

SCHEDULE

THE UNIVERSITY OF QUEENSLAND Facilities or Assets:		
Instrument/Facility	Website/Contact	Fee
Centre for Geoanalytical Mass Spectrometry	https://sees.uq.edu.au/research/geoanalytical-mass-spectrometry	Contact lab manager
Radiogenic Isotope Facility	https://sees.uq.edu.au/research/facilities/radiogenic-isotope-facility	Contact lab manager
Stable Isotope Geochemistry Laboratory	https://sees.uq.edu.au/research/facilities/stable-isotope-geochemistry-laboratory	Contact lab manager
Environmental Geochemistry Laboratory	https://sees.uq.edu.au/research/equipment-and-facilities/laboratories/analytical-facilities/environmental-geochemistry-laboratory	Contact lab manager
Centre for Microscopy & Microanalysis - CMM	https://cmm.centre.uq.edu.au	Hourly rates for Peak Time & Off-Hours; Internal, Affiliated and External Rates
Instruments at AIBN	https://cmm.centre.uq.edu.au/aibn-instruments	
Instruments at CHEMISTRY	https://cmm.centre.uq.edu.au/x-ray-instruments	
Instruments at HAWKEN	https://cmm.centre.uq.edu.au/hawken-instruments	
Instruments at NOVEL Imaging	https://cmm.centre.uq.edu.au/mass-spectrometry	
Instruments at UQRocX	https://cmm.centre.uq.edu.au/uqrocX-instruments	
Instruments at CryoTEM	https://cmm.centre.uq.edu.au/qbp-cryo-tem-instruments	
Instruments		
Electron beam lithography - CEE apogee spincoater & hotplate		
Electron beam lithography - cleanroom		
Electron beam lithography - Dektak		
Electron beam lithography - EBPG5150		
Electron beam lithography - plasma cleaner		
Electron beam lithography - Raith e-line plus SEM		
FIB - AIBN FIB SCIOS		
Freeze fracture/dehydration - AIBN cpd		

Freeze fracture/dehydration - AIBN Leica		
Freeze fracture/dehydration - QBP		
Freeze fracture/dehydration – QBP Leica CPD		
Freeze fracture/dehydration – QBP Leica AFS		
Light microscopes - AIBN Optical Olympus BX61		
Light microscopes - Leica lmd Laser Dissection light microsc		
Light microscopes - QBP Nikon TI E Inverted microscope		
Light microscopes - QBP Optical Olympus BX60		
Mass photometry - Refeyn one		
Mass spec imaging - Bruker Amazon Speed with ETD		
Mass spec imaging - Bruker Autoflex Speed		
Mass spec imaging - Bruker MicroTOF Q II		
Mass spec imaging - probot spotting robot		
Mass spec imaging - proteineer spotting robot		
Mass spec imaging - Thermo Quantum Ultra		
Mass spec imaging - Ultraflex III		
Novel Imaging - Scanning XRF-IXRF		
Raman		
Sample preparation - AIBN Biowave		
Sample preparation - SPI gold coater		
Sample preparation - Carbon ctr		
Sample preparation - Evactron plasma cleaner		
Sample preparation - IM4000 ion mill		
Sample preparation - Platinum coater Q150ts		
Sample preparation - UV ozone cleaner		
Sample preparation - PIPS		
Sample preparation - PIPS + cold stage		
Sample preparation - Biowave		
Sample preparation - Carbon coater Baltec		

Sample preparation - Carbon coater EMS		
Sample preparation - diener femtoplasma cleaner		
Sample preparation - wire bonder		
SEM - Hitachi TM4000		
SEM - JEOL Neoscope		
SEM - Thermo Fisher Apreo/Volumescope		
Sem - Zeiss Sigma/ 3view		
SEM - EDS/Xray theory		
SEM - Hitachi SU3500		
SEM - JEOL 6610		
SEM - JEOL 7001f		
SEM - JEOL 7100f		
SEM - JEOL 7800		
SEM - Philips XL30		
Sem - Post process EDS/EBSD Aztec		
SEM - Probe 8200		
SEM - Cryo alto 2500 (104)		
SEM - JOEL neoscope		

