

VICTORIA UNIVERSITY RESEARCH PLAN

December 2011

OVERVIEW

Victoria University is an emerging research-focused university which is principally located in the western region of Melbourne. The University was established in 1990 and is one of four dual-sector tertiary education institutions in Victoria.

The core business of Victoria University is teaching, learning and research. The Victoria University student cohort includes (EFTSL) 504 Higher Degree by Research (HDR) students, 1,403 post graduate coursework students, 14,862 Higher Education undergraduate students and 19,204 Vocational and Further education students.

Another way of conceptualising these numbers is to separate them according to Australian Qualifications Framework (AQF) levels and expressing the University's student cohort as either Pre-Tertiary (Senior Secondary and Certificates 1-3) or Tertiary (Certificate 4 through to PhD).¹ Using this method, the University's cohort is made up of 8,634.7 EFTSL Pre-Tertiary students, and 27,433.1 EFTSL Tertiary students.

These students are accommodated across 10 Victorian campuses and a number of international sites operated in conjunction with partner organisations. The HDR student cohort is comprised of approximately 65% domestic students and 35% international students; virtually all of which are studying in Australia.

The Higher Education student profile sees Victoria University as a large dual sector institution but one of the smaller Higher Education institutions in Australia. The University has an enviable reputation for serving the needs of its community, government and industry by promoting student engagement in the workplace and applied research. In particular, the University is committed to promoting access and success to those in the community who may not have previously been able to engage in Higher Education.

The purpose of this Research Plan is to establish a framework to guide the University's development and investment in research from 2012-2016 specifically and to 2020.

The Plan has been constructed to complement the University's Strategic Plan and will ultimately be integrated into a Research and Knowledge Exchange Strategy. The Research and Knowledge Exchange Strategy will be used as a reference point for the development of a number of consequent strategic and operational plans in the Office of the PVC (Research and Research Training) and the faculties, schools and institutes across the University.

¹ See www.aqf.edu.au for a description of the various levels.

UNIVERSITY RESEARCH GOAL AND RESEARCH PERFORMANCE TARGETS

The Vice-Chancellor, Professor Peter Dawkins, has expressed a goal for the University to considerably increase its research activity and relative research standing among Australian Universities by focusing on applied and translational research. This goal is outlined in the University's Strategic Plan, *Excellent, Engaged and Accessible: Victoria University's Strategic Plan to Be a Great University of the 21st Century, 2012-2016* (University Strategic Plan):

"By 2020, Victoria University will be in the top 20 universities in Australia for research, with an emphasis on applied and translational research.

This will include:

- Being well known for our interdisciplinary research, especially relating to specific themes that have been identified.*
- Victoria University being highly-rated for our discipline based research in selected disciplines, especially in those that are relevant to the interdisciplinary themes."*

Achieving the Vice-Chancellor's aim has been separated into a two-step process. The University will first aim to achieve a rank of 27 by 2016, and follow this with the longer term goal of rank of 20 by 2020.

To realise this, the University has established a set of targets for various research indicators. The targets marked against each research indicator correspond with the level required to be the university achieving rank 27 in 2016 and rank 20 in 2020 (Table 1a).²

The University has also established a set of targets built on the SCImago ranking index (Table 1b), which is a world ranking system of research institutions (university and non-university) based on the Scopus data base and indexing system.³

SCImago enables the University to gauge its movement and trajectory as a research university by tracking the quantity, quality and impact of its research, with these measures contributing to an overall world ranking. Quality of research output is measured by the number of outputs in the first quartile.

Rank 20 will require 44% of the University's research outputs to be in the first quartile. Again, as in Table 1a, the figures in Table 1b correspond with the 27th and 20th placed university in 2016 and 2020 respectively.

² The methodology used to develop these targets is specified in Appendix B.

