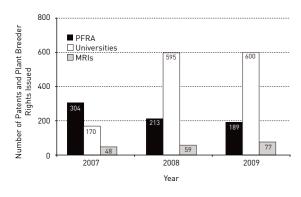
#### INTELLECTUAL PROPERTY ACTIVITY

- The number of invention disclosures increased 24% from 1,206 in 2007 to 1,498 in 2009.
- The number of patent filing decreased from 1,301 in 2007 to 1,061 in 2008, increasing again in 2009 to 1,234.
- The number of patents and plant breeder rights issued increased by 66% from 522 in 2007 to 866 in 2009.
- The total stock of patents and plant breeder's rights declined from 11,237 in 2007 to 10,422 in 2009.

### Number of patents and plant breeder rights issued 2007-2009



#### START-UP COMPANY ACTIVITY

- Capital raising for research commercialisation activities declined from \$199m in 2007 to \$138m in 2009. In 2008, only \$67m was raised.
- New start-up company formation declined from 37 in 2007 to 16 in 2008 and 27 in 2009.
- Operational start-up companies decreased from 247 in 2007 to 216 in 2009.

#### COMMERCIALISATION RESOURCING

Net commercialisation costs, including marketing, legal, staff and non-staff costs for 2008 were \$115m and for 2009 were \$121m. The 2008 and 2009 survey was the first to collect data against this metric.



Department of Innovation Industry, Science and Research

# NATIONAL SURVEY OF RESEARCH COMMERCIALISATION 2008 and 2009

A summary of commercialisation activity in Australia's Research Institutions.

#### DAITA OT DETAIL C

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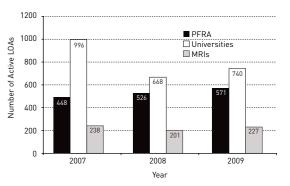
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# KEY POINTS 2008 AND 2009 (72 INSTITUTIONS)

#### LICENCES. OPTIONS AND ASSIGNMENTS (LOAs)

- Adjusted LOA income was \$214m in 2007, \$106m in 2008 and \$315m in 2009 (CSIRO WLAN income included for the first time in 2009).
- The number of active LOAs increased from 1,722 in 2007 to 1.838 in 2009.
- The number of LOAs yielding income decreased from 751 in 2007 to 702 in 2009.

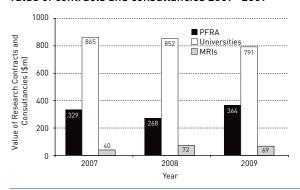
#### Number of active LOAs 2007-2009



#### CONTRACTS, CONSULTANCIES AND DIRECT SALES

- In 2009, 14,397 research contracts and consultancy agreements were executed. In 2009, research contract & consultancy income was more than \$1.2 billion.
- In 2009, 14,803 direct sales transactions¹ were reported with a value of \$27m.

#### Value of contracts and consultancies 2007-2009



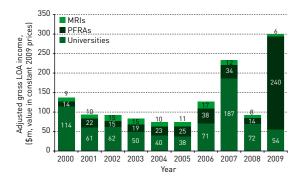
<sup>1</sup> Direct sale by institution's physical products generated by the institution which embody technology-based IP

### TIME SERIES DATA 2000-09 (58 INSTITUTIONS)

#### LICENCES. OPTIONS AND ASSIGNMENTS (LOAs)

- The number of LOAs executed p.a. has increased by 19%, from 414 in 2000 to 491 in 2009.
- The number of LOAs vielding income p.a. has increased by 41% from 489 in 2000 to 691 in 2009.
- Adjusted LOA income dropped 31% from \$137m in 2000 to \$94m in 2008. The impact of one or a handful of successful commercialised technologies can "mask" other trends, such as in 2009 LOA income increased 218% from 2008 values to \$299m<sup>2</sup> (mainly due to CSIRO WLAN technology income).

#### Adjusted LOA income by sector 2000-09



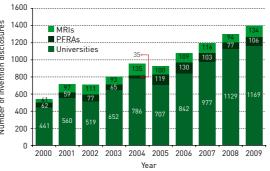
#### **COMMERCIALISATION STAFF**

 The number of dedicated commercialisation staff has increased 62%, from 191 in 2000 to 309 in 2009.