<p align="center">QUEENSLAND UNIVERITY OF TECHNOLOGY Facilities or Assets:</p> <p><i>*Fees shown for calendar year 2020. Fees will be updated in each calendar year for the duration of this MoU.</i></p>		
Instrument/Facility	Website/Contact	Fee*
Biorefining Research Facility	https://www.qut.edu.au/institute-for-future-environments/facilities/biorefining-research-facility	Negotiated based on project scope
Digital Observatory	https://www.qut.edu.au/institute-for-future-environments/facilities/digital-observatory	Negotiated based on project scope
Central Analytical Research Facility (CARF):		
- Elements and Isotopes	https://www.qut.edu.au/institute-for-future-environments/facilities/central-analytical-research-facility/elements-and-isotopes	
- Genomics	https://www.qut.edu.au/institute-for-future-environments/facilities/central-analytical-research-facility/genomics	
- Magnetic resonance spectroscopy	https://www.qut.edu.au/institute-for-future-environments/facilities/central-analytical-research-facility/magnetic-resonance-spectroscopy	
- Microscopy	https://www.qut.edu.au/institute-for-future-environments/facilities/central-analytical-research-facility/microscopy	
- Molecular mass	https://www.qut.edu.au/institute-for-future-environments/facilities/central-analytical-research-facility/molecular-mass	

spectrometry	future-environments/facilities/central-analytical-research-facility/molecular-mass-spectrometry	
– Nanoscale Imaging	https://www.qut.edu.au/institute-for-future-environments/facilities/central-analytical-research-facility/nanoscale-imaging	
- Physical and mechanical properties	https://www.qut.edu.au/institute-for-future-environments/facilities/central-analytical-research-facility/physical-and-mechanical-properties	
- Proteomics	https://www.qut.edu.au/institute-for-future-environments/facilities/central-analytical-research-facility/proteomics	
– sample preparation	https://www.qut.edu.au/institute-for-future-environments/facilities/central-analytical-research-facility/sample-preparation	
– Synchrotron Science	https://www.qut.edu.au/institute-for-future-environments/facilities/central-analytical-research-facility/synchrotron-science	
– Vibrational spectroscopy	https://www.qut.edu.au/institute-for-future-environments/facilities/central-analytical-research-facility/vibrational-spectroscopy	
– X-Ray analysis	https://www.qut.edu.au/institute-for-future-environments/facilities/central-analytical-research-facility/x-ray-analysis	
Research Engineering Facility (REF) – Drones and aviation – Robotics and autonomous systems – Energy Systems – Design and systems integration – Structural engineering and testing – Data acquisition and management	https://www.qut.edu.au/institute-for-future-environments/facilities/research-engineering-facility	Negotiated based on project scope
Samford Ecological Research Facility (SERF)	https://www.qut.edu.au/institute-for-future-environments/facilities/samford-ecological-research-facility	Negotiated based on project scope
Visualisation and eResearch (ViseR)	https://research.qut.edu.au/viser/	Negotiated based on project scope
IHBI Histology Facility:	https://www.qut.edu.au/institute-of-health-and-biomedical-innovation/facilities/histology-laboratory histology@qut.edu.au	
Primera Signature Slide Labeller		\$0.50/ICON slide, \$1/UberFrost slide
Primera Signature Cassette Labeller		\$0.50/Cassette

