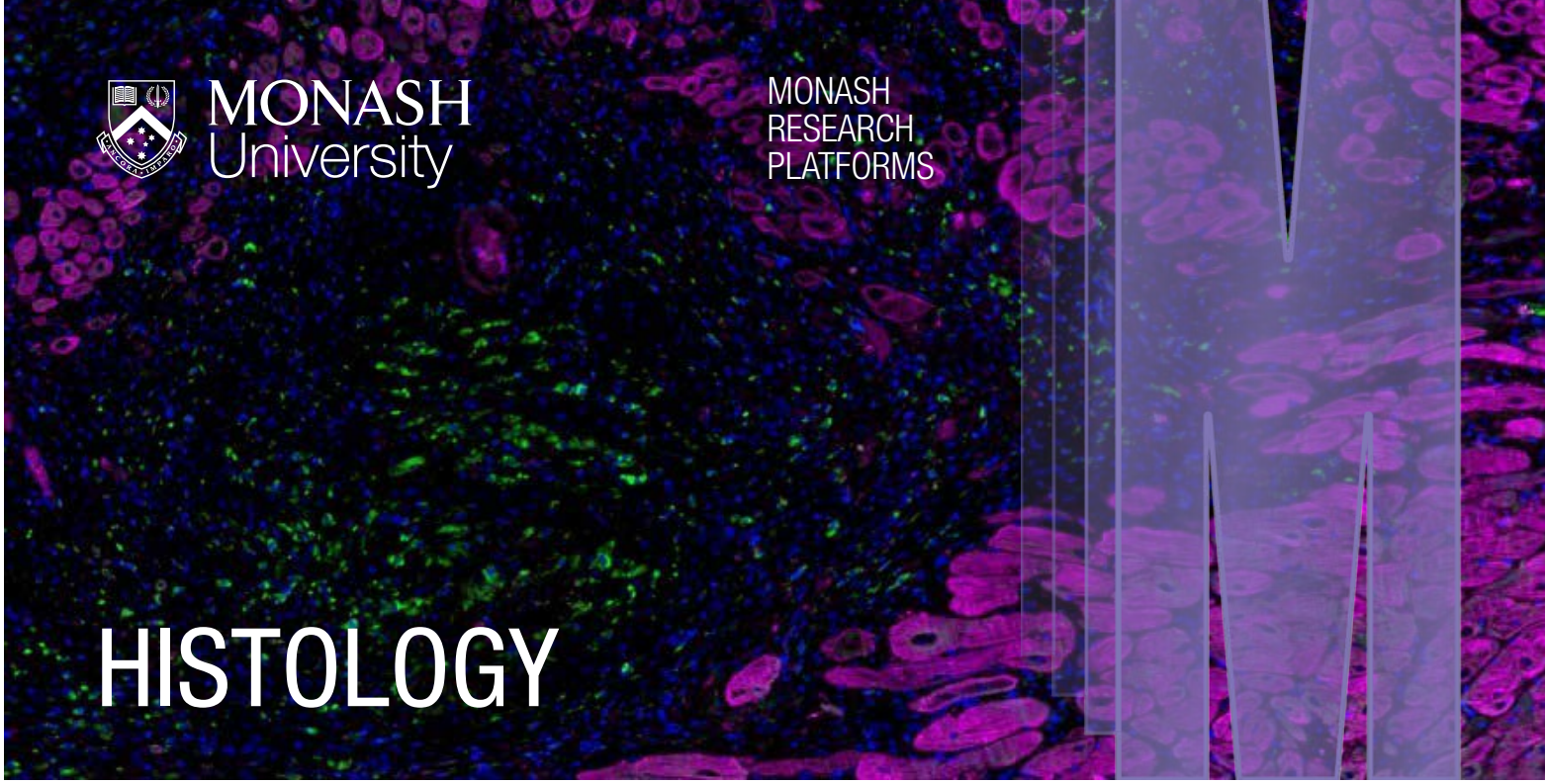

MONASH University

MONASH RESEARCH PLATFORMS

HISTOLOGY

Monash Histology Platform (MHP) is a world-class, full-service histology laboratory operating to international quality standards and certified to ISO 9001. MHP supports the local and national research community, providing specialised services, training and consultation.