#### INTELLECTUAL PROPERTY ACTIVITY

- The number of invention disclosures has increased by 159%, from 544 in 2000 to 1,409 in 2009.
- rights applications filed in Australia and the US has increased by 9%, from 587 in 2000 to 641 in 2009.
- issued worldwide has increased 209% from a low of 273 in 2001 to a high of 844 in 2008.

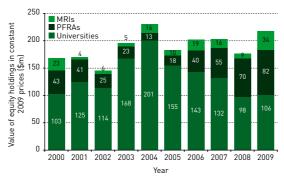
#### Invention disclosures by sector 2000-09



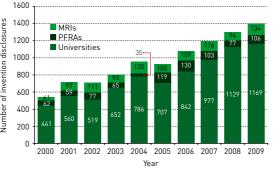
#### START-UP COMPANY ACTIVITY

- Start-up company formation has fallen 60%, from 47 in 2000 to 19 in 2009.
- The number of start-up companies operational at year end with institutional equity stakes increased 153%, from 69 in 2000 to 175 in 2009.
- The value of equity holdings increased 32% from

## by sector 2000-09

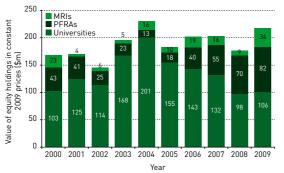


- The total number of new patent and plant breeder
- The number of patents and plant breeder rights



- \$168m in 2000 to \$222m in 2009.

## Value of research commercialisation equity holdings

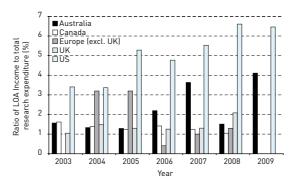


### INTERNATIONAL COMPARISONS

#### LICENCES, OPTIONS AND ASSIGNMENTS (LOAs)

- The number of LOAs executed per \$US100m of research expenditure by Australia dropped to 9 in both 2008 and 2009, from an average of 12 between 2000 and 2009. In 2009, the US dropped to 10 from a longitudinal average of 12.
- The ratio of LOA income to total research expenditure in Australian institutions was highest in 2009 (4.1%). The US and UK also showed improvement against this ratio since 2003.

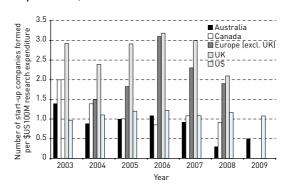
#### International LOA income 2003-2009



#### START-UP COMPANIES

 All countries are showing declines in the rate of start-up company formation since 2006.

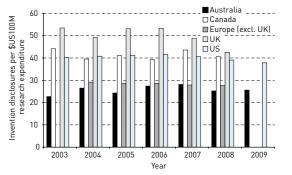
#### Start-up companies formed per \$US100m research expenditure, 2003-09



#### INTELLECTUAL PROPERTY ACTIVITY

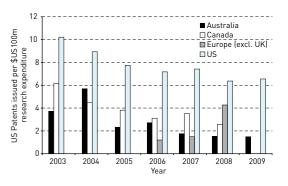
■ The number of invention disclosures per \$US100m of research expenditure by Australian institutions has averaged 25 since 2000 - similar to institutions across Europe (average of 29) but significantly lower than the US (average of 41).

#### Invention disclosures per \$US100m research expenditure, 2003-09



■ The number of US patents issued to Australian institutions per \$US100m of research expenditure has more than halved between 2000 and 2009 from 4.2 to 1.5. The US has also experienced a decline over this period, falling from 14.0 in 2000 to 6.6 in 2009. Canadian issuances have also steadily dropped from 8.8 in 2000 to 2.6 in 2008.

#### US Patents issued per \$100m research expenditure, 2003-2009



<sup>2</sup> Adjusted LOA income is gross LOA income minus reimbursements paid by other institutions. The time series adjusted LOA income has been calculated using 58 institutions (\$299m) compared to 72 institutions for the Key Points (\$315m).