



THE UNIVERSITY OF  
WESTERN AUSTRALIA

### Operational Priorities Plan 1999-2000

#### RESEARCH PRIORITIES - ACTIVITIES TO DATE

Overall responsibility - Pro Vice-Chancellor (Research and Innovation)

Priorities/Objectives	Targets/Indicators of Success	Implementation Strategies	Activities to Date	Delivery of Targets
<ul style="list-style-type: none"> <li>Improving and encouraging greater research productivity/output and international impact.</li> </ul>	<ul style="list-style-type: none"> <li>Increase the citation impact of UWA publications (in at least three of the major fields of research) to coincide with their national ranking on percentage of papers cited.</li> <li>Increase the international visibility and recognition of University research and research outcomes.</li> </ul>	<ul style="list-style-type: none"> <li>Review of UWA publication assessment exercise to place more weight on national and international impact in the 1999 publication collection.</li> <li>Develop and implement a system of Publication Awards to recognise excellence in the 1999 publication collection.</li> <li>Develop more visible University structures, such as the proposed establishment of an Institute of Advanced Studies and Graduate Studies, to help raise the profile of UWA internationally.</li> <li>Host at least two international conferences in 2000.</li> <li>Attract at least one Nobel Laureate to UWA in 2000, as part of enhancing the Distinguished Visitors Scheme.</li> </ul>	<ul style="list-style-type: none"> <li>Review of publications deferred pending the implementation of the DETYA Institutional Grants Scheme and the Research Training Scheme.</li> <li>University Initiative Fund (UIF) grant of \$307,000 awarded in 1999 to support the establishment of an Institute of Advanced Studies (IAS), its administrative structures and associated programs.</li> <li>Central Research Allocation (CRA) reserves of \$54,000 used to support four IAS Research Awards.</li> <li>Postgraduate Research School established in 2000 with funding for a full-time Dean and secretary, a full-time postgraduate education officer and associated programs.</li> <li>Funding provided for an additional staff member in the Postgraduate Research and Scholarships Office to administer Masters by Research (by thesis) candidature.</li> </ul>	<ul style="list-style-type: none"> <li>In the first year of operation of the Institute of Advanced Studies two cross-disciplinary programs were conducted; 37 visitors came to campus exclusively by invitation of the IAS and an additional 27 presented a paper or lecture for the IAS during a visit to the campus. A total of 5000 people attended these events.</li> </ul>
<ul style="list-style-type: none"> <li>Increasing research collaborations, particularly with internationally distinguished research partners.</li> </ul>	<ul style="list-style-type: none"> <li>Obtain at least one major international linkage program in each faculty.</li> </ul>	<ul style="list-style-type: none"> <li>Introduce an International Collaboration Development Scheme to facilitate the negotiation and establishment of major international linkages.</li> <li>Increase the knowledge base of international funding programs by using information networks such as SPIN and Knowledge Express.</li> <li>Establish staff exchange agreements with several leading international research universities.</li> <li>Encourage and support increased multi-disciplinary research activity.</li> </ul>	<ul style="list-style-type: none"> <li>Implemented SMARTS/GENIUS as a more targeted approach to supplying information on funding opportunities to researchers.</li> <li>Tested KnowledgeExpress with select researches and concluded that it was of limited use.</li> </ul>	<ul style="list-style-type: none"> <li>The ARC Special Research Centres of COFS and Tectonics have forged strategic international partnerships.</li> <li>See also UWA success with the IREX scheme and the Wellcome Trust.</li> <li>The Internationalisation review has made recommendations and these will be implemented in 2001.</li> </ul>