³ The SCImago report ranks more than 2000 of worldwide research institutions and organizations whose output is larger than 100 scholarly publications. These indicators serve as a useful alternative as measures of overall rank as well as impact and quality of research output; especially given the absence of impact measures from the ERA system and recent moves from the Commonwealth to discuss the future use of A and A* quality measures. Further information is in Appendix B.

Table 1a VU Research Indicators: 2016 and 2020 Targets

| Research Indicator | 2009 | 2016 Target | 2020 Target |
|---|--------------|--------------|--------------|
| Research Income* | \$11 million | \$25 million | \$55 million |
| Journal Publications Output | 352 | 521 | 1030 |
| Total HDR load | 446 | 476 | 935 |
| HDR submissions within four years (EFT) (%) | 50 | 70 | 75 |
| Overall 'High' Thesis Quality (%)** | 25 | 35 | 40 |
| Number of ERA 4 digit FOR scores \geq 3.0 | 5 | At least 10 | At least 15 |

* from Categories 1-4 (excluding block grants)

**based on questionnaires filled out by doctoral thesis examiners. Examiners were asked to rate the overall quality of the examined thesis as either 'high', 'medium' or 'low'.

Table 1b SClmag Research Indicators: 2016 and 2020 Targets

| SCImago Indicator | 2009 | 2016 Target | 2020 Target |
|---|------|-------------|-------------|
| Overall Rank | 1596 | 1300 | 800 |
| Australian University Rank | 29 | 26 | 20 |
| Research outputs in first quartile (%) | 30 | 38 | 44 |
| Research outputs with international partner (%) | 26 | 28 | 30 |
| Research output impact score | 0.91 | 1.01 | 1.23 |

These targets are not merely aspirations, but have been used to inform and shape the strategies and objectives in this document. These strategies and objectives have been crafted in recognition of four broad realities. Firstly, that research success is dependent on building a culture of research excellence; secondly, that the University must work to build its capacity to undertake research; thirdly, that the University's strategies recognise the importance of postgraduate research and the role it plays in building and sustaining research excellence; and finally, the need for strategies and objectives to build and sustain our external relationships.

These four realities have manifested into four overarching goals:

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| <i>Goal 1:</i> | <i>Culture and Participation: For Victoria University to develop a vibrant research culture that embraces and sustains creativity, critical inquiry, innovation, and integrity.</i> |
| <i>Goal 2:</i> | <i>Capacity and Research Reputation: For Victoria University to continue to refine and develop its existing areas of research strength while also providing avenues and support for the development of new areas of research strength.</i> |
| <i>Goal 3:</i> | <i>Research Training: For Victoria University to be recognised as a research training institution offering a high quality and supportive program that graduates students in a timely manner with excellence in research outcomes.</i> |
| <i>Goal 4:</i> | <i>Research Engagement: Victoria University will engage with external organisations in order to undertake research that achieves outcomes at local, national and international levels of high quality.</i> |

The suite of objectives and strategies that cascade out of these four goals have been designed to enable the University to attain its research targets by:

1. improving the quality of research undertaken at the University;
2. establishing and supporting areas of research focus;
3. developing a critical mass of researchers and research students; and
4. promoting and developing domestic and international partnerships across the University, industry and community sectors.

An important aspect of any plan or strategy is that it be flexible and responsive. As such, the initiatives, goals and objectives included in this document will be reviewed regularly and amended to reflect changing circumstances where required.

RESEARCH VISION

The University Strategic Plan has established a vision for the University:

*“Victoria University will be **excellent, engaged and accessible** and internationally recognised for its leadership in:*

- *empowering a diverse community of students to grow their capabilities and transform their lives;*
- *engaging with industry and community to make the world a better place, through the creation, sharing and use of new knowledge.”*

Moving from the University vision, the research vision for Victoria University is:

By 2016 Victoria University will be a research active university with a vibrant research culture known for the international standard of its research.

