aspire is one in which the boundaries between disciplinary communities, between research and education, and especially between the University and the communities that it serves, are extremely porous. It is one in which the relationship between the University and the diverse communities with which we work can genuinely be described as partnerships, working collectively to find solutions to important social and technical challenges and to develop the skills of our next generation of students across a whole range of fields. This engagement between the University and its various communities, both in Australia and overseas, means that both staff and students can move easily between the University and external organisations, with a respect on both sides for the contribution that each has to make.

In order to achieve these goals, there is no doubt that we need to be a less complex organisation than we can currently claim to be. Our internal processes, structures and governance must facilitate the mobility we seek. They must consume as few resources as possible so that we can strengthen our investment in education and research. They must enable the University to act swiftly in response to organisations that wish to engage with us, and with our work. We strive to be a University that is both comprehensive in its disciplinary range, respectful of genuine disciplinary difference, and yet simple to navigate as a single institution.

Finally, none of this will be possible unless we work to foster our aspirational culture. Courage and creativity, respect and integrity, inclusion and diversity, and openness and engagement are values that support excellence, engagement and simplification. But they are also broader in their application. They capture an institution that is bold in its pursuit of our best conceptions of the true, the good and the right, and in which it is recognised that this pursuit involves everyone, requires a diversity of voices, and requires a quality of community in which everyone is acknowledged to play an

important part. A commitment to these values, and to the culture that they support, was found in our consultations to be almost universally shared, to be innate to the community of the University of Sydney. Yet we also discovered a sense that we needed more intentionally to focus on giving them expression, to ensuring that they are honoured in our collective life. In doing so, we aim to sustain an environment in which all – staff, students and those from the community with whom, and alongside whom, we work – "can thrive and realise their full potential".

We believe that by focusing on 'excellence', 'engagement', and 'simplification', and remaining true to our values, we can in the next five years make enormous strides towards achieving the vision of a University that we first set out five years ago. We have made a very strong start on that journey, but the initiatives outlined in this strategic plan represent a significant advance in that process. They will place the University at the vanguard of Australian institutions, and firmly secure our place among the best in the world.

We will bring visibility to exceptional performance in research, education and professional service.

8   Appendices

Appendix 1: *The University of Sydney 2016–20 Strategic Plan*: key performance indicators

A number of important performance indicators at the whole-of-University level will allow us to measure our progress against our three strategic themes:

– excellence in our research, education, student experience, and culture
– deeper engagement with local and international communities, government and industry
– simplification of our operations in such a way that it reduces the complexity of our administrative processes and procedures, and internal governance.

1. Institutional KPIs

Theme	Performance area	Key indicators	Quality target
Excellence	Research performance	CAT1–4 research; ERA; social impact	First in Australia
	Educational experience	Student satisfaction; student retention and progression	Recognised as the best in Australia
	Graduate outcomes	Percentage employed or undertaking further study; graduate qualities assessment	
	Reputation	Rankings – THE; ARWU; QS; US News	First in Australia
	Student demand	Load by faculty in the new curriculum	NSW market share for 90+ ATAR
Engagement	External partnerships	Research engagement activity; quality of global partnerships [alignment with research and education strategies]; student mobility	Market share of national research engagement activity and funding; 50 percent student mobility; 30 preferred partnerships by 2020
	Staff culture	Annual culture survey, with year-on-year improvement	
Simplification	Sustainable and streamlined operations	Measurable improvement in service quality and efficiency	

2. Strategic KPIs

As a complement to the institutional level KPIs, strategic KPIs have been developed for each focus area in education and research, in order to assess the successful implementation of the specific strategies and initiatives of the strategic plan. Targets for each initiative have been agreed according to the following key performance indicators.

As indicated in the institutional KPIs table on the previous page, we will measure progress towards the initiatives in Chapter 6 ('A culture built on our values') through an annual staff culture survey.

