

# Imaging Locus

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#### Aim of the Imaging Locus and open data

- The Imaging Locus project aims to promote Monash's distinctive research, infrastructure, and supported set of imaging instruments.
- The imaging data generated by these instruments are an asset with the potential to focus the world's attention on Monash's significant research strength.
- The Major Open Data Collections project has established initial collections of imaging data in a sustainable operational environment which will continue well into the future.
- Our vision is to showcase significant imaging datasets in areas of particular strength, interest and value to the University and its collaborative partners and communities.
- Some of the imaging datasets will be made available on the ANDS Research Data Australia website during the life of the project; others will become available through the sustainable operational environment we are creating.

#### Research Data Management Guidelines

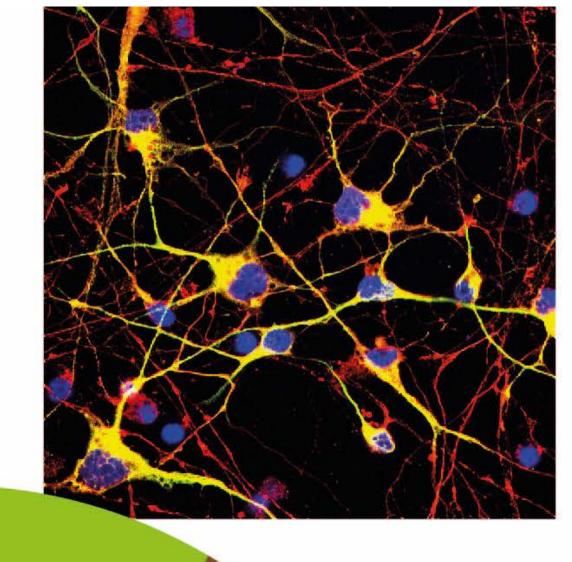
- Guidelines (currently in draft) have been written in order to encourage Monash researchers using Monash platforms and instruments to make their imaging datasets publicly accessible except for where there are strong reasons not to do so.
- The importance of researcher control has been an intrinsic element. Opening imaging datasets where possible will lead to increased citations for researchers and greater data collaboration with other institutions.