We provide all frozen sections, methacrylate and epoxy resin processing, sectioning and staining services, in addition to slide scanning and digital imaging, tissue clearing, tissue microarray generation and automated immunohistochemical staining. Our consistent, high quality and timely outputs assist researchers in the delivery of highly innovative, cutting edge research outputs in all aspects of histology.

KEY INSTRUMENTATION

- Tissue processors – Leica Peloris II, ASP300 and VIP2000s
- Cassette writer – Thermo Fisher PrintMate
- Slide writers – Thermo Fisher SlideMates
- Tissue embedding centres - Leica and Medite Tes Valida embedding units
- Rotary microtomes – Microtec and Leica Microtomes
- Cryostats - Leica CM3050S's
- Autostainer and coverslipper – Leica ST5010 Autostainer and CV5030 Coverslipper
- Immunohistochemistry Autostainers – Dako Autostainer Plus and Dako Autostainer Link 48
- Immunohistochemistry antigen retrieval – Dako PT Links
- Multi-header microscope – Olympus BX50
- Micro tissue arrayer – Beecher MTA-1
- Slide scanners - Aperio AT and FL Scanscope's, Olympus VS120 and VS200
- X-Clarity Optical Clearing System

EXPERTISE

The demand for access to quality Histology services across Monash University's precinct and partner sites has enabled the development of the multi-sited Monash Histology Platform (MHP). Two nodes (MHTP and ARA) operate in hospital environments and together with the centralised MHP facility at Monash University deliver quality processes and services to researchers.

Our team have a wealth of experience in routine histology, immunofluorescence and microscopy techniques, specialised immunohistochemistry and multi-labelled immunofluorescence. We also have resident experts in resin for both light and electron microscopy. The team are qualified to assist in any histological project from design and implementation through to troubleshooting. We also offer training on our DIY equipment and provide the opportunity for regular contact with our highly experienced team.

WORKING WITH US

- Fee for service, Consultancy, Collaborative research

SPECIALIST SERVICES

MHP has two service streams: a full end-to-end service provided by specialist staff, and self-service enabling access to specialised laboratory equipment and staining reagents. In addition, the team provides advice, training and research assistance. We operate on a fee for service basis for all services and laboratory access.

Both the paraffin and resin laboratories are vital components of our service provision. The areas have been developed to meet the demand, quality and high-throughput needs of researchers, academic staff and students. Our team is well known for their ability to produce high quality, accurate results in an efficient, timely manner, together with the provision of advanced training programs.

Paraffin laboratories

The paraffin laboratories are equipped with a range of equipment to tackle the most demanding processing requirements including:

- Fully equipped dissection areas and a cassette writer
- Rapid, dual processing Peloris ASP300 and VIP2000 tissue processors providing efficient, reliable and timely processing to paraffin wax
- Embedding units for high-quality paraffin blocking
- Modern microtomes for specimen sectioning
- Fully equipped staining areas including an automated staining unit with coverslipper.
- Cryostats for frozen section generation
- Automated immunostaining units providing high throughput and consistency for immunohistochemical and immunofluorescent staining

Resin laboratory

The resin laboratory (located at the Clayton campus) provides specialised processing, sectioning and staining services for projects requiring resin sections. The laboratory is well equipped with Leica RM2165 microtomes and a Leica Ultra microtome for cutting both methacrylate (GMA) and epoxy resins for light and electron microscopy. A fully equipped staining area includes an automated staining unit with coverslipper.

Other services

Other specialised equipment includes a state-of-the-art vibratome and an X-Clarity electrophoretic optical clearing unit. A tissue microarray (TMA) unit enables the development of uniquely designed multi-core TMA blocks, while access to brightfield and fluorescent slide scanning brings your digitalized histology sections direct to your screen.

MONASH HISTOLOGY PLATFORM
11 Chancellors Walk, Monash University, Clayton campus, VIC

Camilla Cohen
Manager
T +61 (3) 9905 2740
E camilla.cohen@monash.edu

monash.edu/researchinfrastructure/histology