Measures of success for our research strategy

Strategy	Initiative	KPI
Invest in and drive research excellence across the University	Establish agreed aspirational benchmarks for research performance	Percentage meeting benchmark with increasing benchmark over time
	Launch the Sydney Research Excellence Initiative	Increased RBG income; Improved ERA performance (at two-digit and four-digit levels); improved rankings position
	Establish the Centre for Translational Data Science and the Sydney Policy Lab as part of a suite of new multidisciplinary initiatives	Number of new initiatives established; Impact of research on the problems addressed by the multidisciplinary initiatives and increased partnerships with key stakeholders
Attract and develop outstanding researchers	Remodel the pathway to the PhD	Quality of HDR applicants, demand pipeline and percentage progression to PhD
	Attract and invest in the best PhD students	Quality of HDR applicants, higher satisfaction ratings in HDR student surveys and improved completion rates
	Create a new fellowship scheme targeted at retaining outstanding postdoctoral fellows	Retention of high-performing ECR fellows and demand for positions at Sydney
	Establish the Sydney Outstanding Academic Researcher (SOAR) program as the flagship researcher development scheme	Accelerated career progression of staff in the program, including improved research outcomes (publications and impact, where relevant)

Strategy	Initiative	KPI
Develop partnerships that enable our research to make a difference, locally and globally	Promote the importance of industry research	Increase in commercialisation income; increased number of Record of Inventions; increased success rate in relevant government programs (Linkage, Cooperative Research Centres [CRC] etc); increased income from research overheads
	Create the University of Sydney Knowledge Hub as a dedicated collaboration space with industry and community partners	Number and quality of industry and community partners committed to the Knowledge Hub
	Invest in and expand our footprint at our Westmead campus to maintain it as a leading international centre for research and innovation	Target student and staff numbers; research outcomes in identified focus areas benchmarked against other leading international centres (eg research income, quality of publications, impact of research in target areas)
	Partner with Aboriginal and Torres Strait Islander communities for research in real-world cultural settings	Social impact; number of publications from research projects with community partners
	Develop a focused approach to global engagement	Target number of partnerships in place aligned to strategic research strengths (including increased international research funding) and increased supported places for student mobility

Measures of success for our education strategy

Strategy	Initiative	KPI
Transform the undergraduate curriculum	Embed new graduate qualities and a new curriculum framework in all undergraduate degrees	Improvement in graduate outcomes, measured as percentage in full-time study or further employment
	Establish a unique undergraduate degree and vertically integrated degree pathways	Sustainable demand and student satisfaction in new degrees
	Establish a curriculum development fund to expand learning opportunities for our students	Number and percentage of students who undertake experiential learning
	Develop a University-wide approach to assessing graduate qualities	Level of attainment of graduates undertaking a qualities assessment in the final year of study
Transform the learning experience	Develop interactive and collaborative learning designs that foster excellence and innovation	Increased student satisfaction with Learner Engagement
	Create contemporary environments that enable flexible and interactive learning	Increased student satisfaction with Learning Resources
	Build a new professional learning and support environment	Increased staff satisfaction and participation in new learning opportunities

Appendix 2: Mapping the curriculum framework to graduate qualities

Qualities	Curriculum components	Enrichment opportunities
Depth of disciplinary expertise	– Ensure that every student completes a major or stream in at least one field of study – Embed within every major or stream a coherent set of core learning experiences that build knowledge, skills and methods of enquiry – Ensure that each major or stream includes authentic problems and assessments – Ensure that every student has the opportunity for a group or individual project (research, entrepreneurship, or community-based or workplace-based), drawing on disciplinary skills and knowledge	– Offer elective units of study involving research projects – Offer interdisciplinary group projects in which students utilise disciplinary expertise within an interdisciplinary context
Broader skills: – critical thinking and problem solving – communication (oral and written) – information/ digital literacy – inventiveness	– Embed structured opportunities for development of each skill at key points in the curriculum, beginning in first year and culminating in a formal assessment of skills and their integration in a final-year project. Requisite skills should include integrity and ethics in the practice of scholarship and skills to work effectively and critically with new media, tools and resources – Ensure that every student has the opportunity for a group or individual project (research, entrepreneurship, or community based or workplace based) – Offer interdisciplinary learning experiences that contextualise disciplinary knowledge and skills – Ensure that each major or stream includes authentic problems and assessments – Utilise collaborative learning activities to foster interpersonal and communication skills – Provide access to short, modular courses or resources that allow students to acquire foundational concepts and methods in other disciplines	– Provide access through the OLE to short, modular courses that allow students to acquire (and have recognised on their transcript) foundational concepts and methods in other disciplines including in the humanities, social sciences and sciences, eg basic skills in programming, data analysis, 'big data' methods, research techniques, complex systems, team leadership, project management, briefings for cultural experiences, persuasive communication, interviewing, visual communication, entrepreneurial thinking and design thinking etc – Offer elective research units of study – Offer access to multiple disciplines
Cultural competence	– Embed cultural competence as a learning outcome in every degree, and ensure supporting development within every major, stream or degree as appropriate – Provide meaningful learning activities that take advantage of the cultural diversity within the University community, including group projects requiring collaboration skills; – Ensure that professional programs develop cultural understanding and intercultural capabilities relevant to likely practice	– Ensure access to study of culture and languages, and intercultural communication – Grow mobility programs and international educational collaborations – Offer community-based projects – Provide access to short, modular courses building cultural competence

