



# HUMANITIES, ARTS & CULTURE DATA SUMMIT

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Bioplatforms Australia



14-15 March 2018, Canberra  
[humanities.org.au](http://humanities.org.au) | [#HACDS2018](https://twitter.com/HACDS2018)



**BIOPLATFORMS**  
AUSTRALIA

**HASS Canberra 15<sup>th</sup> March 2018**

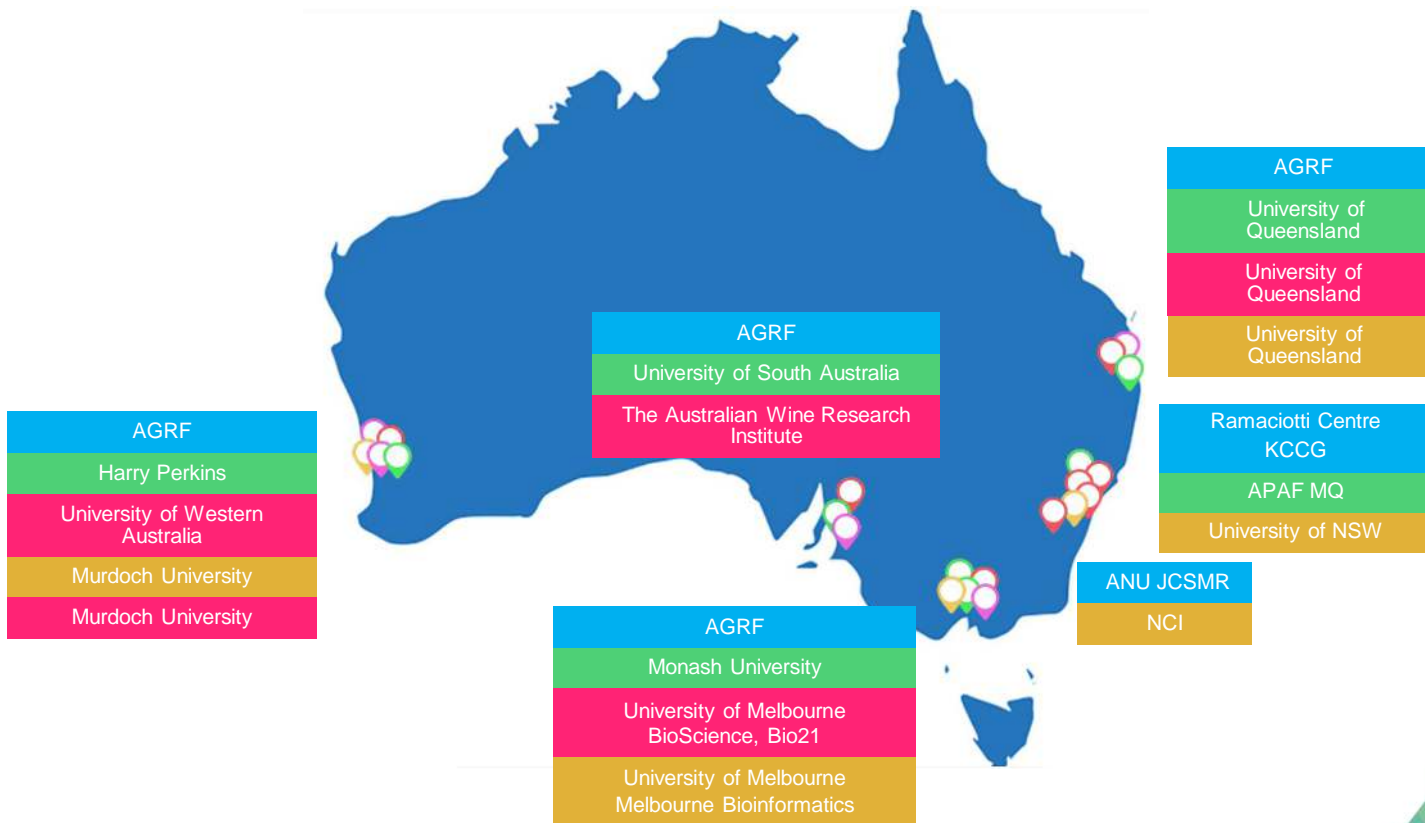
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# BPA National Footprint



