

## SCHOOL OF HEALTH SCIENCES

# Research Strategic Plan 2010 – 2014

## VISION

The School of Health Sciences will become a leader in Australia for health research. The School will encourage each discipline and multidisciplinary teams to develop areas of research concentration to an international level.

The model for research within the School is based on the following principles:

1. Multidisciplinary in orientation
2. Capacity building for multidisciplinary research: increasing postgraduate numbers in core areas of research; building strategic collaborations here and abroad; funding research fellows, post-docs and other experienced research staff; building infrastructure support
3. Leveraging external funds from existing research strengths
4. Collaboration - Engaging new staff in multidisciplinary research in areas of strength

Research within the School will demonstrate the following features:

1. Innovation – novel solutions to theoretical and applied issues
2. High quality, evident in terms of approach, methodology, implementation, and outputs
3. Diversity of method, but with an emphasis on translational and applied research
4. Having an impact on the health and well being of Australians and the international community.

While the School will encourage a multi-disciplinary approach, and collaborations with industry, this will not occur to the exclusion of other types of research. The School's research activities will be integrated with its teaching programs.



# GOALS

## 1. All Staff

- 1.1 Each staff member in the School is expected to be a consumer of research and to incorporate research findings into their teaching.
- 1.2 Each staff member in the school is expected to publish HERDC-recognised research papers to a level at least commensurate with their level of appointment. The number of staff who meet this criteria is expected to increase from around 35% in 2009 to 80% by 2014. Staff are encouraged to target high impact journals with a view to raising the average Impact Factor of School's research quantum.
- 1.3 Each staff member is expected to be involved in efforts to seek grant funding (internal and/or external). The target for funding will depend to some extent on Track Record and research experience.
- 1.4 Each staff member is expected to supervise postgraduate research students and, whenever possible, to orient these students to projects that are likely to deliver publishable outcomes and to leverage possible funding.

## 2. Postgraduate Research Students

- 2.1 The School will at least maintain its current postgraduate research load of 100 funded places.
- 2.2 The School will increase its number of student completions from around 15 in 2008 to 20-25 per year by 2014. These goals imply an increase in student enrolments and/or proportion of enrolled students completing.
- 2.3 Incoming students should be oriented to projects that are likely to deliver publishable outcomes and leverage possible funding.

## 3. Research Income

### 3.1 'Australian Competitive Grants'

The number of Australian Competitive Grants will increase 20-25% over the 5-year period from a baseline of 4 in 2008, as will total grant income. This goal implies a substantial increase in the quality of the submitted applications (in view of figures on success rates from R&I). The School should aim for a success rate of at least 30 % by 2014.

### **3.2 'Other Public Sector Research Funding' and 'Industry and Other Funding for Research'**

An increase in the number and value of other grants of 10% per year, which would take the number of successful grant applications from 15 in 2009 to around 20-25 in 2014. This goal implies a substantial increase in both the number and quality of applications. The School should aim for a success rate of at least 35 % by 2014.

## **4. Publications**

- 4.1 An increase in DEST-recognised publications of 7.5% per year, which would take the number from 110 in 2008 to between 150 by 2014 (equivalent to an average of about 2 publications per staff member).
- 4.2 At least 50% of the publications will be in international journals of good standing (impact factors above 1), and 20% in the leading journals in their fields (impact factors above 2) by 2014.