Priorities/Objectives	Targets/Indicators of Success	Implementation Strategies	Activities to Date	Delivery of Targets
<ul style="list-style-type: none"> <li>Increasing the number of postdoctoral research fellowships and high quality postgraduate students, attracted, and supported, nationally and internationally.</li> </ul>	<ul style="list-style-type: none"> <li>Attract a minimum of four new ARC Research Fellows in 2000.</li> <li>Attract one new Senior Research Fellowship in 2000.</li> <li>Increase to 20 the number of interstate postgraduate scholarship applicants ranked in the top one hundred candidates for APA/UPA awards in 1999.</li> <li>Increase by 20% the number of international postgraduate research students by 2000.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that there are 20 high quality, competitive ARC Fellowships applications from UWA.</li> <li>Target at least two senior researchers as applicants for the McFarlane Burnett Fellowship Schemes or the ARC Senior Research Fellowship Scheme.</li> <li>Seek to implement incentives to attract high quality interstate postgraduate scholarships applicants such as:- <ul style="list-style-type: none"> <li>Summer Vacation Scholarships (10 @ \$3,500) and Honours Scholarships (10 @ \$12,500) to attract interstate students to UWA before they graduate.</li> <li>Top-up Awards (10 @ \$2,500).</li> <li>Additional Relocation Allowances (20 @ \$2,000).</li> </ul> </li> <li>Review international postgraduate research student fee policies and administrative processes to ensure that they are not deterrents to the recruitment of high quality research students by strong research areas.</li> <li>Actively promote international funding agencies such as AusAID.</li> </ul>	<ul style="list-style-type: none"> <li>Hosted an information forum on the ARC Fellowship application round; collaborated with the Centre of Staff Development (CSD) to host seminars on the art of writing successful grants and workshops on peer evaluation of applications.</li> <li>UIF grants awarded to support the following: <ul style="list-style-type: none"> <li>\$305,000 (\$153,000 in 1999 and \$152,000 in 2000) towards postgraduate scholarships, including 5 full-fee exemption UPAs, 20 Summer Vacation Scholarships and 10 Winthrop Scholarships;</li> <li>\$108,000 in 2000 for 12 Honours Scholarships;</li> <li>\$233,000 towards the full cost of awarding 6 UPRFs in 2000.</li> </ul> </li> </ul> <p>The UIF grants above are to be supplemented by \$399,250 of CRA reserves.</p>	<ul style="list-style-type: none"> <li>13 ARC Fellowships were awarded in 2000: 8 APDFs, 2 ARFs, 2 QEIs and 1 SRF.</li> <li>6 UPRFs awarded in 2000 from 43 high quality applications.</li> <li>Number of interstate postgraduate scholarship applicants ranked in the top 100 candidates from APA/UPA awards increased from 12 in 1999 to 17 in 2000.</li> <li>Number of international postgraduate research full-fee enrolled students increased by 20% from 125 in 1999 to 150 in 2000.</li> </ul>

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<ul style="list-style-type: none"> <li>Increasing per capita external research funding from all sources, with particular emphasis on international and industry sources:</li> </ul>				
<ul style="list-style-type: none"> <li>Improving ARC performance</li> </ul>	<ul style="list-style-type: none"> <li>Attract one new Special Research Centre in 2000.</li> <li>Increase by 10% ARC Large Grant funding in 2000, and to increase UWA's national ranking (per FTE) to within the top 4 universities.</li> <li>Attract at least 4 ARC Large Grants in the Humanities/Social Sciences in 2000 that request the salary of a Research Associate/Senior Research Associate.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that there are four high quality, competitive SRC applications from UWA.</li> <li>Hold information sessions and workshops on writing successful ARC Large Grants.</li> <li>Improve the targeted assistance and mentor program in the Faculty of Arts and Faculties of ECEL to help researchers develop more competitive ARC Large Grant applications.</li> <li>Develop incentives and rewards for staff whose research grant applications pass the first ARC assessment stage.</li> </ul>	<ul style="list-style-type: none"> <li>Provided targeted assistance in writing five SRC applications in the 2000 round.</li> <li>Hosted an information forum on the ARC Large Grant application round; collaborated with CSD to host seminars on the art of writing successful grants and workshops on peer evaluation of applications.</li> <li>Seconded the Manager of the Research Grants Office to DETYA to work with the ARC panels to view the assessment process.</li> <li>Convened a meeting of the Executive Deans of Arts and ECEL and the Director of CSD to discuss the possibility of implementing a targeted assistance and mentor program. As a result of this meeting ECEL is planning to employ a dedicated officer in this developmental role in 2000.</li> <li>Initiated the Research Assistance Program (RAP) which is a register of UWA staff with affiliations or proven success in the ARC (and NHMRC) who can be contacted for advice on grant application.</li> </ul>	<ul style="list-style-type: none"> <li>ARC Large Grants commencing in 2000 increased by 18% from \$1.525 million in 1999 to \$1.807 million in 2000. However, the 2000 figure is still \$0.197 million short of the 1998 total.</li> <li>4 ARC Large Grants in 2000 requesting the salary of a Research Associate/Senior Research Associate were in the Humanities/Social Sciences.</li> </ul>

