RESEARCH DEVELOPMENT & INVESTMENT STRATEGY

2008-2010

This paper identifies the overarching strategy and operational plans to develop, focus and consolidate research at VU over the next 5 years. It comprises:

- 1. **Research development strategy** for ALL academic staff with a particular focus on developing and supporting new staff and early career researchers.
- 2. **Research recognition strategy**: for the development, management funding and review of research centres and institutes, and establishes the RAI policy as an integral program for encouraging and recognising research performance at an acceptable level.
- 3. Research investment strategy: Building on a long standing strategy of identifying research capabilities VU will invest in a limited number of key areas which it has or can achieve sustained national and international recognition and which are related to the University's region and its overall institutional strategy. Resources will be invested to achieve critical mass and facilitate the coordination of multidisciplinary research programs in the designated areas. Any University funding will be time limited and only used as leverage to attract significant external funding for developments.
- 4. **Postgraduate research strategy**: VU will aim to build its reputation for strong postgraduate research outcomes by further developing and streamlining VU postgraduate research programs to place and maintain them at the forefront of postgraduate research innovation.

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Dr Gayle Morris Director, Office for Research Professor Helen Borland Director, Postgraduate Research

1.0 INTRODUCTION

Since its formation as a university VU has been developing and investing in building research capability. Over the past 5 years these strategies have evolved from establishing University Research Centres; the identification of Key Research Areas (KRAs) in 2003 and the consequent development of University Institutes; and in 2008 the development of a comprehensive policy regarding their establishment and review process.

In 2005, VU Council agreed to earmark \$15 million of University money for investment into a small number of Priority Research Innovation Projects (PRIPs) in order to build research strength and capability. The first tranche of this funding was committed in 2006. These projects are monitored quarterly and a major comprehensive review is undertaken annually and reported to Resources Committee of Council.

Research development for new and existing staff has been an integral role of the Research portfolio and an active program to facilitate grant proposal development and an incentive funding program has been put in place to improve success in external grant applications and encourage the expectation that all staff will actively seek external funding for their research. This will be further developed under this strategy.

In 2006 the University introduced the Research Active Index (RAI) as part of the comprehensive workloads policy. This calculates an individualised score based on a persons recorded performance in postgraduate completions, publications and research grants over the preceding three years. Workload points are allocated for research to staff who meet the classification benchmark RAI of \geq 1.0 points. The RAI is reviewed annually and adjustments made to reflect internal experience and external policy changes. The attribution of research active status comprises a major financial investment by the University in research since staff paid time is attributed to research activity.

In 2006 the feedback from the AUQA audit affirmed the research directions that the University was taking and made a number of recommendations for improvement. These have either been implemented or are incorporated into the strategy.

During 2006-2007, in preparation for the Research Quality Framework (RQF) exercise of the Howard Government, the University undertook a comprehensive analysis of its clusters of research activity and research strength. In 2008, with the election of a new government, a set of programs for investment in research in Australia were announced:

- the RQF was replaced by Excellence for Research in Australia (ERA) with no direct funds attached;
- a program of 1000 Future Fellowships to fund mid-career researchers established;
- doubling of the number of Australian Postgraduate Awards (APAs) for higher degree study;
- a set of enterprise development programs have been announced including a "Researcher in Industry" program. (See Appendix1).
- A Review of the National Innovation System was established to report to the Federal Government with the final report released September 9.
- a House of Representatives Inquiry into Research Training and Research Workforce Issues in Australian Universities, final report expected in November 2008

All of these initiatives support the strategy of VU in identifying a limited number of areas which offer the best opportunity for sustained national and international recognition. While all academic staff will be expected and supported to be research active and the University will continue to expect research performance across all sectors of the institution, strategic investment in key areas in which we already have strength and/or which match VU's academic positioning and mission will be a necessity.

This paper aims to further develop VU research capabilities and research strategies over a five year period. It will be reviewed annually with a view to evaluating our success and fine tuning the programs in line with review outcomes and changes in the external and internal environments. It will also be used to guide VU Development and Fundraising strategies for research and areas for partnership development.

2.0 UNIVERSITY MISSION AND MAKING VU 2016

Research is one of the defining characteristics of a University, recognised in various federal and state government policies, legislation and University foundation acts. Along with teaching and training, it is one of those features that separate universities from other institutions of learning and teaching.