RESEARCH MISSION

It is fortunate that the development of this Research Plan was undertaken at the same time as the revision of the broader University Strategic Plan and revised University mission. This means that the Research Plan will be guided by the new University mission. This University mission is:

Victoria University will partner with industries, communities, governments and other education and research organisations, in Australia and internationally, to be renowned for:

- *empowering students from diverse countries and cultures, socio-economic and educational backgrounds, to be successful lifelong learners, grow their skills and capabilities for the changing world of work, business and social enterprise, and be confident, creative, ethical and respectful, local and global citizens; (through the Victoria University curriculum, with its focus on problem-solving, work-integrated, community-integrated, and cross-cultural learning and learning-integrated work)*
- *finding creative and evidence-based solutions to important contemporary problems in Australia, Asia and globally, relating especially to education and lifelong learning, to health and active living, to the cultural diversity and well-being of communities, to environmental sustainability, and to the success of particular industries and particular places, including our heartland of the West of Melbourne, Australia's fastest growing region. (through Victoria University's distinctive approach to research and knowledge exchange)*

Moving from this, the University's research mission is:

Victoria University will undertake internationally recognised research and research training which provides creative and evidence-based insights into and solutions to important contemporary problems in the west of Melbourne, Victoria, Australia, the Asia-Pacific and Globally.

RESEARCH VALUES

Research and Research Training at Victoria University will reflect the following values:

- *Rigour and excellence in critical inquiry*
- *Innovation, relevance and impact*
- *Integrity and ethics in research conduct*
- *Partnerships and collaboration*
- *Intellectual fulfilment*

STAKEHOLDER NEEDS

Research at Victoria University has three broad sets of stakeholders, including [Research Staff](#), [HDR Students](#) and our [Community, Industry and Government](#) partners.

Academic staff at Victoria University have the following needs:

- to work in and contribute to the development of a vibrant research culture;
- the support to pursue and achieve their research career goals;
- to be respected for their research achievements;
- to be recognised and rewarded for their research achievements;
- to gain enjoyment, personal and professional satisfaction from their engagement in research;
- to work in a supportive, team-oriented research environment;
- to have access to appropriate facilities, scholarly information resources, technologies that support e-research and research support services, ;
- to be able to contribute to the development of research focused university;
- to develop fulfilling internal and external research collaborations and partnerships; and
- to be externally focused in terms of their benchmarking and expectations

Higher Degree by Research students at Victoria University need:

- the opportunity to participate in career preparation and research training that enhances their competitiveness to progress their research careers;
- opportunities to develop excellent research skills and knowledge that prepare them to undertake a broad range of careers in research and knowledge transfer and exchange at an advanced level;
- access to adequate financial resources to support them during their research training;
- the opportunity to participate in a stimulating, engaging and supportive research environment within their immediate research area;
- access to high quality supervision;
- access to high quality facilities, scholarly information resources, technologies that support e-research and research infrastructure (both specialist research and general student facilities);
- support from an efficient and effective central postgraduate research coordinating group;
- access to and opportunities for engagement in a vibrant research culture that supports their active participation in their disciplinary research both within the University and externally across Melbourne, nationally and internationally; and
- to be recognised for their important role in the development of research at the University.

Community, Industry and Government research partners and collaborators need:

- ease of access to researchers who are willing to question and challenge existing ways of thought and operation;
- access to high quality discipline-based and multi-disciplinary researchers and research teams who can successfully solve complex problems in a manner that is defensible and reflects world's best practice;
- the ability to participate, contribute and support Victoria University research
- access to a critical mass of researchers and research teams that can use initiative, imagination and innovation to solve current problems and to identify likely future problems;
- the ability to engage and collaborate with world-wide networks of researchers in order to help them solve problems which are too large for any one university to tackle;
- ease of access to researchers who are able to understand their context and to provide evidence based solutions to issues that are useful, contextually relevant and provided in a timely manner;
- the ability to form sustained partnerships with Victoria University researchers based on mutual understanding, integrity and benefit;
- to have ease of access to researchers who display leadership and independence of thought and action; and
- the ability to engage with and support researchers who display leadership and independence of thought and action.

