



Developing a Nature publishing culture within an aspirational research university

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Nature Publishing Index 2010 Asia-Pacific

What is the Nature Publishing Index Asia-Pacific?

- It is maintained by the Nature Publishing Group.
- It records the Asia-Pacific author affiliations (institutions and countries/territories) for primary research articles published in the Nature family of journals.
- Institutions and countries are ranked by the sum of the corrected counts (article counts adjusted for contribution of each institution/country to each article) for each one-year period.
- The Index is updated weekly online and adjusted to reflect the latest rolling 12-month period: <http://www.natureasia.com/en/publishing-index/>
- The Index is published once per year to provide details specifically on each calendar year.

Number of institutions covered

This fluctuates weekly, depending on the number of institutions which have published articles in the Nature family of journals, but is of the order of:

- 450 institutions in the Asia-Pacific; and
- 55 institutions in Australia.

Nature Publishing Index 2010 Asia-Pacific

NATURE PUBLISHING INDEX AUSTRALIA

2010					2009		
RANK	INSTITUTION	CORRECTED COUNT	ARTICLES	ASIA-PACIFIC RANK	RANK	CORRECTED COUNT	ARTICLES
1	The University of Sydney	4.15	18	13	5	3.13	9
2	The University of Queensland	3.90	15	14	2	4.30	17
3	Monash University	3.25	10	19	6	2.21	9
4	Commonwealth Scientific and Industrial Research Organisation	2.98	12	21	9	1.12	6
5	The University of New South Wales	2.74	13	24	10	1.08	5
6	The University of Melbourne	2.61	17	25	3	3.78	21
7	Griffith University	2.20	6	30	27	0.18	5
8	Australian National University	2.14	9	32	1	4.65	15
9	The Walter and Eliza Hall Institute of Medical Research	1.65	7	43	4	3.33	9
10	Macquarie University	1.52	4	48	20	0.35	3

Nature Publishing Index 2010 Asia-Pacific, 2011, NPG Nature Asia-Pacific, Tokyo.

“Griffith soars in rankings”



Rowbotham, J 2011, 'Griffith soars in rankings', *The Australian*, 30 March, p. 31 <http://www.theaustralian.com.au/higher-education/griffith-university-soars-in-rankings/story-e6frgcjx-1226030262316>



Impact of Nature and Science publication profile

Academic Ranking of World Universities (Shanghai Jiao Tong rankings)

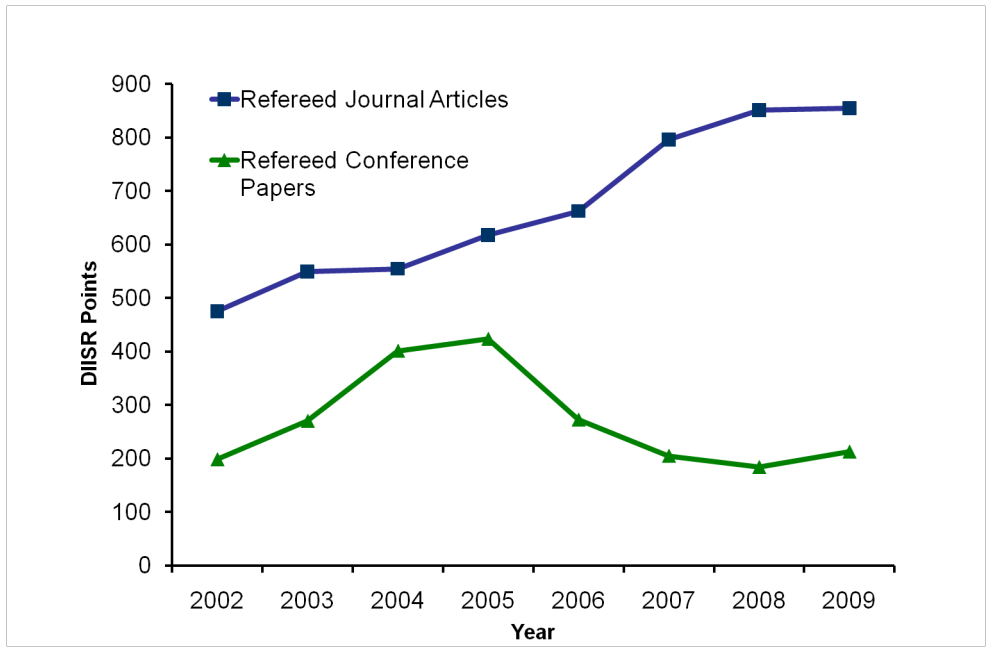
The ARWU ranking method* uses six indicators of academic or research performance, weighted as follows:

- | | |
|---|------------|
| (1) Alumni of an institution winning Nobel Prizes and Fields Medals | 10% |
| (2) Staff of an institution winning Nobel Prizes and Fields Medals | 20% |
| (3) Highly cited researchers in 21 broad subject categories | 20% |
| (4) Papers published in <i>Nature</i> and <i>Science</i> | 20% |
| (5) Papers indexed in Science Citation Index-expanded and Social Science Citation Index | 20% |
| (6) Per capita academic performance of an institution | 10% |

* <http://www.arwu.org/ARWUMethodology2010.jsp>

Nature success is part of a broader strategy

In 2006, Griffith University focussed on driving publishing behaviour away from conference proceedings and to (indexed) journals:



While successful, there was no focus on the quality of the journal and so very high quality journals were not targeted – the ARWU highlighted this as a potential weakness for Griffith.