This marker of a University is also reflected in Making VU, the Strategic Plan and the University's Mission. These documents are the University's superordinate and guiding polices, driving and shaping the University's activities, including regional, national and international research.

The University's mission is:

to positively transform lives through the power of further education, vocational education and higher education, and **research**. Victoria University works collaboratively to develop the capabilities of individual, enterprises and communities within the western Melbourne region and beyond to build sustainable futures for ourselves and our stakeholders.

Making VU outlined five commitments which the University would undertake as applied to research and research training. They are:

- **Collaboration** focussing on input/alignment of VU's research activities through roundtables chaired by prominent industry and community leaders, to reflect local and international research and research training needs identified through 12 Industry/ Community Clusters.
- **Career** ensuring that all Courses contain a minimum of 25 per cent workplace/community learning (LiWC) which will evolve at faculty level, e.g. through group research projects, individual research internships for honours and other research students; and using information on the research needs in industry both local and international communities.
- **Choices** enabling both local and international Student Customisation of the learning experience through the customisation of research and honours programs.
- **Connected** re-shaping workforce training and skills development of existing workers through vocational education and further education research and evaluation.

Community placing research students and resourcing key initiatives in Melbourne's western suburbs to share outcomes and knowledge acquisition with both local and international communities.

These five descriptors, coupled with the University's mission and the foundation Act, shape the nature and management of the University's research strategies. The proposals and actions/recommendations outlined in this document draw from these instruments.

3.0 AIMS

The aims of this strategy are to:

- 1. develop strategies and initiatives to support and develop the research activities of our staff.
- 2. recognise and reward research performance and the University's areas of research strength and capability.
- 3. develop an investment strategy for the future growth and trajectory of research activities at VU.
- 4. develop strategies to support, grow and encourage the University's performance with respect to postgraduate higher degree by research students.

This paper sets out a framework based on these four objectives. Explicit actions are outlined through the document and collated at the end.

4.0 SUPPORTING AND DEVELOPING OUR STAFF

A core commitment of the Victoria University Research Strategic Plan is to invest in developing research capability across the entire University and wherever possible build cross sectoral research capability.

VU recognises that increasingly the best academic staff will choose to join and stay at those universities that offer the opportunity and support for developing an academic career that has a strong basis in, and recognition for research activity. VU expects that all staff will be active in research and scholarship and will invest in, and offer opportunities to all staff to become and remain research active and to achieve excellence in the fields in which they research and publish.

This supports the AUQA recommendations regarding recruiting and retaining outstanding research scholars and those of proven research potential

Programs that will be funded and supported for all staff are:

- 1. Research Grant Development Program
- 2. Enhancing the Quality of Research Outputs
- 3. Support for Early Career Researchers and Staff New to VU
- 4. Support for Developing Research Capability Across the University
- 5. VU Postdoctoral Fellowship Program
- 6. Human Resource Management: Recruitment, tenure and promotion
- 7. Developing Research Capability in and about Work focused learning across the University
- 8. Developing Research Capabilities Among All Staff Across the University

4.1 Research Development Grant Program

VU success rate in attracting external research grants and research contracts will be targeted through:

- Researcher Development Grant Scheme (RDGS) The scheme aims to provide research funding to support VU Early Career Researchers and newly appointed staff showing clear evidence of high research capacity.
- Grant development workshops a range of workshops to assist staff to develop research funding proposals. Includes NCG rejoinder workshops and applications.
- Grant targeting program: to identify alternative funding options and proactively target teams of staff to submit applications.
- Grant Preparation Support Scheme These are small grants designed to assist researchers at Victoria University to prepare applications for external research funding involving two or more institutions or significant University collaboration with industry.

- VU Out-of-Cycle Grants Scheme: To enable established researchers to respond quickly to opportunities as they arise, leading to demonstrated research outputs associated with the new opportunity; to develop research outputs that will enable high quality applications to be submitted to external grant awarding agencies.
- Near miss funding program To partially support "proving" projects that were 'near-miss' for a substantial external competitive grant.

The goals are to:

- improve the VU success rate in national competitive grants to the sector average; and
- significantly increase the value of external funding for research over the period of this plan by 30 per cent.