GOALS AND OBJECTIVES

The following goals and objectives have been established in order to meet the broad research target of the University being ranked within the middle tertile of Australian universities by 2016.⁴

GOAL 1 CULTURE AND PARTICIPATION

For Victoria University to develop a vibrant research culture that embraces and sustains creativity, critical inquiry, innovation, and integrity.

Objective 1.1 For measures of staff research culture in the Voice-It survey to improve to average scores of 50% (support) and 75% (favourable regard) by 2016 from 45% and 63% respectively in 2010.

Strategy 1.1.1 Identity: Clarify and promote Victoria University's research identity which aligns with its values and areas of focus to both external and internal stakeholders.

Strategy 1.1.2 Leadership: For University Executive and Research Leaders to provide clear research leadership and to support the development of emerging and existing research leaders at Victoria University.

Strategy 1.1.3 Integrity: To build a clear understanding of the responsible and ethical conduct and management of research by all researchers.

Strategy 1.1.4 Participation and Excellence: Human Resources policies for relevant Higher Education, Vocational Education and Further Education staff to promote research participation and excellence appropriate to their role and interests and to articulate balanced and clear expectations between teaching and research.

Strategy 1.1.5 Support: Encourage participation in research through programs designed to support existing research active staff, and to build research activity in staff not currently fully engaged in research and staff new to research. For example, as part of the current review of the Graduate Certificate of Education, explore the possibility and feasibility of introducing a core research unit for new staff members.

Strategy 1.1.6 Exchange and Debate: Explore opportunities and develop mechanisms to facilitate research-related exchange and debate.

Strategy 1.1.7 Collaboration: Maintain and enhance collaboration within and between University research areas and with research teams at universities with well established research cultures.

Strategy 1.1.8 Recognition: Maintain and enhance systems to recognise research success by Victoria University researchers and research teams including the distribution of funds from relevant budgets to areas and researchers responsible for research success.

⁴ Resource scarcity means that any support should be subject to a number of analyses, including cost-benefit. A part of the cost/benefit framework will be to consider the cost to deliver research outputs, as against the benefits derived to the University and stakeholders from the research output that is produced. All strategies that are developed should also attempt to incorporate discipline specific features, issues and practices and avoid 'one size fits all' approaches. For example, some disciplines are more amenable to produce very highly in certain areas and less so in others. As such, the University will seek to develop initiatives that reflect and take into account this 'product differentiation'.

Strategy 1.1.9 Processes: Improve administrative processes related to, or which impact upon, research so as to improve researcher efficiency.

Strategy 1.1.10 Key Performance Indicators: Establish research-related Key Performance Indicators for all faculties, institutes and schools.

Strategy 1.1.11 Undergraduate Research: Build research culture by working with the DVC (Academic and Students) and the newly formed Curriculum Commission to explore options for embedding research into undergraduate courses and curriculum and further into postgraduate coursework programs.

Objective 1.2 For HDR intellectual climate measure to score 62% by 2016 from 58% in 2010.

Strategy 1.2.1 Support and Engagement: Explore options and the feasibility of developing a Graduate Research School and associated programs, facilities and infrastructure to raise the level of support for, and level of engagement of, HDR students.

Strategy 1.2.2 Skill Development: Enhance initial HDR skill development by introducing a mandatory induction program for new HDR students and coursework as a component of the first year of doctoral programs.

Strategy 1.2.3 Research culture and environment: Establish and resource further peer-to-peer support initiatives (such as Research Ambassadors students as staff program) to strengthen engagement and interactions within the research environment

Strategy 1.2.4 Access to information and learning resources: Develop intranet and online tools to maximise HDR access to information about research activities, seminars and workshops as well as resources to support research and virtual collaborative spaces.

GOAL 2 CAPACITY AND RESEARCH REPUTATION

For Victoria University to continue to refine and develop its existing areas of research strength while also providing avenues and support for the development of new research strength areas.