X3 MileStone KOS HistoStations		\$3/Sample
Thermo Excelsior ES Tissue		\$3/Cassette
Unitma Quick-Ray UT06 Manual Tissue Arrayer System		Not specified
Shandon Histocentre Embedding Centre		\$6/Cassette unassisted
Leica XL Autostainer with attached Leica CV5030 Autocoverslipper		\$5 - \$15 per slide
Leica Automatic RM2265 Microtome		\$10/hr unassisted
Leica Manual RM2135 Microtome		\$10/hr unassisted
Leica Manual RM2235 Microtome		\$10/hr unassisted
Leica Automatic RM2245 Microtome		\$10/hr unassisted
CitoVac		Not specified.
EXAKT 310 Diamond Band Saw		\$10/hr unassisted
EXAKT 400cs Microgrinder		\$10/hr unassisted
Buehler Ecomet Grinder/Polisher		Not specified
Struers Polisher (TegraDoser-5/TegraForce-5/Tegrapol-5)		Not specified
Reichert-Jung Polycut D6907 Sledge Microtome		Not specified
Leica CM1850 Cryostat		\$10/hr unassisted
CryoStar NX70 Cryostat		\$10/hr unassisted
Nikon Ds-U3 and Ds-Fi2 station for Macro Imaging		Not specified
Nikon SMZ745T on boom stand		Not specified
Nikon SMZ25 Fluorescence stereomicroscope		Not specified
3DHistech Slide Scanner		\$10-\$20(depending upon BF or FL)
Zeiss AxioImager M2		Not specified
Zeiss A1 Microscope		Not specified
Nikon Eclipse ci-L with attached camera (Olympus DP72), tablet (cintiq 24HD) and osteomeasure software		Not specified
IHBI Cell Analysis Facility: <ul style="list-style-type: none"> - Nanostring nCounter Flex System - Nanostring GeoMx Digital Spatial Profiler - BDFACSMelody Fluorescence Activated Cell Sorter - Holomoniotor Live Cell Imaging System 	https://www.qut.edu.au/institute-of-health-and-biomedical-innovation/facilities/cell-analysis-facility Dr Christina Theodoropoulos c.theodoropoulos@qut.edu.au	Project Based
QUT MERF (Medical Engineering Research	https://www.qut.edu.au/institute-of-health-and-biomedical-	Project based

Facility)	innovation/facilities/medical-engineering-research-facility-merf	
Genomics Research Centre	https://research.qut.edu.au/grc/ A/Prof Larisa Haupt/Dr Robert Smith	Project based
Australian Translational Genomics Centre	https://research.qut.edu.au/translationalgenomicsgroup/atgc/	Project based

UNIVERSITY OF THE SUNSHINE COAST Facilities or Assets:		
Instrument/Facility	Website/Contact	Fee
CAVE2 Immersive 2D/3D environment in a 320-degree configuration	Peter Embleton pembleto@usc.edu.au https://www.usc.edu.au/study/life-at-usc/facilities/visualisation-and-simulation/cave2-and-the-community	To be determined on project specific basis
ORCA Driving simulator	Prof Paul Salmon, Director, Human Factors and Sociotechnical Systems, (07) 5456 5893.	To be determined on project specific basis
Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (MR) Laboratory	Christian Jones (cmjones@usc.edu.au , 0424358195)	To be determined on project specific basis
3D Motion Analysis Laboratory	Technical Operations – Research Team Leader 07 5430 2838	Contact Lab Manager
DuraScan 50 Micro Hardness tester	Technical Operations – Research Team Leader 07 5430 2838	Contact Lab Manager
Shimadzu Universal Materials Testing Machines – Engineering Laboratory	Technical Operations – Research Team Leader 07 5430 2838	Contact Lab Manager
PC1 Research Laboratory equipped with: 1. AB 3500 Genetic Analyser 2. Nikon C2+ Laser Scanning Confocal Fluorescence imaging system 3. Eppendorf, epMotion automated liquid handler (robot) 4. New Brunswick Bioflo/Celli Gen 115 benchtop fermenter and bioreactor 5. Agilent 1260 HPLC 6. MiSeq 7. Preparative scale LC 8. LC-MSMS (QQQ) 9. LC-MSMS (qTOF)	Technical Operations – Research Team Leader 07 5430 2838	Contact Lab Manager
PC2 Research Laboratory; qPCR CFX96 Touch System	Technical Operations – Research Team Leader 07	Contact Lab Manager