As research income is a lagging indicator it is likely that the full impact of this strategy will not be realised until the end of the period.

Action: VU will undertake targeted grant development strategies aimed at improving success rates in externally funded grants and encouraging all staff to become and remain research active.

4.2 Enhancing the Quality of Research Outputs

The introduction of the ERA in 2009 will require all universities to improve both the volume and quality of research outputs of academic staff and to ensure that all outputs are recorded and reported. VU staff publications are increasing in number however placement in the highest quality ranked outlets will need to be encouraged and recognised. This requires a concerted focus upon strategies to improve the overall quality of publications as indicated the rankings of outlets by discipline developed for the ERA and to improve citation counts.

- Journal ranking to be considered in staff evaluation strategies
 - RAI calculations will be weighted by journal quality
 - Quality weighting of research publications will apply to publication dates of 2008 or later
 - Tenure and promotions submissions will be evaluated using the journal quality rankings
- E-publication repository
 - Currently VU Library maintains a repository in which all staff have the option of placing research papers and presentations. Advice from other universities is that requiring all researchers to place their research outputs onto internationally searchable repositories significantly increases citations. VU will investigate the feasibility of requiring this and the infrastructure and support needed to achieve it.
- Writing for publication workshops
 - To assist staff in all sectors in writing for publication and targeting journals appropriate to the field and appropriately ranked for the ERA.

Action: VU will aim to improve both the volume and quality of research outputs of academic staff and to ensure that all outputs are recorded and reported.

4.3 Support for Early Career Researchers and Staff New to VU

VU will deliver initiatives to develop and support early careers researchers. Initiatives will also be developed to give greater support to researchers who are new to VU. Among these are:

- Research development start-up funds: all new to VU academics will have access to start up funds to
 establish their research career at VU. This funding will be shared between the Faculty and the Research
 and Region portfolio and will require submission of a brief proposal with a budget accompanied by an
 "individual research development plan" to the faculty Associate Dean Research.
- All new to VU staff at levels A, B and C will be deemed to have achieved the required RAI for the first three years of their appointment in order to enable them to be assigned the necessary workload points to establish their research career at VU. This will require the submission of an:
 - Individual Research Development Plan for all new staff and those requesting research transition points. It is intended to cover the first three years of the staff member's appointment including anticipated research grant applications and publication plan. This is an essential part of mentoring and development for all staff. Discussions are underway to incorporate it into the SPDP form.
- VU staff who achieve a classification benchmark RAI between 0.6-1.0, will receive 15 workload points upon the approval of an Individual Research Development Plan (as outlined above).

Action: VU will ensure that ECR academics have appropriate mentoring and support to develop their academic research and scholarly careers at VU.

4.4 Support for Developing Research Capability Across the University

Academic disciplines are evolving, and the techniques and strategies to undertake disciplinarily research and scholarship changes. VU academic and postgraduate research students require support to ensure that their capabilities are developed and remain at the forefront of research techniques. VU will investigate the need and opportunity for establishing:

- Research design data and statistical analysis support program.
- E-research strategy for research collaborations, data collection, access and sharing are increasingly moving to large scale electronic management. VU researchers and VU research will need to understand and have access to the necessary platforms and technical support and training to participate in the move towards e-research.

Action: VU will put in place research infrastructure and support to enable VU researchers and postgraduate students to develop and maintain international research networks and the skills and resources necessary to access data and research networks.

4.5 VU Postdoctoral Fellowship Program

VU will aim to continue investing in a significant postdoctoral research programs to develop a pool of research only staff who will and enhance the volume and quality of publications, support research grant applications, manage research programs, and extend our supervisory capacity through supervising honours and co-supervising postgraduate research students. It is expected that this investment will be supplemented and sustained by all research areas by seeking external funding to replace and build from internal University funding.

Action: VU will commit financially to an annual postdoctoral scholarship program. Postdoctoral scholarships will be targeted largely to areas of research strength and strategic priority. All postdoctoral fellows will be jointly funded by faculties /Institutes /Research Centres.