GOALS	STRATEGIES	ACTIONS
All	<b>1. Identifying core areas of research strength within the school</b>	
	1.1 Consider areas of research strength within the school.	HoS and SHSRC will: <ul style="list-style-type: none"> <li>• review publication patterns over the past 3 years and identify core themes</li> <li>• review the pattern and type of grant application made by staff over the past 3 years, &amp; success rates</li> <li>• examine how these themes fit with the strategic objectives of the University and National Research Priorities (esp. Healthy Start to Life)</li> <li>• review how staff cluster around THESE themes</li> </ul>
	1.2 Identify areas of strength and innovation that are important to build.	<ul style="list-style-type: none"> <li>• SHSRC to discuss and reach a consensus on core areas</li> <li>• SHSRC to provide recommendations to support areas of strength and innovation (e.g., funding initiatives)</li> </ul> <p>Those areas of research strength are :</p> <ol style="list-style-type: none"> <li>1. <b>Traditional and Complimentary Medicine</b> – e.g., traditional and new approaches to evaluation</li> <li>2. <b>Applied Psychology and Health:</b> A multi-level approach.</li> <li>3. <b>Wellness</b> - e.g., Touch and well-being</li> <li>4. <b>Teaching &amp; Learning</b> - e.g., Use of Virtual Clinics in training</li> <li>5. <b>Public and Mental Health, and Disability Services</b></li> </ol> <p>Note: Examples of possible multi-disciplinary work are included under each area above.</p>
	1.3 Monitor the research activity/outputs in core areas (or Strength Groups)	<ul style="list-style-type: none"> <li>• Nominated leaders of each group to monitor progress and prepare a report on projects &amp; outputs annually.</li> <li>• SHSRC and SHS Executive to monitor performance in core areas.</li> </ul>
	1.4 Consider other areas of research strength if performance indices and/or constraints warrant it	As per 1.1 above

All	<b>2. Developing Strategic Collaborations, Partnerships and Alliances</b>	
	2.1 Identify existing collaborations of strength	See 1 Above.
	2.2 Consider how the School should relate to associated centres (e.g., Parenting Research Centre and the Education Program for Infants and Children).	<ul style="list-style-type: none"> <li>• SHSRC to review how the school can better relate to these centres in light of the changing profile of staff</li> <li>•</li> </ul>
	2.3 Consider how the school can expand its collaborations to reflect the changing profile of staff with the school	<ul style="list-style-type: none"> <li>• Examine partnerships with other schools of health sciences (e.g., ATN or 'neighbours')</li> <li>• Seek other forms of 'industry' collaboration, some of which may be aligned to professional bodies.</li> <li>• Discipline Heads to review research emphases within their discipline. This review will be used to chart avenues for future multidisciplinary research (in addition to discipline-specific work).</li> </ul>
3	<b>3. Increasing Funds for Research and Related Activities</b>	
	3.1 Increase funds within the school to support research	HoS and Executive to determine budget allocations for research within the School
	3.2 Develop a general funding model that is best aligned to the schools goals for research	<p>HoS and SHSRC will:</p> <ul style="list-style-type: none"> <li>• debate the pros and cons of different funding models</li> <li>• determine the relative proportion of funds allocated to: <ul style="list-style-type: none"> <li>○ Strategic projects (building on areas of strength and multidisciplinary focus): ie, grants to assist staff to develop and implement projects in areas of strength</li> <li>○ Seed projects</li> <li>○ Early-career staff</li> <li>○ Travel grants &amp; PEP</li> <li>○ Other</li> </ul> </li> </ul>
	3.3 Develop <i>specific</i> research initiatives that will receive SHS funding	Group/cluster leaders to consult relevant researchers and plan activities of strategic importance; these activities will be reviewed by SHSRC for internal funding

		<p>SHSRC to review funding requests from strength groups and advise executive on the main areas of strategic importance</p> <p>SHSRC to make recommendations about other funded research initiatives that cut across strength groups.</p> <p>Possibilities include:</p> <ul style="list-style-type: none"> <li>• Establish PhD scholarships aligned to each Strength Group (see also 9.2).</li> <li>• Establish postdoc stipends aligned to each Strength Group</li> <li>• Establish and equip a multi-purpose SHS Research Lab (see 4.1)</li> <li>• Employ a part-time <b>Lab Technician</b> with suitable skills in software programming (see 4.6)</li> <li>• Employ a part-time <b>Statistics Specialist</b> with skills in AMOS, SPSS, and NVIVO.</li> <li>• Establish a number of finishing scholarships for current HDR students (see 9.3).</li> </ul> <p>Other options:</p> <ul style="list-style-type: none"> <li>• Develop early-career grants for emerging researchers</li> <li>• Provide travel grants to support international collaborations (grant writing, feasibility studies, etc).</li> </ul>	
	3.4	Implement targeted research initiatives in the most immediate funding cycle	HoS and Executive to approve release of research funds
All	<b>4.</b>	<b>Improving Research Infrastructure/Resources on Both Campuses</b>	
	4.1	Develop a designated research laboratory for SHS	Provide access to the research laboratory in Building 201 (Level 4) to staff working on projects deemed to require and benefit from this facility.
	4.2	Acquiring research equipment/apparatus for research teams / projects that are deemed to require and benefit from this equipment.	
	4.3	Provide office space for academics taking study leave in the School, visiting scholars, etc.	
	4.4	Develop a common room where staff and higher degree by	Fit out a common room (on 201.4) with suitable furniture;