# Capability Impact

RESEARCH AND SOCIETAL IMPACT

End User Engagement

Innovation

INNOVATIVE PARTNERSHIPS

Framework Initiatives

INTEGRATIVE RESEARCH  
CAPABILITY

Maximise quality of science

Access and Outreach

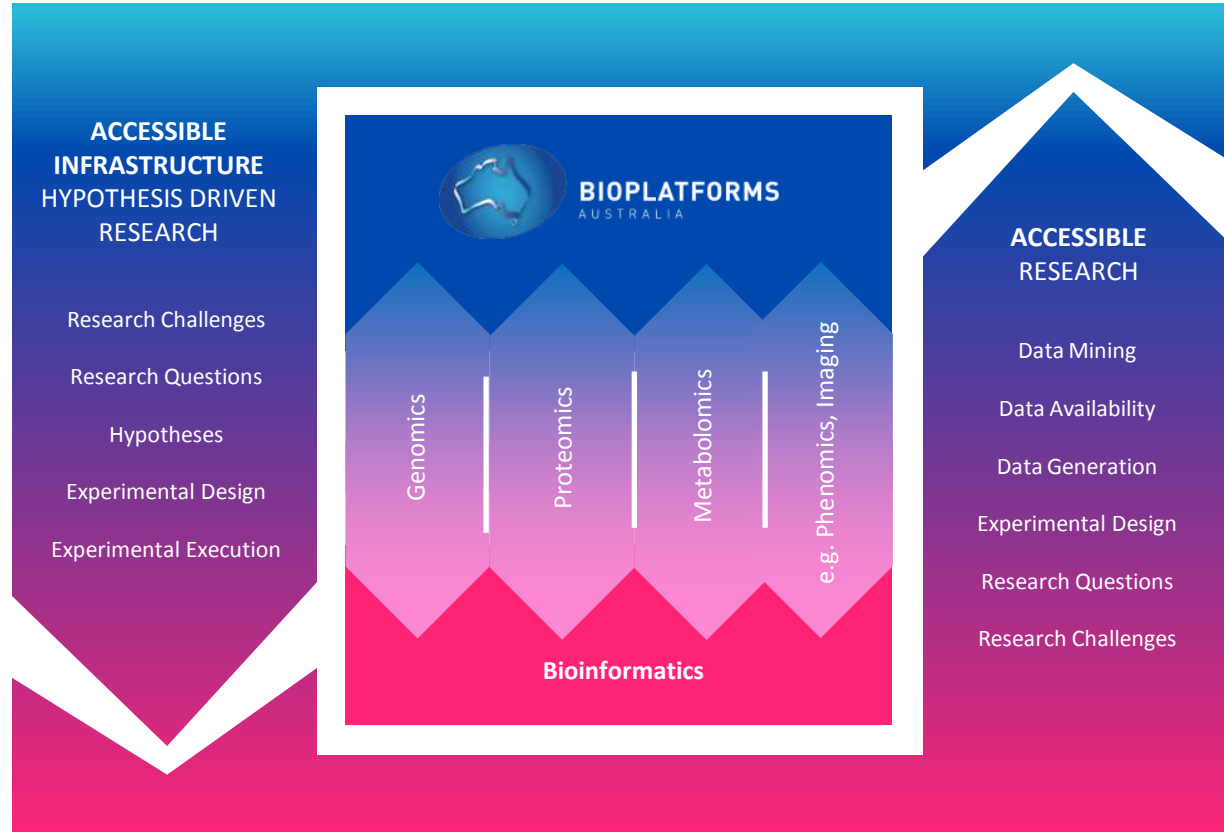
AGGREGATION AND  
ACCESSIBILITY OF  
CAPABILITY