4.6 Human Resource Management: Recruitment, tenure and promotion

In order to build research performance amongst academic staff the expectation and recognition of engagement in research will be built into all human resource policies to assess the candidate's actual and potential contribution to research. Senior academics with responsibility for research need to be engaged in academic recruitment, tenure and promotion committees.

Action: Human Resource policies will be reviewed to ensure that research capability and performance is a key criterion in all selection, appointment, staff development, tenure and promotion and staff renewal plans for academic staff.

Action: The DVC (R&R) or Associate Deans (R&RT) (as appropriate) will be involved in selection and promotion processes.

4.7 Developing Research Capability in and about Work focused learning across the University

VU has a unique opportunity to lead Australia in leading research and scholarship on vocational and work based education. This will encompass:

- Developing a culture of evidence based, reflective practice across all sectors of the University
- Developing and integrating research into work based learning through Making VU
- Providing opportunities for staff to develop skills in research through the conduct of research that informs the practice of vocational and work-based education at VU
- Providing opportunities for staff to enhance research skills through involvement as associates in externally funded research into vocational education and work-based learning practice at a national level
- Creating scholarships and opportunities for staff in VE and FE to undertake postgraduate research studies
- Ongoing support for and engagement in nationally funded strategies to build research capacity in vocational education and training organisations

Action: VU will invest in research and scholarship, and postgraduate scholarships to encourage research into Vocational and Workbased Learning.

4.8 Developing Research Capabilities Among All Staff Across the University¹

Almost all staff at VU are 'knowledge workers', meaning that in the carrying out of their tasks, such workers are involved in research. While academic staff will continue to be the major plank and focus in the University's research efforts, there is great potential to grow our overall research strengths by developing strategies that will tap into the huge resource offered by all staff.

To enable this, the University will also explore strategies that enable these knowledge workers to be more research active. For a multi-sector University such as VU, the possibilities are large, and the potential benefits great.

The strategies that will be explored will determine mechanisms to enable all capable staff to engage in research and scholarship. A particular focus will be researching the implementation and outcomes of the "Making VU" initiative and other educational initiatives, such as problem based learning (PBL).

Action: VU will explore strategies to enable all staff, including general staff, to engage in research and scholarship around educational innovation.

Action: The University will undertake a research and evaluation exercise with respect to the Making VU initiative.

5.0 RESEARCH RECOGNITION STRATEGY

¹ This section is based on the work of the Aitkin/Mitchell Consulting Group

The other side of development and support is recognition for achievement and outcomes. The University will have a three pronged strategy to recognise research performance and areas of strength and capability, including:

- 1. the University Institutes and Research Centres Program
- 2. the Research Active Index
- 3. Recognising and rewarding research performance

5.1 University Institutes and Research Centres Program

VU has invested over several years in a number of research areas through its Institute, University Research Centre and Faculty research unit program. Currently there are 3 Institutes, 6 University Research Centres and 4 research units which are faculty/school based. These centres and units have developed in different directions. A minority have achieved significant levels of external funding and commercialisation, and/or postgraduate student enrolment.

A new policy was adopted in January 2008 on establishing and disestablishing University Research Centres and Institutes and establishing governance and management and review procedures. All are being reviewed on an agreed schedule and their performance is being monitored through submissions of annual reports.

The University will aim to increase its financial commitment to the Institutes and Centres through the Faculties and the DVC's portfolio. This funding includes meeting the core salary and infrastructure costs of the director, and assisting with the salary and infrastructure costs of faculty/school academics who carry out research through the Centre/Institute. In addition, the University will aim to make a financial commitment for up to two senior staff in each of the Institutes.

Institutes and Centres will be required to develop KPIs for research performance. Institutes will also be required to develop KPIs for education performance. Continued funding will be based on their performance in meeting these targets.

The Institutes/Centres will continue to be reviewed on a four yearly basis with changes including upgrading status or funding or conversely closure or redesignation dependent upon the outcomes of the review and the strategic directions of the University. It is unlikely that, in the current funding climate any additional Centres would be created without significant and sustained guaranteed external funding.

Action: Institutes and Centres will be reviewed to ensure that they are meeting their goals and are reaching and maintaining acceptable standards and outputs within reasonable time frames. Action: The University will aim to increase its financial commitment to the Institutes and Centres. Continued funding will be subject to the Institutes and Centres meeting agreed KPIs.