Objective 2.1 For Victoria University to increase Excellence in Research for Australia (ERA) scores of 3 or above from five (5) four digit Fields of Research in 2010 to ten (10) by 2016.

Strategy 2.1.1 Focus: In accordance with the University Strategic Plan, the University will be well known for its interdisciplinary research in the following thematic areas:

- i. Education, Lifelong Learning and Workforce Development
- ii. Environmental Sustainability
- iii. Health, Active Living and Sport
- iv. Cultural Diversity
- v. The performance and well being of particular industries and places⁵

Strategy 2.1.2 Investment: Increase financial investment to equal at least 8% of the University budget with a particular focus upon recruiting and retaining high level research staff at all academic levels in areas of strategic focus, including the establishment of a 'World Research Leader' recruitment program.

Strategy 2.1.3 Institutes and Research Centres: using established criteria, review and where appropriate further develop Victoria University Institutes and Research Centres, which align with the stated strategic focus areas, so they attain international research standing and are largely self sustaining within five years of start up. At least one of the University Institutes and Research Centres should be the lead partner in a successful bid for a Research Centre of Excellence, or similar, by 2016

Strategy 2.1.4 Promotion of Research Disciplines: All research active organisational areas to identify and promote their research disciplines of strategic focus and associated Fields of Research (FOR).

Strategy 2.1.5 Victoria University Research Depository: Maintain and enhance the capacity of the Victoria University Research Depository to promote University research outcomes to improve research citation rates.

Strategy 2.1.6 Strategic Recruitment. Develop strategies to recruit researchers to key areas who will enable the University to build research capacity and leverage its current research investments.

Strategy 2.1.7 Library Strategic Investment: Continued strategic development of the Library to provide scholarly information resources that underpin research and the capability to support initiatives in e-research and dataset and repository development

Objective 2.2 For 45% of higher education sector staff (from 35% in 2010) and 5% of vocational and further education sector staff to be classified as Research Active by 2016.

Strategy 2.2.1 HR Policies and Practice: Encourage all relevant staff to undertake research by including the promotion of research and the removal of structural barriers in HR policies and practices.

⁵ Please see page 5 of the University Strategic Plan for information on these industries and places.

- Strategy 2.2.2** Develop research skills: Explore the feasibility of introducing a Graduate Certificate in Research Methods to be available to both existing staff without a research background and to potential new HDR students requiring additional skills in research before commencing a Masters by research degree or Doctoral program. The exploration would consider whether such a certificate would provide the necessary skill set for Vocational and Further Education staff to become active researchers and/or to pursue HDR studies and whether this would improve the engagement between Vocation and Further Education and research.
- Strategy 2.2.3** Appointment Processes: Increase the number of Higher Education staff trained and experienced in research by requiring appointment panels for teaching and research positions to appoint staff with demonstrable capacity in both teaching and research for 'teaching and research' classified positions .
- Strategy 2.2.4** HE, VE and FE Staff Research Training: Explore options to support existing HE, VE and FE staff to undertake research training where considered appropriate and mutually beneficial.
- Strategy 2.2.5** Mentoring and Support: Maintain and enhance mentoring and support programs for existing staff to become research active; develop mentoring programs to support existing research active staff, early career researchers and others new to research and enable them to continue to grow as researchers.
- Strategy 2.2.6** Research Only Positions: Increase the number and proportion of staff holding research only positions including the maintenance and expansion of the Victoria University Postdoctoral Fellowship program and seek to appoint staff and develop existing staff to the level required to gain one Laureate Fellowship and three Future Fellowships by 2016.