What did we do?

The change in publishing culture was embedded in research strategy rather than tactical responses to the rankings

- Investment in infrastructure



Griffith Health Centre



Sir Samuel Griffith Centre



Glycomics Institute



Eskitis Institute



Smart Water Research Centre



Science, Engineering and Architecture



What did we do?

- Investment in high quality researchers
(Next-Phase Appointments, Areas of Strategic Investment)
- Organisational strategy (Research Centres Policy)
- Dispelling the urban myths about publishing in very high quality journals such as *Nature* and *Science*
- Encouragement funding for Nature and Science publication
- Research Excellence Awards



Urban myths about publishing in *Nature* and *Science*

- (1) Publishing in *Nature* and *Science* takes much longer than publishing in other journals**
- (2) Attempting publication in *Nature* or *Science* will significantly delay publication of your paper if you are rejected**
- (3) You can only get published in *Nature* and *Science* if you are part of large research consortia**
- (4) You can only get published in *Nature* and *Science* if you do so on the coat-tails of a “top 100” university**



Summary Journal Information¹ - *Nature*

Impact Factor (2008)²	31.434
Publication Frequency	Weekly issues, though original research is published online in advance of the print issue
Aims and Scope	'...publishing the finest peer-reviewed research in all fields of science and technology on the basis of its originality, importance, interdisciplinary interest, timeliness, accessibility, elegance and surprising conclusions...'
Disciplines³ of the original research articles (sampled Jan-April 2010)	Approx 60% = Biological Sciences Approx 15% = Physical Sciences Approx 15% = Chemical Sciences Approx 10% = Earth and Environmental Sciences
Times to publication	35-40 days (average) for submission to a decision on publication (for papers sent for peer review). (Revisions and editing takes additional time.)
Rejection of manuscripts	Approx 7% of submitted manuscripts are accepted for publication. Most papers are rejected without being sent to peer reviewers, usually within 7-10 days of submission.

¹Information in table obtained from journal website (<http://www.nature.com/nature>) and from email contact with editorial staff, Jan 2010.

²Journal Citation Reports, ISI Web of KnowledgeSM

³*Nature* assigns their research articles to subjects on their website (http://www.nature.com/nature/research/research_by_subject.html)



Summary Journal Information¹ - Science

Impact Factor (2008)²	28.103
Publication Frequency	Weekly issues, though selected articles are published online in advance of the print issue
Aims and Scope	'seeks to publish those papers that are most influential in their fields and that will significantly advance scientific understanding. Selected papers should present novel and broadly important data, syntheses, or concepts.'
Disciplines³ of the original research articles (sampled Jan-April 2010)	Approx 55% = Life Sciences Approx 44% = Physical Sciences (approx 19% Physics approx 13% Chemistry approx 12% Earth Sciences) Approx 1% = Other subjects (Economics, Education)
Times to publication	Most papers are published within 14 weeks of initial submission.
Rejection of manuscripts	Less than 8% of submitted manuscripts are accepted for publication. Approximately 80% of manuscripts are rejected during an initial screening stage, usually within 7-10 days.

¹Information in table obtained from journal website (<http://www.sciencemag.org>)

²Journal Citation Reports, ISI Web of KnowledgeSM

³Science assigns their research articles to subjects on their website (<http://www.sciencemag.org/content/332/6027.subject-index>)



Urban myths about publishing in *Nature* and *Science*

(1) Publishing in *Nature* and *Science* takes much longer than publishing in other journals

No – it usually only takes a few months

(2) Attempting publication in *Nature* or *Science* will significantly delay publication of your paper if you are rejected

Not usually – authors of rejected papers are usually notified in 7-10 days

(3) You can only get published in *Nature* and *Science* if you are part of large research consortia

The experiences of Griffith researchers show this is not true

(4) You can only get published in *Nature* and *Science* if you do so on the coat-tails of a top 100 university