5.2 Research Active Index (RAI)

The RAI is a major innovation for VU. It enables active researchers to receive workload recognition on the basis of their previous activity and to invest that time in research. Upon reaching the classification benchmark RAI, staff receives 25 workload points to invest in research. The maximum research workload points is 50. It also allows new staff to be deemed to have research active status for the first three years of their appointment to enable them to develop their research careers.

The RAI formula and implementation will continue to be reviewed annually by the Research Management Committee in order to ensure that it is operating equitably and appropriately and reflects external and internal research strategy. This requires significant data collection and maintenance and VU research data needs will be reviewed to ensure that the systems and staffing will be adequate to meet future demands. Action: The RAI will be reviewed annually to ensure that it is aligned with national research funding formulae. The evidence requirements will be reviewed to ensure that VU is able to collect and manage academic research performance data as efficiently as possible.

5.3 Recognising and Rewarding Research Performance

Academic staff who are successful in producing research outputs, including external research income and publications, will be rewarded by sharing in the VU Research Support Fund which is derived from the IGS. This is provided for recognition and support of excellence in research and to drive increased research and research-training outputs across strategically important areas. VU will also recognise and celebrate research achievement by greater publicity for success across the University and externally.

Action: University research funding distribution will be reviewed annually to ensure it contributes to encouraging and rewarding active researchers.

6.0 RESEARCH INVESTMENT STRATEGY

VU will identify and invest in a select number of areas of University strength as a key strategy for achieving wider and sustained recognition of VU both nationally and internationally and to meet requirements for accessing new Federal Government funding programs. VU's areas of strength will be sufficiently broad to have substantial scale and to maintain relevance and excellence over the long term but not so broad as to be amorphous or lose their distinctive identity.

Necessarily this will be in areas where VU has or intends to develop:

- a. sufficient critical mass to compete internationally;
- b. a strong base and reputation of distinctive VU strength;
- c. strong opportunities for further long term enhanced development;
- d. a strategic positioning that relates to and reflects VU's unique mission and commitments including through the Making VU a New School of Thought initiative;
- e. link with VU academic directions as evidenced through faculty visioning and planning and clusters identified as part of the Making VU strategy. There will be a clear role for the roundtables, as they develop their purview, to include research activities.

These areas have been identified using an evidence base from the individual and group research records that are maintained for research reporting and assessment purposes, namely research grant and contract income, the number and quality of publications, the number of postgraduate research students enrolled and completed and the achievement of a critical mass of staff. The information used is limited by the retrospective time frames used for research data collection and reporting. The analysis also took into account potential for developing significant strength in a particular area and strategic significance in terms of the University's academic vision, locational advantage and external developments locally, regionally and internationally. They are areas where VU currently or potentially has not only the quality of endeavour but significant concentration of staff to be able to claim a national and/or international profile.

The Strategic Research Areas will be developed through existing structures and based upon the record developed through KRA's, Institutes, Centres and PRIP's. Any new funds will be utilised for enhancing their strengths in agreed directions. The goal is that the University will attain international standing and a distinctive international profile in each of the areas and it is crucial that the funds be utilised in the most strategic fashion to achieve this goal. They will be reviewed annually with a view to identifying the continuing strength of the area and the development of "emergent areas". It is unlikely that major changes will occur in a one year time frame; however confirmation of strengths and/or major revisions would be expected within a three year time frame.

The areas of strategic investment will receive additional funding through targeting new research funds, priority placement of VU postdoctoral fellowships and postgraduate scholarships, Making VU funding and targeted partnership funding. This will all be subject to meeting agreed income and performance KPI's. Where relevant and feasible VU researchers will be encouraged to focus or identify their research into these areas through a special competitive fund for research project initiatives linked to VU research priorities.

The University will encourage, support and provide access to resources for area leaders to build:

- media, marketing and communication strategies both internal and external;
- interdisciplinary networking activities.

The areas identified are:

1. Areas of Existing Strength

- Active Living and Sport Performance: research in exercise and sports science, biomedical science and nutrition and the related health and wellness outcomes.
- Communication and Sensor Technologies: wireless technologies, microelectronics in health and power applications, and optical sensors and amplifiers; application of new e-technology.
- Diversity and Wellbeing: research in community diversity, refugee resettlement, racial and gender discrimination and socially inclusive policies.
- Sustainable Environmental Technologies: water management; green and safe construction including fire prevention; and economic, social and policy research on water use and environmental sustainability; human behaviour in fire.
- Tourism: research in environmentally and culturally appropriate and economically sustainable tourism, regional issues.