Objective 2.3 *Improve the publication profile of VU researchers to achieve at least 38% (from 30% in 2009) of publications in the highest quartile of journal quality (e.g. Scopus Q1 journals) by 2016*

- Strategy 2.3.1** Incentives: Modify research incentive programs at all levels of the University to increase the quality of research outputs
- Strategy 2.3.2** Appointment and Promotion Policies: Staff appointment and promotion policies will be adjusted to ensure that evaluation of appointment and promotion submissions includes consideration of the quality of research outputs.
- Strategy 2.3.3** Recruitment Policies: Develop recruitment strategies to ensure that staff recruitment helps achieve Objective 2.3. Options for consideration include adjusting recruitment processes so that ability to add to and improve the University's performance with respect to research outputs, including quality, becomes a criterion for selection.
- Strategy 2.3.4** Key Performance Indicators: Include the quality of research publications in management and academic staff Key Performance Indicators

Objective 2.4 *For an average of 1 journal article published per year per academic staff member by 2016 from 0.79 in 2009.*

- Strategy 2.4.1** HR Policies: Include the publication of research outputs in appropriate Human Resources policy; especially in consideration of tenure, promotion and contract renewal.

- Strategy 2.4.2 Key Performance Indicators: Include the publication of research outputs in management and academic staff Key Performance Indicators
- Strategy 2.4.3 Publication Support Programs: Establish publication support programs such as publication support workshops, statistical and research design support programs, establishment of writing teams and support for the conduct of writing retreats
- Strategy 2.4.4 Annual Academic Workloads: Support adjusting academic workload composition to facilitate the submission of research outputs to peer reviewed journals
- Strategy 2.4.5 HDR Publications: Encourage students to publish their research by promoting the use of the PhD by publication option and participation in schemes to support the development and submission of manuscripts arising from HDR studies.

Objective 2.5 Increase the level of internal, Australian and, particularly, International collaboration.

- Strategy 2.5.1 Partnerships: Develop partnerships with more research intensive universities to create mentoring and development opportunities for Victoria University researchers.
- Strategy 2.5.2 e-Research: Implement an eResearch Strategy that will both increase opportunities for collaboration and the productivity of collaborations.
- Strategy 2.5.3 Incentives: Revise research incentives schemes to more strongly recognise and encourage interdisciplinary collaboration both within the University and with international partners.
- Strategy 2.5.4 Investment: Invest in internal funding schemes to support international and other strategic research programs for staff and students, including for example, through financial top-up of research-based SSP to promote and facilitate the development of staff capacity to undertake world standard research.
- Strategy 2.5.5 Administrative Support: Provide administrative support to develop focused international research partnerships that are integrated where possible with international educational partnerships
- Strategy 2.5.6 Engagement: Support and promote relationships with peak bodies and networks that promote engagement with international researchers and research organisations.
- Strategy 2.5.7 Income: For international research partnerships to facilitate an income of at least \$500,000 per annum by 2016

Objective 2.6 For Victoria University Staff to increase Category 1 income per annum from \$3,939/FTE in 2009 to \$14,300/FTE 2016

- Strategy 2.6.1 Grant Development and Support Programs: Maintain and further develop existing Victoria University grant development and support programs including the research start-up program, researcher development grant scheme, grant targeting programs and grant preparation support programs. In particular, these programs should be clearly targeted at the relevant external competitive research funding programs and to assist researchers in accurately costing projects and negotiating with external partners.

- Strategy 2.6.2 Human Resources Policy and Practice: Include research income, particularly a track record of securing external research funding in appropriate Human Resources policies; especially in consideration of appointment, tenure, promotion and contract renewal.
- Strategy 2.6.3 Key Performance Indicators: Key Performance Indicators for relevant management and academic staff to include all external research income with a quality weighting for Category 1 research grant income
- Strategy 2.6.4 Investment: Target research investment to build research capacity in areas able to access significant Category 1 funding pools.
- Strategy 2.6.5 Track record: Encourage all research active staff to build competitive track records through developing quality research outputs (See Objective 3.3)

GOAL 3 RESEARCH TRAINING

For Victoria University to be recognised as a research training institution offering a high quality and supportive program that graduates students in a timely manner with excellence in research outcomes.