Cell and Tissue Culture Rooms	5430 2838	
Glass and Greenhouse – Plant Growth Facility	Technical Operations – Research Team Leader 07 5430 2838, PGF Technician 07 5459 4528	Contact Lab Manager
400 MHz NMR	Technical Operations – Research Team Leader 07 5430 2838	Contact Lab Manager
Mastersizer 3000 – Laser diffraction particle size analyser	Technical Operations – Research Team Leader 07 5430 2838	Contact Lab Manager
Scanning Electron Microscope JEOL JSM-6050LA	Technical Operations – Research Technical Officer 07 5430 1113	Contact Lab Manager
Transmission Electron Microscope JEOL JEM 10-11	Technical Operations – Research Technical Officer 07 5430 1113	Contact Lab Manager
STA 449 F3 Jupiter Thermal Analyser	Technical Operations – Research Team Leader 07 5430 2838	Contact Lab Manager
Agilent 1290 uHPLC	Technical Operations – Research Team Leader 07 5430 2838	Contact Lab Manager

GRIFFITH UNIVERSITY Facilities or Assets:		
Instrument/Facility	Website/Contact	Fee
Centre for Clean Environment and Energy - JEOL JSM-7100F Microscope	https://www.griffith.edu.au/centre-clean-environment-energy Dr. Porun Liu p.liu@griffith.edu.au (07) 555 28456	User fees apply. Please enquire with contact
Centre for Quantum Dynamics - M2 Tunable Laser Facility - RAITH150 Tw0 Electron B Writer	https://www.griffith.edu.au/centre-quantum-dynamics A/Prof Mirko Lobino m.lobino@griffith.edu.au (07) 373 54115	The tool can be used after proper training by external users. User fee to be discussed on the specific project.
Griffith Institute for Drug Discovery - High Content Screening facility for imaging in microplates - Perkin Elmer Opera and an Opera Phenix high content screen syste - High resolution mass spectrometry - Bruker 12 Tesla ICR-FTMS mass spectrometer and ESI QTOF mass spectrometer - NMR facility comprising Bruker 800 MHz NMR with cryoprobe, and Bruker 500	https://www.griffith.edu.au/institute-drug-discovery Prof Vicky Avery v.avery@griffith.edu.au (07) 373 56056 Dr Wendy Loa w.loa@griffith.edu.au (07) 373 56053	User fees apply. Please enquire with contact

<p>MHz NMR</p> <ul style="list-style-type: none"> - Olympus FV1000 confocal microscope with spectral scanner - Agilent Biocel microplate handling platform <p>Compounds Australia comprises more than \$10m of robotic compound management, plating and storage equipment. Compounds Australia securely stores and curates sample libraries submitted by Australian based chemists. The facility makes these compounds available at low cost in flexible screening and assay-ready formats to academic and not-for-profit researchers.</p>	<p>A/Prof James St John j.stjohn@griffith.edu.au</p> <p>Dr Ian Hayward i.hayward@griffith.edu.au (07) 373 56534</p> <p>Moana Simpson m.simpson@griffith.edu.au (07) 3735 4448</p>	
<p>Institute for Glycomics</p> <ul style="list-style-type: none"> - Rigaku X-Ray Crystallography Apparatus - MicroMax 007 - 400 MHz NMR Spectrometer - Bruker Avance III HD Nanobay with 60-place BACS sample changers - 600 MHz NMR Spectrometer - Bruker Avance III HD with 24-place SampleCase sample changer - Beckman MOFLO XDP Cell Sorter - Four-way cell sorter - Orbitrap Fusion with nano-liquid chromatography system Mass Spectrometer System - Amazon Speed Ion Trap with nano-liquid chromatography system Mass Spectrometer System - Rapidflex MALDI Tissue System 	<p>https://www.griffith.edu.au/institute-glycomics</p> <p>Dr Carie-Ann Logue / Dr Michael Batzloff glycomicsoperationsmanager@griffith.edu.au</p>	<p>User fees apply - please enquire with Institute for Glycomics</p>
<p>Queensland Microtechnology Facility</p> <ul style="list-style-type: none"> - Silicon carbide device micro fabrication for semiconductor and MEMS. This capability consists of a suite of equipment enabling R+D but also bridging the gap to production that enables pilot and low volume producing to be achieved. 	<p>https://www.griffith.edu.au/queensland-micro-nanotechnology-centre/facilities/queensland-microtechnology-facility</p> <p>Alan Iacopi a.iacopi@griffith.edu.au (07) 373 54057</p>	<p>Service Fees are based upon the Australian National Fabrication Facility fee structure - see www.anff.org.au</p>