The experiences of Griffith researchers show this is not true



Don't ignore the Nature 'family' of publications

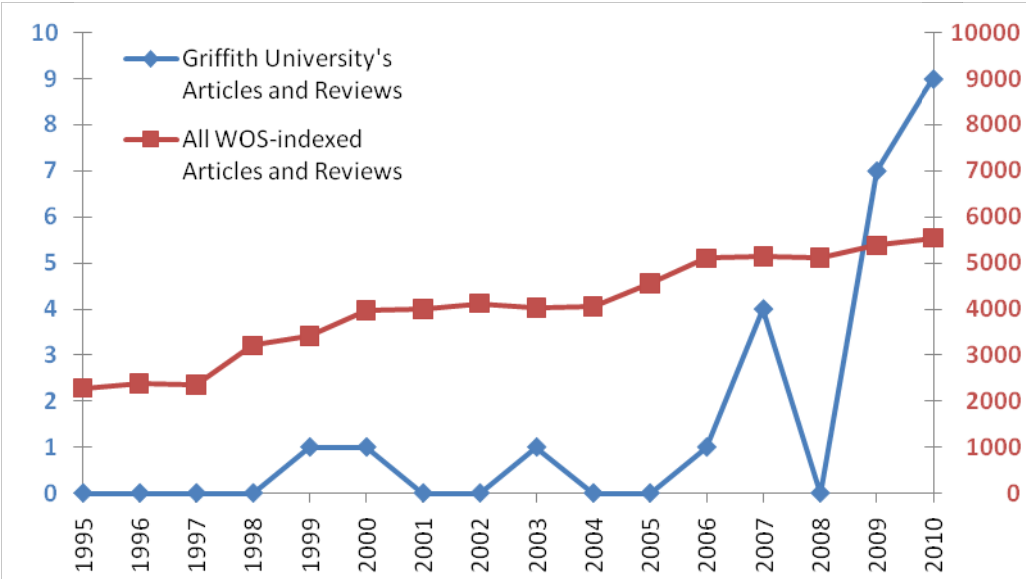
Griffith researchers often preferred to target the Nature 'family' of publications, expanding our research impact to the following:

Journal	Impact Factor (2011)
Nature	34.48
Nature Genetics	34.28
Nature Reviews Drug Discovery	29.06
Nature Medicine	27.13
Nature Photonics	22.86
Nature Reviews Microbiology	17.64
Nature Physics	15.49
Science	29.47

Thirteen Nature journals have an Impact Factor greater than 25.

How have we done?

Publishing in very high quality journals has increased markedly



	Griffith University	All WOS-indexed publications
1996-2000	2	15,344
2001-2005	1	20,756
2006-2010	21	26,295

Web of Science-indexed publications* in *Science*, *Nature*, the Nature family of journals, and the *New England Journal of Medicine*

* <http://apps.isiknowledge.com/>, accessed April 19, 2011



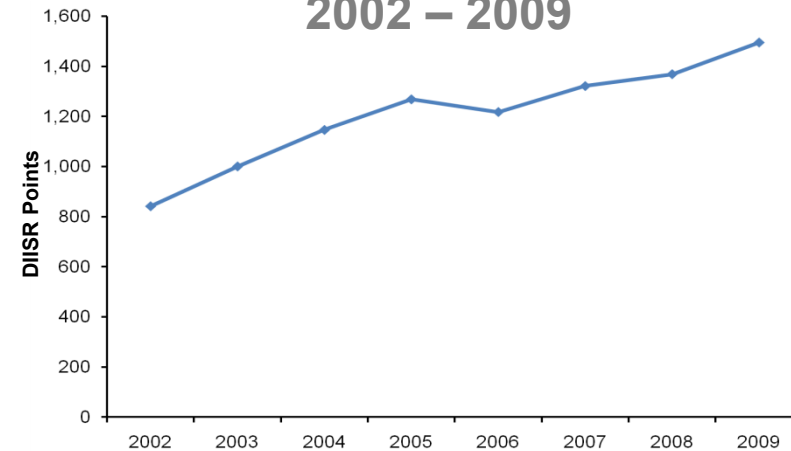
Impact on other research performance criteria

Focussing on increasing publication in very high quality journals has not negatively impacted on the overall publication rates of Griffith researchers:

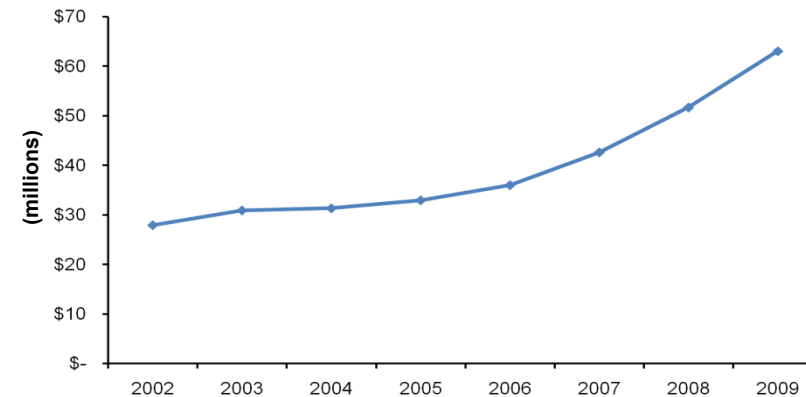
There has also been a positive impact on researchers' success in obtaining research grant income:

(Weighted) Research Publications

2002 – 2009



Research Income 2002 – 2009





Developing a Nature publishing culture – lessons from the process

- Aspirational targets around quality publication output need to be underpinned by strategic approaches to research quality
- These need to involve
 - Investment in people
 - Investment in infrastructure
 - Alignment of investment with strategy
 - Executive commitment
 - Communicating outcomes
- Tactical approaches to rankings and performance measures are unlikely to work, or at least be sustainable
- Effective strategies improve rankings in multiple arenas
- Rankings vary over time but trends count