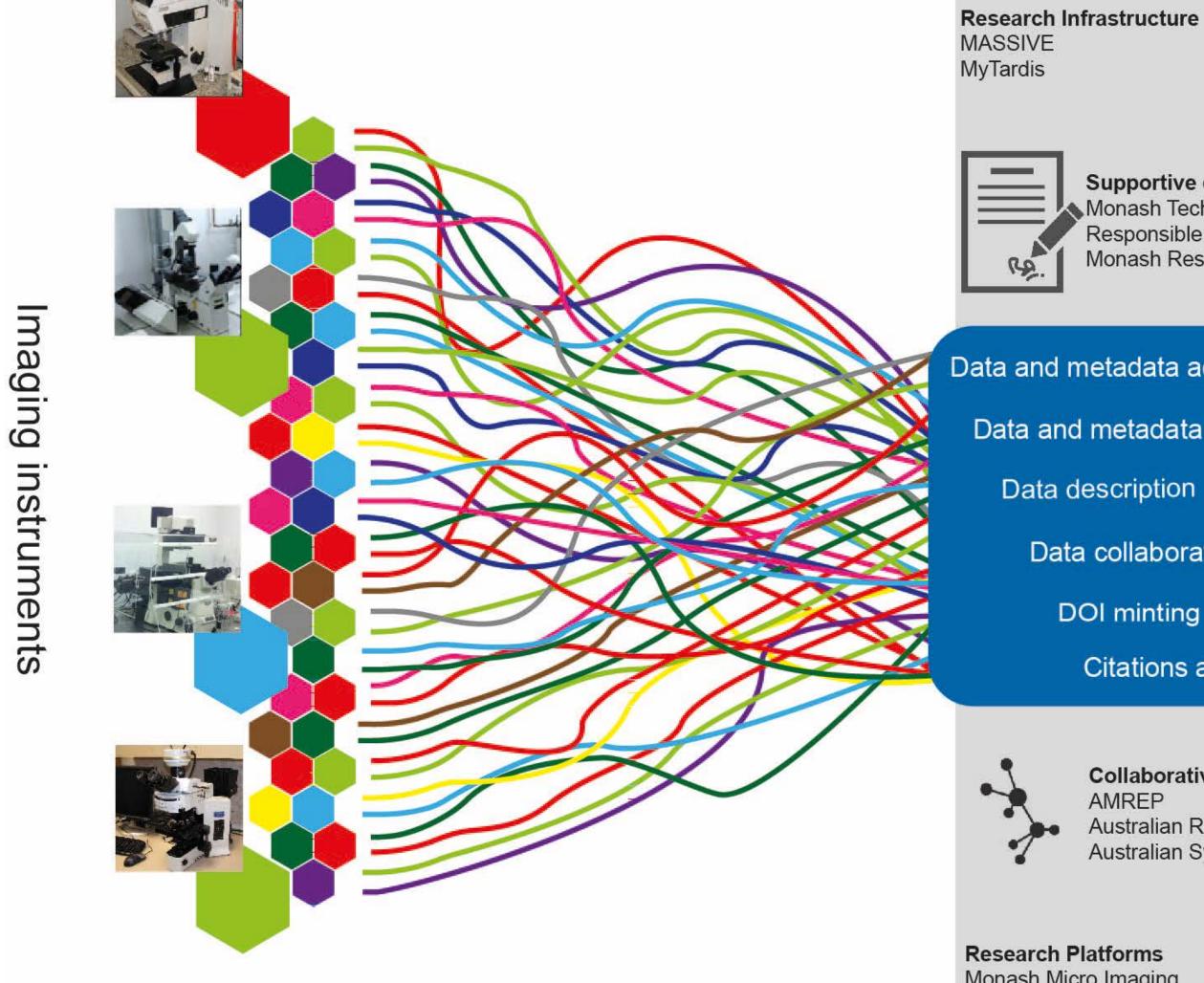
#### MyTardis

- MyTardis is a highly automated web application for data and metadata acquisition, data description, managing and assisting the sharing of large datasets in a private and secure way.
- Its particular focus is on integration with scientific instruments, facilities and data and metadata storage, with the belief that the less effort a researcher has to expend safely storing data, the more likely they are to do so.

Purified neurons differentiated from human iPS cells generated from MS patient skin.

Dr Guizhi Sun Australian Regenerative Medicine Institute (ARMI), Monash University