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- Improving NHMRC performance	<ul style="list-style-type: none"> <li>To increase by 10% NHMRC Project Grant funding in 2000, and to maintain UWA's national number one ranking of funding per FTE.</li> </ul>	<ul style="list-style-type: none"> <li>Hold information sessions and workshops on writing successful NHMRC Project Grants.</li> </ul>	<ul style="list-style-type: none"> <li>Hosted an information forum on the NHMRC Grant application round; collaborated with CSD to host seminars on the art of writing successful grants and workshops on peer evaluation of applications.</li> <li>Convened a meeting of senior NHMRC researchers to discuss strategies to improve UWA's success in the NHMRC Training Fellowship Schemes. A number of suggestions are being pursued.</li> </ul>	<ul style="list-style-type: none"> <li>NHMRC Project Grants commencing in 2000 decreased by 21% from \$3.196 million in 1999 to \$2.521 million in 2000, but was still \$0.136 million more than in 1998.</li> </ul>
- Improving research funding from international sources, particularly through research contracts.	<ul style="list-style-type: none"> <li>To attract at least two IREX Fellowships and one Wellcome Trust Fellowship in 2000.</li> </ul>	<ul style="list-style-type: none"> <li>Target senior and successful researchers to help identify and apply for international funding opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>Approached senior researchers to apply for IREX fellowships. The result was 14 applications submitted in the 2000 round (12 more than last year).</li> </ul>	<ul style="list-style-type: none"> <li>9 IREX Awards and 1 IREX Fellowship were awarded in 2000 compared with none the previous year.</li> <li>1 Wellcome Trust Fellowship was awarded in 2000 with \$1.078 million of funding over 5 years.</li> </ul>
- Increasing research funding from the State Government.	<ul style="list-style-type: none"> <li>To increase by 20% State Government funding by 2000.</li> <li>For each faculty to have at least one academic staff member whose salary is provided for 50% by State Government agencies in 2000.</li> </ul>	<ul style="list-style-type: none"> <li>Target researchers with timely information on State Government contracts and tenders.</li> <li>Promote collaborative links between researchers and State and Local Government agencies.</li> </ul>	<ul style="list-style-type: none"> <li>Investigated the possibility of commissioning the services of a tender agency.</li> </ul>	<ul style="list-style-type: none"> <li>State Government funding increase by 3% from \$6.108 million in 1998 to \$6.303 million in 1999. As at 30 June 2000 estimates show that State Government research income is \$4.079 million or 65% of the total last year.</li> </ul>
- Increasing research funding from industry, principally through increasing the number of strategic links with industry partners	<ul style="list-style-type: none"> <li>To increase by 20% Industry funding in 2000.</li> <li>To attract one new Cooperative Research Centre in 1999.</li> <li>To attract a minimum of four new SPIRT Grants in the Social Sciences in 2000.</li> </ul>	<ul style="list-style-type: none"> <li>Promote strategic links between researchers and industry partners.</li> <li>Ensure that there are four high quality, competitive CRC applications involving UWA.</li> <li>Implement a targeted assistance and mentor program in the Faculties of ECEL to help researchers develop competitive SPIRT applications.</li> </ul>	<ul style="list-style-type: none"> <li>Prepared a discussion paper on Building Strategic Partnerships with Industry – Industry Research Funding, Technology Transfer &amp; Commercialisation. Several recommendations have been made.</li> <li>Provided targeted assistance in the writing of CRC applications in the 1998 round. The outcome was UWA is a core participant in four successful CRCs.</li> <li>Hosted an information forum on the SPIRT application round.</li> </ul>	<ul style="list-style-type: none"> <li>Industry contract research increased by 39% from \$1.808 million in 1998 to \$2.511 million in 1999. As at 30 June 2000 estimates show that industry research income is \$1.263 million or 50% of the total last year.</li> <li>UWA was named as a core partner in 4 successful CRCs in 1999. Commonwealth funding to UWA over the seven years of each centre is estimated at \$4.903 million.</li> </ul>