	research students can meet informally over a cup of coffee/tea to discuss research ideas and opportunities.	seek staff input on this.
	4.5 Reviewing whether the Psychology Clinic and Complementary Medicine Clinics can better be used as research resources. The broad aim is to increase utilization of client databases.	Review the types of data recorded in our various clinics; enlist the help of Business postgraduate students. Develop a common database system within the school.
	4.6 Employing staff on a project basis to support research that is jointly funded by the school (i.e., technical staff for programming, building electronic and mechanical equipment, developing audio visual aids, etc).	Covered by funding for projects in designated areas of strength
	4.7 Paying successful researchers (e.g., retired academics) to assist staff to develop research topics, and prepare grant applications and publications.	
	4.8 Developing 'participant pools' where appropriate, from students, staff, clients of the clinics, and the community.	Discipline leaders to consider this within the context of their own clinics
<b>All</b>	<b>5. Improving Research Culture of the School</b>	
	5.1 Establishing opportunities for staff to discuss their research and hear about the research of colleagues inside and outside the School	For example, establish a <b>Research Round</b> (scheduled at a set time each week or fortnight during semester), and other fora on an ad hoc basis.
	5.2 Encouraging high calibre researchers from other universities to take their study leave in the School, or come as visiting scholars.	Encourage established researchers within the school to consider applying for Fellowships, supporting international colleagues.
	5.3 Encouraging more experienced staff to include less experienced staff in their research programs	Encourage established researchers within the school to mentor the development of emerging staff – e.g., writing/reviewing early-career and other grants; co-authoring a paper; etc.
	5.4 Encourage staff to support research forums within SHS	Build expectations regarding attendance at research forums into workplan models
<b>1, 3, 4</b>	<b>6. Creating Time for Pursuing Research</b>	
	6.1 Implement revised teaching allocation models in the School to ensure that staff who are publishing their research receive as much relief from teaching and administration as possible.	Part of current workload model
	6.2 Reviewing teaching and administrative roles to see if outcomes can be achieved more efficiently.	Part of current revisions to teaching and administrative models
	6.3 Reviewing administrative support for academic staff.	
	6.4 Reviewing policies in the School related to study/sabbatical leave	

	to make them more supportive of research activity.	
	6.5 Supporting staff who wish to take study/sabbatical leave.	Within-discipline funding will be at the discretion of each executive. Encourage staff to apply for Research Leave Awards at the University level, where track record is appropriate.
<b>1</b>	<b>7. Developing Research Plans at the Individual Level</b>	
	7.1 Encouraging staff to develop their own individual research plans as part of their Work Plans, with a mentor, including targets for research income and publications, in the short- and long-term.	<ul style="list-style-type: none"> <li>• Discipline leaders to assign <b>mentors</b> to new and emerging staff; these mentors to attend workplan meetings and maintain liaison</li> <li>• SHSRC to provide a mentoring role by reviewing potential grant applications (internal and external) for early-career staff and those without a strong track record in research</li> </ul>
<b>1</b>	<b>8. Appointing New Academic Staff</b>	
	8.1 Research track record should be a major selection criterion in all future appointments of academic staff.	<ul style="list-style-type: none"> <li>• Discipline heads to ensure that this features in selection criteria and process</li> <li>• HoS to consider new Professorial appointments to stimulate research, consistent with new SEH targets</li> </ul>
	8.2 Appointments should take account of agreed research concentrations of the School.	As above
	8.3 Consideration should be given for bringing research-active staff into the School via adjunct and honorary appointments.	This can be considered on an ad hoc basis according to our research priorities
<b>2</b>	<b>9. Increasing Postgraduate Research Student Enrolments and Completions</b>	
	9.1 Advertising to attract excellent postgraduate research students to RMIT.	<ul style="list-style-type: none"> <li>• Use existing marketing brochures</li> <li>• Update SHS website to reflect the range, strengths, and quality of our research</li> </ul>
	9.2 Attract talented HDR students to SHS, and their involvement in Strength Groups.	<ul style="list-style-type: none"> <li>• Establish PhD Scholarships aligned to each of the five Strength Groups within SHS</li> </ul>
	9.3 Reviewing how the School can assist postgraduate students successfully complete their research by, for example, reviewing	<ul style="list-style-type: none"> <li>• Consider establishing a set of Finishing Scholarships for current HDR students</li> </ul>