## Data and metadata acquisition

Supportive documents

Monash Technology Research Guidelines

Monash Research Data Management Policy

Responsible Conduct of Research

Data and metadata storage

Data description

Data collaboration

DOI minting

Citations after publication



**Research Platforms** Monash Micro Imaging Monash Biomedical Imaging Monash Centre for Electron Microscopy

Monash eResearch Centre

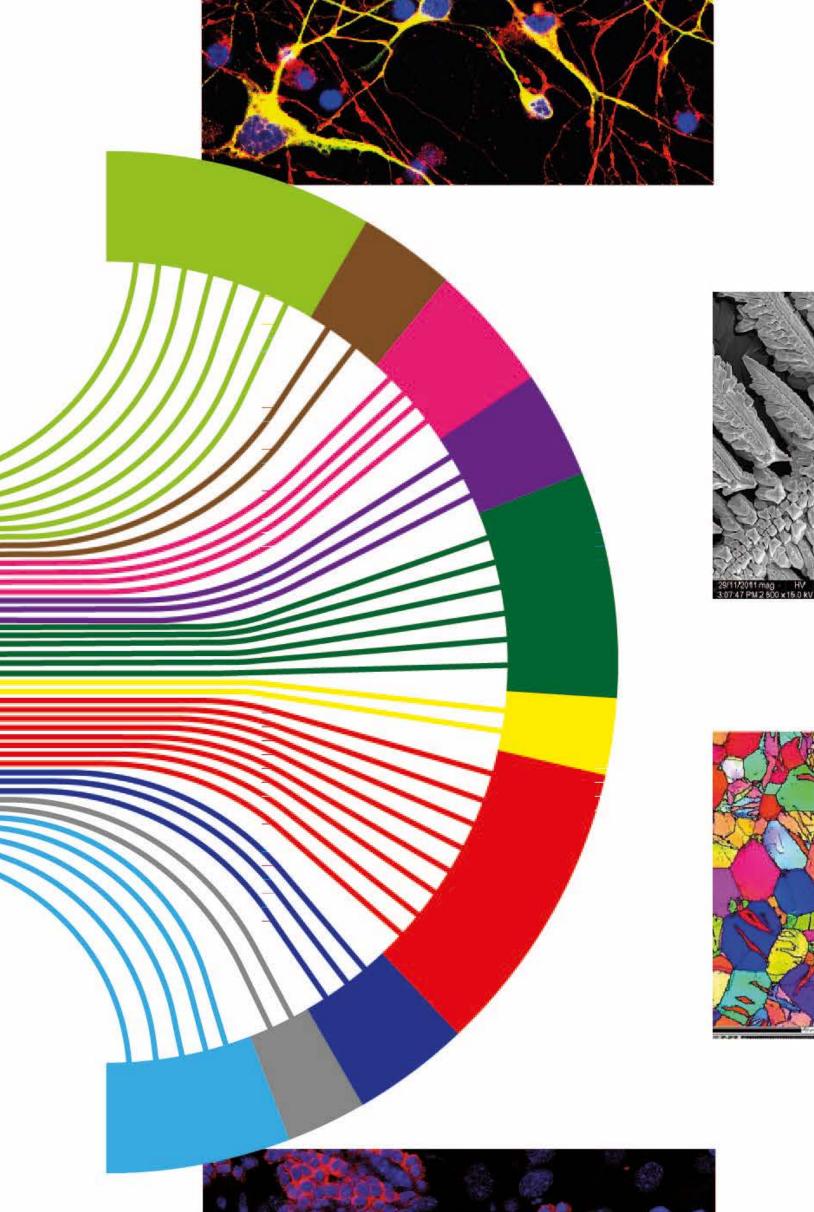
Future steps

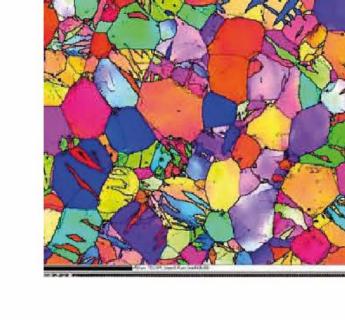
Locus.

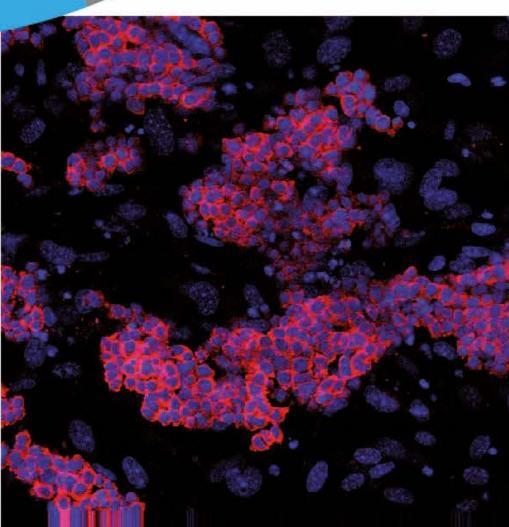
publications.

Monash Immersive Visualisation Platform

lmaging







#### Colonies of SPCs cultured on feeder layers of embryonic fibroblasts stained for the germ cell marker Vasa (red). Nuclei are counterstained.

Dr Robin Hobbs Australian Regenerative Medicine Institute (ARMI), Monash University





Monash will continue to seek ongoing feedback from researchers regarding the implementation of the Research Data Management Guidelines for Monash Technology Research Platforms.

Monash University will continue working alongside researchers to

identify, describe and make openly available their significant imaging

datasets to create publicly accessible records via the Monash Imaging

Monash University believes in making publicly funded datasets publicly

available when there are no restrictions such as intellectual property,

confidentiality issues or the potential for further research and

Monash University will work with Monash researchers to assist in the transition to an environment where data sharing will increasingly be mandated by funders, and where open data becomes a normal and expected part of research.

This project is supported by the Australian National Data Service (ANDS). ANDS is supported by the Australian Government through the National Collaborative Research Infrastructure Strategy Program.

For the use of their images we would also like to thank Monash Centre for Electron Microscopy, and Monash Micro Imaging.

### Increased citations from open data

- A number of studies have demonstrated the citation benefit to researchers from opening their datasets.
- Studies that make data available receive more citations than similar studies for which the data is not available.
- The Imaging Locus serves as a vehicle to allow significant Monash imaging research to be findable and reusable, which alongside DOI minting will lead to an increase in citations for Monash University researchers.
- Citations after publication will increase as other researchers are able to find, use and cite Monash research.
- A range of imaging researchers have collaborated with the library in order to make their imaging datasets publicly available.
- There is a strong consensus that open data is beneficial to fields of research and to researchers themselves.