<p>The facility consists of world leading equipment / technology for the deposition of 3C SiC on wafers from 2" to 300mm in diameter although the fabrication equipment is set for 150mm wafers. The facility can also process Si wafers for non SiC device fabrication.</p>		
<p>Advanced Design and Prototyping Technologies Institute</p> <ul style="list-style-type: none"> - Renishaw Additive Manufacturing system AM400; AM in Titanium, Aluminium, SS316 and Cobalt Chrome. 	<p>https://www.griffith.edu.au/advanced-design-prototyping-technologies-institute Derek Smith derek.smith@griffith.edu.au (07) 567 80547</p>	<p>Fees are available through iLab. https://griffith.corefacilities.org/service_center/4497</p>

UNIVERSITY OF SOUTHERN QUEENSLAND Facilities or Assets:		
Instrument/Facility	Website/Contact	Fee
<p><u>Advanced Composites Manufacturing:</u></p> <p><i>Pultrusion:</i></p> <ul style="list-style-type: none"> - Industry scale pultrusion line. Only Industry scale research line in Australia. 	<p>Dr Tristan Shelley (07) 4631 5474 Tristan.Shelley@usq.edu.au</p>	<p>Prices to be negotiated on an individual basis dependant on user requirements.</p>
<p><i>Dual-ring Braider</i></p> <ul style="list-style-type: none"> - 144 carrier (84/60) braider with Yaskawa robot. Only dual ring braider in Australia. 		
<p><i>Advanced Filament winding</i></p> <ul style="list-style-type: none"> - In 2021 USQ will acquire Australia's most advanced composites 8-axis filament winder to support the pressure tank research and produce rocket motor casings and nose cones. Most advanced filament winder in Australia. 	<p>Associate Professor Xuesen Zeng (07) 4631 2251 Xuesen.Zeng@usq.edu.au</p>	<p>Prices to be negotiated on an individual basis dependant on user requirements.</p>
<p><i>Advanced Composites repair</i></p> <ul style="list-style-type: none"> - Defence Aerospace out-of-autoclave composite repair methodology. Equipment includes DASA certified hot bonder for aerospace composites repair 		

<p><u>Process and in-service sensing systems</u></p> <ul style="list-style-type: none"> - <i>Process sensing</i> – 16,000 node pressure sensor mats for monitoring pressure evolution in vacuum and autoclave processing (0 to 12 bar) – Currently the only system in the world. - <i>In-service sensing</i> – full field digital image correlation strain mapping. Application to 0.1mm through to +30m. Only system in Australia 	<p>Associate Professor Xuesen Zeng</p> <p>(07) 4631 2251 Xuesen.Zeng@usq.edu.au</p>	<p>Prices to be negotiated on an individual basis dependant on user requirements.</p>
<p><u>Fire/ thermal performance</u></p> <ul style="list-style-type: none"> - GovMark fire smoke density and toxicity analysis. Cone Calorimeter, UL94 and pyrolysis GCMS - Development of blast furnace (3500°C) testing of materials is harsh rocket exhaust environments. 	<p>Associate Professor Pingan Song</p> <p>(07) 34704105 Pingan.Song@usq.edu.au</p>	<p>Prices to be negotiated on an individual basis dependant on user requirements.</p>
<p><u>Large scale structural testing</u></p> <ul style="list-style-type: none"> - 2MN tensile and compression facility. - 500kN fatigue rig 	<p>Mr Wayne Crowell</p> <p>(07) 4631 1333 Wayne.Crowell@usq.edu.au</p>	<p>Prices to be negotiated on an individual basis dependant on user requirements.</p>