	funds available to them, support mechanisms, processes, etc.	<ul style="list-style-type: none"> <li>Consider common courses in research methods to assist high-level postgraduate research</li> </ul>
	9.4 Reviewing how the School can assist supervisors develop their supervision skills.	<ul style="list-style-type: none"> <li>Staff are currently obligated to attend at least two training sessions per year</li> </ul>
	9.5 Acquiring more office space for postgraduate research students (eg 201.4).	
	9.5 Incoming students should be oriented to projects that are likely to deliver publishable outcomes and leverage possible funding.	
4	<b>10. Translating Student Research and Theses into Publications</b>	
	10.1 Consider ways to encourage PhD students to publish whilst completing PhD and/or to translate student theses into publications.	<ul style="list-style-type: none"> <li>Encourage staff to adopt a writing-focused approach to supervision, one aligned to publication</li> <li>Create monetary incentives for students who publish their PhD research</li> <li>Encourage students to present their work at conferences that have associated special editions.</li> </ul>
1, 2	<b>11. Improving Research Skills of Staff and Postgraduate Students</b>	
	11.1 Consider training in writing grants.	<ul style="list-style-type: none"> <li>Encourage staff to attend special workshops convened by SET or R&amp;I</li> </ul>
	11.2 Consider training in publishing.	As above.
	11.3 Consider training in statistics/methodologies.	<ul style="list-style-type: none"> <li>Encourage staff to attend special workshops on research methods that are aligned to their current work</li> <li>Create a resource folder on different research methodologies that staff show some expertise with; post this on "I" drive</li> <li></li> </ul>
	11.4 Consider training in presentation skills	<ul style="list-style-type: none"> <li>Encourage students to attend workshops provided by GRO.</li> </ul>

# **APPENDIX A - IMPLEMENTING THE PLAN AND MONITORING PROGRESS**

## **1. Action Plan**

- 1.1 At the end of each year, the School Research Committee will develop an Action Plan for the following year that will outline how the Strategic Plan will be implemented that year.

## **2. Monitoring Progress Against the Research Strategic Plan**

- 2.1 A School research report should be produced annually documenting performance and commenting on progress against the Plan.
- 2.2 At the end of each year, Discipline Heads will review the performance of their unit against the Action Plan and report to the HoS.
- 2.3 The School should benchmark its performance against Australian health science schools by reviewing annual reports and periodically carrying out in-depth comparisons with appropriate schools.

## **APPENDIX B – CURRENT AREAS OF RESEARCH CONCENTRATION**

### **CORE AREAS \***

1. **Chinese Medicine** (inc. pharmacology, quality, safety and efficacy)
2. **Applied Psychology and Health** (inc. models and treatment of developmental disorders; children's psychological well-being; parenting; resilience; virtual, multimodal, and tele-rehabilitation; professional psychology practice; program evaluation and change measurement)
3. **Wellness** (inc. Touch, Pain Management, efficacy of complementary medicine)
4. **Teaching & Learning** (inc. new models for teaching; e-learning)
5. **Public and Mental Health, and Disability Services**

Notes: \*These areas are both existing areas of strength and offer greatest leverage for multidisciplinary work.

### **OTHER AREAS**

- Clinical and health psychology
- Educational and developmental psychology
- Cross-cultural psychology
- Health economics and information management in Chinese Medicine and osteopathy, and database development
- Clinical neuroscience examining biological mechanisms underpinning the practice of manual therapies (chiropractic)
- Clinical effectiveness of complementary medicine including osteopathic and chiropractic treatment
- Nursing and midwifery: Theory, practice, management, and education

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