***Objective 3.1** For 80% of Victoria University Doctoral HDR graduates to secure employment in occupations utilising their research training and skills within six months of graduation*

Strategy 3.1.1 Career Development and Engagement: Enhance HDR student access to career development programs and mentoring.

Strategy 3.1.2 Research and Transferable Skills: Enhance opportunities for HDR students to extend and diversify their research and transferable skills as part of their overall research training experience.

***Objective 3.2** For a cohort of 1.1 EFTS HDR students per FTE academic staff to be established by 2016*

Strategy 3.2.1 Preparation for and Pathways to Research: Enhance preparedness and opportunities for well-qualified VU undergraduate and postgraduate coursework students to move onto HDR studies, through initiatives such as honours programs, Dean's Scholars programs, research-led undergraduate teaching, and research experience in work-integrated learning. Strategy 3.2.1 would be developed in conjunction with and in consideration of Strategy 2.2.2

Strategy 3.2.2 Marketing and Promotion: Enhance marketing and promotion of HDR opportunities (domestic and international) available at Victoria University in areas of research strength to support planned growth whilst continuing to build the quality of applicants admitted.

Strategy 3.2.3 Scholarships: Increase the number of VU HDR scholarships offered per year to 30 and the number of externally funded HDR scholarships to 50 by 2016.

Strategy 3.2.4 Supervisory Capacity: Continue to build supervisory capacity and alignment of capacity to areas of research focus and HDR demand, including establishing and strengthening of research groups and associated supervisory teams. Ensure that all supervisors have recognised track records in quality publication and securing external grant funding

Strategy 3.2.5 Partnerships and collaboration in HDR programs: Develop cross-institutional local collaborations in doctoral training and international partnerships to offer joint PhD programs with high quality partner universities.

***Objective 3.3** For 70% of Victoria University HDR students to submit their thesis within 4 years (EFT) by 2016 from 50% in 2009.*

Strategy 3.3.1 Progress Monitoring: Review and, where appropriate, improve HDR ongoing progress monitoring and academic review and support focused towards expediting timely quality completion.

Strategy 3.3.2 Supervision: Continue to improve the quality of HDR supervision by improving supervisor education and mentoring programs, including through the development of a community of practice around the pedagogy of supervision.

Strategy 3.3.3 Access and Support: Ensure all students have access to appropriate research training and academic support programs, research facilities and infrastructure to facilitate timely and quality completion.

Strategy 3.3.4 Examination Processes: Review examination processes with a view to improving the time from submission to final classification and introduce and encourage a thesis oral defence option for all students.

Objective 3.4 For 35% of Victoria University HDR graduates to achieve a 'high' overall quality thesis examiner classification by 2016 from 25% in 2009

Strategy 3.4.1 Supervision: Further develop HDR supervisory practices geared towards enhancing thesis quality.

Strategy 3.4.2 Peer Review: Introduce mandatory regular independent peer review post-candidature and pre-submission.

GOAL 4 RESEARCH ENGAGEMENT

Victoria University will engage with external organisations in order to undertake research that achieves outcomes at local, national and international levels of high quality.

***Objective 4.1** For Victoria University to establish deep, multilayered and mutually beneficial active partnerships*

Strategy 4.1.1 New Relationships: Encourage researchers and research leaders to identify and develop potential Australian and international community, government and industry relationships with collaborative partners by establishing a collaboration research support fund focused upon partnerships which align with University research focus areas and deliver mutually beneficial outcomes

Strategy 4.1.2 Leveraging Existing Relationships: Encourage researchers and research leaders to build upon relationships with existing teaching and learning collaborative partners by establishing a collaboration research support fund which is particularly focused upon partnerships which align with University research focus areas.

Strategy 4.1.3 Relationships in HDR Programs: Encourage domestic and international partnering for HDR degrees with domestic and international community/government/industry in order to ensure that doctoral graduates achieve excellent employment and career outcomes.