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<ul style="list-style-type: none"> <li>Improving the provision of capital and infrastructure (including the Library) to support increased research activity.</li> </ul>	<ul style="list-style-type: none"> <li>To recover \$2 million of infrastructure from research grants and contracts in 1999.</li> <li>To increase the proportion of Faculties' budgets spent on research infrastructure by 10%.</li> </ul>	<ul style="list-style-type: none"> <li>Review University infrastructure policy, including the possibility of applying charge-out rates.</li> <li>Review the budget allocations and procedures for the provision and maintenance of major research infrastructure.</li> <li>Increase to 50% the proportion of infrastructure recovered by faculties.</li> <li>Distribute at least 70% of Research Quantum and Research Infrastructure Block Grant funding to Faculties.</li> <li>Develop strategies to meet shortfalls in infrastructure funding associated with research grants.</li> </ul>	<ul style="list-style-type: none"> <li>Established a working party to review university infrastructure policy and members have considered an options paper on the method of charging infrastructure. Case studies are being prepared to compare the full cost of research undertaken in different cost centres.</li> <li>USF grant awarded in 2000 of \$0.120 million to support a Research Contracts &amp; Finance Officer to ensure appropriate costing of University research infrastructure charges.</li> </ul>	<ul style="list-style-type: none"> <li>Recovery of research infrastructure decreased by 28% from \$0.928 million in 1998 to \$0.667 million in 1999, but this is mainly due to a discrepancy with CELT. Currently, an infrastructure audit of 1999 research consultancy income is being undertaken.</li> </ul>
<ul style="list-style-type: none"> <li>Improving the commercialisation and management of intellectual property.</li> </ul>	<ul style="list-style-type: none"> <li>To increase the revenue return from commercialisation of University research outcomes, including the commercialisation of University research through equity holding in at least one 'spin-off' company by 2000.</li> </ul>	<ul style="list-style-type: none"> <li>Increase researcher awareness of appropriate and timely protection of intellectual property by establishing a program of IP audits of departments to identify potential areas for proactive commercialisation through TIM and other agencies with access to venture capital funds.</li> <li>Benchmarking with successful universities in this area, to determine appropriate structures and strategies.</li> </ul>	<ul style="list-style-type: none"> <li>Strategy review convened November 1999 with overseas experts.</li> <li>Office of Industry and Innovation established.</li> <li>\$500,000 pa committed over 2000-2002 to expand activities in industry liaison and commercialisation.</li> <li>Manager (part-time) of commercialisation appointed.</li> <li>Commercialisation 'adviser' network established.</li> <li>Audit conducted of industry-related activities.</li> <li>All research grants and contracts administration consolidated in Research Services.</li> </ul>	<ul style="list-style-type: none"> <li>Spin-off company Advanced Powder Technologies Pty Ltd (APT) established with \$7.5 million of funding from Samsung-Corning. Acquisition by UWA of 76.5% of shares in APT in consideration for the transfer of UWA's nanopowder technology to a joint venture company owned 50:50 by APT and Samsung. Samsung invested \$6.0 million in the joint venture and a further \$1.5 million in APT to support APT's R&amp;D efforts. UWA's share holding in APT is currently valued at approximately \$10 million.</li> <li>Over 20 other major commercialisation projects under active management (see attached), with several nearing successful licensing or other investment.</li> </ul>