2. Areas of Emerging Strategic Research

These are areas which have not yet achieved critical mass or significant research performance. They are strategically important to VU due to location, positioning or strategic initiatives that will define VU's future

- Education, Access and Transition: this includes two streams.
 - Stream A involves research into teaching in diverse communities, university/industry/school partnerships engagement with educationally and socially disadvantaged youth, facilitating educational access for non traditional students. VU has invested in major organisational and educational change.
 - Stream B is based upon the paper by Aitken and Mitchell "Teaching, Research and Human Knowledge in the Context of Making VU". It is proposed that both the process and the outcomes of Making VU and other educational initiatives such as the introduction of PBL will be researched, evaluated and communicated within and beyond the University. Leadership in this will be vested in the PVC (T&L) and CITL.
- Logistics and Transportation: research in information technology and information systems, mathematical modelling, distribution systems, international trade, economics of transport and distribution.

3. Underpinning Areas of Research Strength

There are a number of areas of significant research strength which while strong in their own right are additionally important in <u>underpinning</u> all of these areas. These are:

- Applied Informatics
- Strategic Economics

These areas will have access to the same resources to build research capability as those listed as research strengths with particular stress on applying economics, and informatics into the substantive areas identified in 1 and 2.

The collation and multidisciplinary link between VU recognised Strategic Research Areas, including underpinning research areas, is schematically presented in Figure 1.

Action: VU will identify, market and invest in a select number of areas of University strength as a key strategy for achieving wider and sustained recognition of VU both nationally and internationally and to meet requirements for accessing new Federal Government funding programs.

7.0 POSTGRADUATE RESEARCH STRATEGY

VU will aim to build its reputation for strong postgraduate research outcomes by further developing and streamlining VU postgraduate research programs to place and maintain them at the forefront of postgraduate research innovation. This strategy has four primary areas of focus for 2008-10, including:

- 1. Growing the number of HDR enrolments
- 2. VU postgraduate research education at forefront in developing professional researchers
- 3. Supervisor development program
- 4. Strengthening of the research culture for postgraduate researchers

7.1 Growing the number of HDR enrolments

A key goal of this strategy is to grow the level of HDR enrolments in ways that are sustainable and synergistic with broader institutional research developments. A growth target of 8 per cent per annum for the next 3 years will be pursued, with growth focused into areas of:

- research strength and investment, and
- ongoing sustainable supervisory capacity.

Key initiatives to support this growth target will include:

- **Scholarships development strategy** international and local. Two key elements: internationally funded scholarships; and philanthropic and industry-supported scholarships and project support
- **Improved publicity and promotional materials and strategies** aimed to attract high quality HDR applicants through profiling areas of research strength, and achievements and expertise of supervisors and the success stories of recent and current students.
- **Development of new delivery models** that can support a larger number of prospective students (overseas and locally) in cost-efficient ways. By end 2010 at least one new model to have been developed and trialling to have commenced.

7.2 VU Postgraduate Research Education at forefront in developing professional researchers

VU postgraduate research will be differentiated in ways that align it to broader institutional directions, such as the 'Making VU' project. A number of initiatives are proposed including:

- Development of a coursework component for all research degrees. To be part of each student's first 1-2 semesters of study and laying the foundation for ongoing professional development and support activities throughout the student's research education program. The coursework component will commence in 2010 and will include: advanced disciplinary and interdisciplinary studies in the student's field of research; and advanced methodological studies.
- **Development of 'Engaged' researchers.** VU's approach to postgraduate research education will have a distinctive focus on the development of researchers with expertise in working with communities and industry, and in translating their skills and knowledge into impacts with broad applications through:
 - o Implementation of new supervisory policies for appointment of external supervisors.
 - Using analysis of FOR and cluster alignments to link research students into VU research teams, University-industry networks, advisory bodies and seminar and training opportunities.