Qualities	Curriculum components	Enrichment opportunities
Interdisciplinary effectiveness	– Offer interdisciplinary or inter-professional learning experiences that provide experience of interdisciplinary challenges and opportunities in realistic settings – Ensure that each major or stream includes authentic problems and assessments – Provide access to short, modular courses or resources that allow students to acquire foundational concepts and methods in other disciplines	– Ensure access to multiple disciplines – Offer inter-disciplinary competitions on complex problems – Offer recognised interdisciplinary programs, majors or minors, recorded on the academic transcript – Offer science modules to humanities and social science students, and humanities and social science modules to science students
An integrated professional, ethical and personal identity	– Embed ethical reasoning into all majors, streams, degrees – Ensure systematic experience of authentic problems that raise broader questions of values and ethics and incorporate opportunities for structured reflection and integration – Encourage self-direction in learning through access to short, modular courses – Ensure that every student has the opportunity to undertake a group or individual project (research, entrepreneurship, community based or workplace based)	– Ensure access to units of study and OLE modules devoted to critical thinking, ethical reasoning, moral philosophy, contemporary debates etc – Offer recognised interdisciplinary programs, majors or minors relevant to salient societal issues – Encourage structured co-curricular reflection of educational goals, developmental opportunities and longer-term aspirations – Offer community-based projects
Influence	– Provide access in the OLE to short courses relevant to influence, eg effective teamwork, team leadership, project management, interpersonal effectiveness, systems thinking – Ensure systematic development of individual expectations within group learning settings, including for leader roles – Ensure that every student has the opportunity for a group or individual project (research, entrepreneurship, or community- or workplace-based) – Offer interdisciplinary or inter-professional learning experiences that provide experience of interdisciplinary challenges and opportunities in realistic settings	– Offer opportunities for debate and engagement on contemporary issues – Offer community project opportunities – Ensure access to units of study devoted to critical thinking, ethical reasoning, moral philosophy and contemporary debates etc – Offer co-curricular service and leadership opportunities

Glossary of acronyms

AINST
Australian Institute for Nanoscale Science and Technology

AP&D
Academic Planning and Development

ARWU
Academic Ranking of World Universities

ATAR
Australian Tertiary Admission Rank

BMC
Brain and Mind Centre

CRC
Cooperative Research Centres

E12
Early Offer Year 12 scheme

ECR
Early career researcher

ERA
Excellence in Research for Australia

ETI
Educational Technology Incubator

FoR
Field of research

HDR
Higher degree by research

MOOCs
Massive open online courses

NHMRC
National Health and Medical Research Council

OLE
Open Learning Environment

QS
Quacquarelli Symonds

RBG
Research Block Grant

SCTDS
Sydney Centre for Translational Data Science

SEG
Senior Executive Group

SOAR
Sydney Outstanding Academic Researcher program

SREI
Sydney Research Excellence Initiative

SyReNS
Sydney Research Networks Scheme

THE
Times Higher Education

UEM
University Economic Model

Contact us
university.strategy@sydney.edu.au

sydney.edu.au

The University of Sydney

CRICOS 00026A

16/5575