<p><u>Mt Kent Astronomical Observatory</u></p> <p><u>MINERVA Australis telescope array:</u></p> <ul style="list-style-type: none"> - Fully automated dedicated exoplanetary observatory capable of precise radial velocity and transit studies. - Telescopes: Five 0.7m alt/az mounted PlaneWave CDK700, optically connected to a KiwiStar Optics, stabilised, R = 75,000 echelle spectrograph with an iodine cell for precise radial velocimetry. <p><u>Shared Skies:</u></p> <ul style="list-style-type: none"> - One 0.7m alt/az mounted PlaneWave CDK700 telescope, one 0.5m CDK20 telescope, and one 10.6cm Petzval astrograph, allowing precision photometric observations of varying wide-field formats down to ~18th magnitude. On-site operation. 	<p><u>Minerva Australis.</u> Dr Duncan Wright</p> <p>0422536177 Duncan.Wright@usq.edu.au</p> <p><u>Shared Skies:</u> Professor Brad Carter</p> <p>(07) 3470 4131 Brad.Carter@usq.edu.au</p>	<p>Prices to be negotiated on an individual basis dependant on user requirements.</p>
<p><u>ILSE USQ/GRDC Glasshouses.</u></p> <p>Two PC1 glasshouse facilities containing:</p> <ul style="list-style-type: none"> - 13 separate, individually controlled bays. - Bay sizes available: 24m² to 192m². - Each bay fully automated via EnviroStep computer - Custom control over temperature, humidity and irrigation through the automatic control of roof vents, evaporative coolers, refrigerated air-conditioning, heaters, fans, shades, thermal blankets and irrigation control - Full automatic data logging of Wind speed and direction, humidity, temperature, light intensity and accumulated light - Data can be downloaded through the software enabling the assessment of glasshouse performance for quality assurance purposes. - Full integration with external 	<p>Ms Lauren Huth</p> <p>(07) 4631 2024 Lauren.Huth@usq.edu.au</p>	<p>Prices to be negotiated on an individual basis dependant on user requirements.</p>

<p>weather station allowing for separation between day and night modes relative to the time of year.</p> <ul style="list-style-type: none"> - Remote monitoring and environment adjustment from a PC or smartphone provides advanced data logging and analysis tools 		
<p><u>USQ Hypersonic wind tunnel (TUSQ)</u></p> <ul style="list-style-type: none"> - Only wind tunnel in Australia offering supersonic to hypersonic test capabilities. - Produces cold flows for relatively long test times, providing a useful test flow duration up to 500 milliseconds - 16 m long, 130 mm honed internal diameter Ludwig tube, which utilises a free piston compression process enabling the simulation of hypersonic flows using either the Mach 6 or Mach 7 nozzles - Facility can be operated in an atmospheric pressure blow-down mode to produce supersonic flows with durations of several seconds, depending on the required nozzle size. Mach numbers between 2 and 7 can be generated with the facility. 	<p>Professor David Buttsworth (07) 4631 2614 David.Buttsworth@usq.edu.au</p>	<p>Prices to be negotiated on an individual basis dependant on user requirements.</p>