Strategy 4.1.4 Access to Relevant Government Programs: Encourage staff and students to take advantage of relevant Australian Federal and State Government programs designed to facilitate interaction between research organisations and industry, as well as improve commercialisation skills (e.g. Enterprise Connect 'Researchers in Business' (RiB), the Commercialisation Training Scheme (CTS)) In particular, the University seeks to be a partner in at least two Co-operative Research Centres (CRCs) by 2016.

Strategy 4.1.5 Research Outreach: Consider the role and responsibility of Victoria University to provide space, infrastructure and other resources that serve government, industry and community to undertake research activities and facilitate knowledge exchange related research on Victoria University campuses. Engage with the State Government of Victoria on this issue to understand their priorities and plans regarding the future development of precincts, their preferred discipline emphasis and the likelihood of support for Victoria University initiatives.

Strategy 4.1.6 Promotional, Business and Research Development Support: Provide promotional, business and research development support to facilitate community, government and industry transactions and partnerships through the engagement of appropriately skilled Faculty and Institute staff, together with central support in the Offices of the PVCs for Research and Research Training, Knowledge Exchange (Industry) and (Community) and VUI.

Strategy 4.1.7 Relationships: Support and promote relationships with relevant peak bodies and networks that can facilitate engagement with community, government and industry-based researchers and research organisations.

Strategy 4.1.8 Locations: Support staff and students to undertake research in key community, government and industry locations which are aligned with areas of strategic research focus.

Strategy 4.1.9 Systems and Processes: Continue to develop, refine and implement operational and financial systems, processes and tools that support staff to secure new research grants, contract and collaborative research opportunities as well as consultancies.

Strategy 4.1.10 Rewards and Recognitions: Review and modify, where appropriate, Victoria University policies related to research knowledge exchange and external engagement activities (eg. consultancy and contract research policy, promotions policy) so they are aligned with current functional strategy.

Strategy 4.1.11 Research Impact: For Victoria University to explore options and develop a measure of research impact. This will include trialling such a measure with full implementation by 2016.

Objective 4.2 *To increase research income from community, government and industry (Australian Grant Categories 2-4) sources from \$20,353/FTE/year in 2009 to \$38,943/FTE/year in 2016*

Strategy 4.2.1 Establish grant and tender preparation support programs and systems such as tender capacity development workshops, and recruit and establish a panel of consultants of tender and grant writers to support academics submitting proposals for commercial research tenders and grants (including assistance with costing and pricing). These programs should be clearly targeted at the relevant research opportunities, including those from philanthropic organisations.

Strategy 4.2.2 Human Resources Policy and Practice: Include research income, particularly a track record of securing external research funding in appropriate Human Resources policies; especially in consideration of appointment, tenure, promotion and contract renewal.

Strategy 4.2.3 Key Performance Indicators: Key Performance Indicators for relevant management and academic staff to include income from Australian Grant Categories 2-4

Strategy 4.2.4 Investment: Target research investment to build research capacity in areas able to access significant Category 2-4 funding pools.

Strategy 4.2.5 Track record: Encourage all research active staff to build competitive track records through developing quality research outputs (See Objective 3.3).

Objective 4.3 *For Victoria University to record 12 invention disclosures per annum by 2016 from 5 in 2009*

Strategy 4.3.1 IP Identification: Faculty based business development staff to continuously monitor research activities to identify new IP; encourage the use of relevant tools such as the invention disclosure template.

Strategy 4.3.2 IP Protection: Conduct initial assessment and due diligence on all new IP; protect IP as appropriate.

Strategy 4.3.3 Capacity Building: Conduct training related to the identification of IP.

Objective 4.4 For Victoria University to execute two licences, options or assignment agreements related to Victoria University intellectual property per annum by 2016 from one in 2009

Strategy 4.4.1 Commercialisation: Identify potential commercial partners and/or investors for all commercially viable IP; negotiate terms and conditions.

Strategy 4.4.2 Capacity Building: Conduct training related to the various aspects related to the commercialisation of IP.