- Strengthening industry and philanthropic partnerships and fundraising to financially and institutionally support postgraduate research projects.
- Distinctive and high profile program of research education seminars and workshops to develop understanding of the roles and responsibilities in working ethically and effectively as an 'engaged' researcher.
- Internationalisation of research education. To ensure and help postgraduate research students to have a firm understanding of the international research and development context of their field, VU will:
 - Develop new and deepen existing international strategic partnerships and cross-institutional research education and training relationships that focus on areas of research strength.
 - Support and promote relationships with peak bodies and other e-research collaborations that provide an entry into international research networks
 - Internationalise the postgraduate research community and the postgraduate research experience through:
 - enhancing opportunities and travel funding support for research student international mobility for all Melbourne-based students..
 - increasing the number of international and transnational students studying in Melbourne and/or participating in new models of transnational delivery of research education.
- Strong Levels of Publication Output and Public Profiling of Postgraduate research. VU will increase the profile and public output of its HDR students by:
 - Use of VU research journalist and media relations experts to promote outcomes of student research and to teach students on how to present their research ethically and accurately.
 - Doctoral research students supported to present their work at a minimum of one national and one international conference leading to a refereed publication across the course of their studies
 - Research education program to include a strengthened focus on workshops to assist students in publishing during and after the completion of their theses

7.3 Supervisor Development Program

The focus of the Supervisor Development program will be to build supervisory capacity amongst existing VU academic staff. Specific initiatives will include:

- Audit of current supervisory capacity (in relation to FORs and areas of research strength), and development of plans to address areas of shortage using the new policies.
- Supervisory development strategy and associated professional development and mentoring programs to address the supervisory skill development needs of early career researchers and associate supervisors

7.4 Strengthening the research culture for postgraduates at VU

VU will build a strong and dynamic research culture aligned with areas of research strength, through:

- Policies on minimum standards for postgraduate research facilities and infrastructure to create a context to support the development and consolidation of postgraduate precincts and improve access to study and research facilities and support networks in line with national standards;
- Development of student confidence and skills in engaging in debate about their discipline and field of research.
- Increased funding support for postgraduate research student participation in mainstream conferences.
- Working with VUPA to enhance links of VU research students with those at other institutions locally and nationally.

Action: VU will develop and implement the postgraduate research strategies outlined in section 7 to promote, grow and further strengthen the University's postgraduate research performance.

8.0 CHANGING POLICY LANDSCAPE: FUTURE CHALLENGES

The newly elected Federal Government and Parliament have undertaken or is in the process of undertaking a number of reviews, which have or are due to report in the second half of 2008. These include:

- The Review of the National Innovation System (report released September 9)
- The House of Representatives Inquiry into Research Training and Research Workforce Issues in Australian Universities
- The review of Cooperative Research Centres (previously included as part of the review of the Innovation System)
- The Review of Higher Education (Bradley Review)

The University has made submissions to each of these reviews.

In addition, the Government has introduced or flagged the introduction of a number of other changes, including:

- Funding "Compacts" with the government: Are planned to provide mission based funding for each institution tailored to its needs, priorities and strengths.
- Future Fellowships :1000 new fully funded 4 year positions for mid career researchers (5-15 years post PhD)
- Doubling the number of APA's : must be placed in universities and in fields that are able to demonstrate that they are "internationally competitive"
- Research infrastructure investment, including a Hub and Spokes model for research infrastructure and facilities: government has proposed that major research infrastructure will be developed as a consortium arrangement with any investment being located at one institution but being accessed by agreement by researchers nationally and internationally. In terms of hub and spokes, Minister Carr has suggested that Hubs could be identified as part of the government's ERA initiative, giving the ERA would be given a new role of formally identifying the top one or two research departments, or hubs, in a discipline.
- Enterprise connect program: \$200 million to create a network of sites around the country where SMEs can access new ideas and technologies in order to accelerate knowledge transfer

These changes, and in particular the reviews and any recommendations arising from them, could impact on the strategies outlined in this document. The University will amend the initiatives and proposals outlined in this strategy in the event of any policy shifts that affect or diminish their intent.



VU RECOGNISED STRATEGIC AND UNDERPINNING RESEARCH AREAS

Figure 1 VU recognised Strategic Research Areas, including underpinning research areas.