JAMES COOK UNIVERSITY Facilities or Assets:		
Instrument/Facility	Website/Contact	Fee
Shimadzu GC 2010	aac@jcu.edu.au	analysis/set up dependent
Shimadzu GC 2014	aac@jcu.edu.au	analysis/set up dependent
UHPLC Shimadzu Nexera X2	aac@jcu.edu.au	analysis/set up dependent
Varian GC 3800	aac@jcu.edu.au	analysis/set up dependent
Agilent GC-MS 5975CMS 7890A GC	aac@jcu.edu.au	analysis/set up dependent
Autosorb iQ	aac@jcu.edu.au	\$50/sample
Hitachi 7800 TEM	aac@jcu.edu.au	\$52/hr
Jeol JXA8200 EPMA	aac@jcu.edu.au	\$60/hr
Hitachi SU5000 FE-SEM	aac@jcu.edu.au	\$52/hr
WiTec Laser Raman	aac@jcu.edu.au	\$35/hr
Confocal Zeiss 710	aac@jcu.edu.au	\$35/hr
AFM	aac@jcu.edu.au	\$50/hr
X-ray		

Bruker D2 Phaser XRD	aac@jcu.edu.au	\$20/hr
Bruker XRF puma S2	aac@jcu.edu.au	Element requirement specific
Agilent 5100 ICP-OES solution element analysis	aac@jcu.edu.au	\$10 first element, plus \$2 each additional element per sample (in solution)
Thermo Scientific iCap RQ ICP-MS solution element & isotope analysis	aac@jcu.edu.au	\$10 first element, plus \$2 each additional element per sample (in solution)
Thermo Scientific iCap RQ ICP-MS laser ablation/RQ ICP-MS	aac@jcu.edu.au	\$1050/day
Thermo Scientific iCap TQ ICP-MS solution element & isotope analysis	aac@jcu.edu.au	\$10 first element, plus \$2 each additional element per sample (in solution)
Thermo Scientific iCap TQ ICP-MS solution laser ablation/TQ ICP-MS	aac@jcu.edu.au	\$1050/day
Thermo Finnigan Neptune Multicollector ICP-MS Isotope analysis	aac@jcu.edu.au	\$1250/day
Thermo Finnigan Neptune Multicollector ICP-MS laser ablation/multicollector	aac@jcu.edu.au	\$1250/day
Light element&isotope		
2x Thermo Fisher IRMS with peripherals for:		
C & N Analysis	aac@jcu.edu.au	\$18/sample
O & H Analysis	aac@jcu.edu.au	\$23/sample
O & C	aac@jcu.edu.au	\$18/sample
Hydrogen pyrolysis	aac@jcu.edu.au	\$40/sample
Flow Cytometry Facility (CNS/TVL)		
FACS Fortessa X-20 (CNS)	Jamie.brady@jcu.edu.au	\$30/hr/instrument
FACS Aria III (CNS)		\$30/hr/instrument
FACS - CANTO II (TSV)	Chris.Wright@jcu.edu.au	\$15/hr
FACS - Fortessa X-20R (TSV)	Chris.Wright@jcu.edu.au	\$30/hr
Advanced Proteomics (Mass Spectrometry) Facility (CNS)		
SCIEX 5800 MALDI TOF/TOF MS	David.wilson4@jcu.edu.au	Tier and single usage charge systems available upon request
SCIEX Triple TOF 6600 MS		
Shimadzu LCMS-2020		
Millipore MAGPIX xPONENT 4.2 Analyser (CNS)	jamie.brady@jcu.edu.au	\$50/day (unlimited samples)
MagPix (TSV)	Chris.Wright@jcu.edu.au	\$50/day (unlimited samples)
RS2000 Cabinet X-Ray Irradiator (CNS)	Phill.walsh@jcu.edu.au	Free Of Charge
Octet RED96e System (CNS)	Phill.walsh@jcu.edu.au	\$50/day (unlimited samples)
Nuclear Magnetic Resonance		