Australian Bioinformatics  
Commons

National Centres  
and Networks

Collaborative  
Culture

# Accessible Infrastructure & Accessible Data



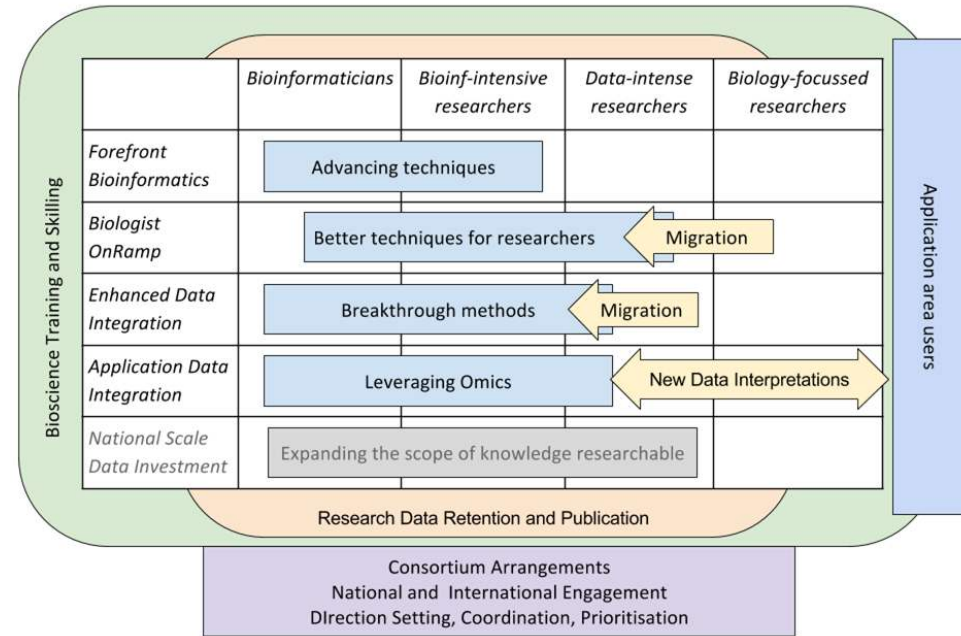


# Mapping infrastructure to users groups

<i>Community</i>	<i>bioinformaticians</i>	<i>bioinformatics intensive bioscience researchers</i>	<i>data intensive bioscience researchers</i>	<i>biology focussed bioscience researchers</i>
<i>A service platform to which a researcher can bring their research goals, tools, pipelines and data</i>	Estimated #: <b>1,000</b> (In 5 years → 1,500)	<b>2,000</b> (→ 3,000)	<b>7,000</b> (→ 12,000)	<b>20,000</b> (→ 15,000)
<i>A technical platform on which data assemblies can more easily occur</i>	Estimated #: <b>1,000</b> (In 5 years → 1,500)	<b>2,000</b> (→ 3,000)	<b>7,000</b> (→ 12,000)	
<i>A platform which can support national scale data investment</i>	Estimated #: <b>1,000</b> (In 5 years → 1,500)	<b>2,000</b> (→ 3,000)		
<i>A mechanism through which Australia can represent its interests and participate in global data endeavours in life sciences</i>	A bioinformatics community leadership group Est <b>20</b>	A bioscience community leadership group Est <b>50</b>	A bioscience community leadership group Est <b>50</b>	

# Current Thinking

Service	Capability	A	B	C
	Forefront Bioinformatics - Advancing Techniques	✓		
	Biologist OnRamp - Better Techniques for Researchers	✓		
	Enhanced Data Integration - Breakthrough Methods		✓	
	Application Data Integration - Leveraging Omics		✓	
Challenge				
	Research Data Retention and Publication	✓		✓
	Bioscience Training and Skilling	✓	✓	
	Leadership, National and International Engagement		✓	✓



## Capability A

### A Biologist to Bioinformatics Bridge

A national omics analysis service providing:

- A means to use standardised bioinformatics techniques through high level interfaces
- Integrated with a regionally accessible support and training network
- Providing direct access to underlying infrastructure for new technique developers

## Capability B

### Data Integration and Interrogation Facilities

Either a single facility serving all domains of application (EBI-EMBL like), or a number of domain focussed facilities, providing:

- An 'NCI like capability' at the infrastructure level - focused on high throughput computing
- Coupled with a critical mass of data science expertise versed in omics
- Assigned by merit to support large team based research for extended periods (multi year)

## Capability C

### An Australian Bioscience Data Consortium

A coming together of the leadership in bioscience to address long term systemic challenges:

- Policy development around rapidly emerging data asset issues;
- The changing requirements on undergraduate and postgraduate training; and
- Engagement with large scale omic resources onshore and offshore



# Network Investors

## NCRIS

National Research  
Infrastructure for Australia

An Australian Government Initiative