Avance III 600Mhz NMR (CNS)	David.wilson4@jcu.edu.au	Fees based on facilities used and duration of use (available upon request)
nCounter Dx Analysis System FLEX	Phill.walsh@jcu.edu.au	Free Of Charge
3 x Agilent 1260 HPLC Systems (CNS)	David.wilson4@jcu.edu.au	Free Of Charge
Animal Facilities		
Various invertebrate/insectary facilities:	Phill.walsh@jcu.edu.au	Agistment fees apply- based on facilities used and duration of use (available upon request)
- E3, E4, E5 CT room/Approved Arrangement room		
- E3 Large Semi-Field Flight Cage;		
- E18, E19 CNS		
Small animal facilities (TSV and CNS)	Serrin.rowarth@jcu.edu.au	Agistment fees apply- based on facilities used and duration of use (available upon request)
PC3 facility including micro labs and animal rooms (TSV)	Chris Wright	Fees based on facilities used and duration of use (available upon request)

SOUTHERN CROSS UNIVERSITY Facilities or Assets:

Instrument/Facility	Website/Contact	Fee
Environmental Analysis Laboratory <ul style="list-style-type: none"> - NexION 300/350D ICP-MS System (Complete with Fully Intergrated Flexar HPLC Speciation system) - NexION 2000B ICP-MS - Avio 500 DV ICPOES - Optima 8300 ICP-OES Spectrometer - Mantech Ph Ec Titration System - CRS Analyser 6 & H/Plate Temp Control - Mastersizer3000 with a HydroLV Dispersion Unit - Oil & Grease Soxtherm Analyser Gerhardt - Lachat QC8500 4 Channel FIA System - TOC Analyzer with TN Unity & ASI Autosampler - Leco Trumac Carbon, Sulfur, Nitrogen Analyser - Leco Trumac CNS Analyser with Autoloader - Leco SC832Sulfur/ 	www.scu.edu.au/eal Graham Lancaster Graham.lancaster@scu.edu.au 0419 984 088	User fees apply. Please enquire with contact.

<ul style="list-style-type: none"> Carbon Determinator - Trailer Mount Hydraulic Auger & hydraulic hammer soil drill rig - Epsilon 3-XL XRF Spectrometer - Isotope Ratio Mass Spectrometer (Delta V IRMS) x 3 - Isotope Ratio Mass Spectrometer (Delta V IRMS) with Elemental analyser, TOC and GC peripherals - EVO LS/15 Scanning Electron Microscope, Carl Zeiss Pty Ltd - Hitachi TM4000 Plus Desktop scanning SEM with oxford Aztec Energy Dispersive X-Ray Spectrometry - SAGe Gamma Spectrometer 		
<p>Southern Cross GeoScience</p> <ul style="list-style-type: none"> - Bruker D4 Endeavour XRD - Metrohm 883 Basic IC Plus - Dionex Ultimate 3000 HPLC system - Horiba Scientific Aqualog - Varian Cary50 UV-Vis Spectrometer - Clariostar Microplate Reader - Malvern Morphologi G3-ID - Malvern Zetasizer Nano S - Micromeritics 3Flex Analyser - Xigo Nanotools Acorn Flow - Mossbauer Analytical System with Cryostage - OLIS Clarity Spectrophotometer - Dual Carbon Isotope CRDS Analyser - Picarro GasScouters - 836 Titrande Autotrator - Microwave Digestors, Anaerobic Chambers, -80°C Freezers, Muffle Furnace, Freeze Drier & Ringmill 	<p>https://www.scu.edu.au/southern-cross-geoscience/research-facilities-and-resources-group/analytical-equipment/</p> <p>Dr Nick Ward nicholas.ward@scu.edu.au (02) 662 69360</p>	<p>User fees apply. Please enquire with contact.</p>
<p>Geoarchaeology and Archaeometry Research</p>	<p>https://www.garg.org.au/</p>	<p>User fees apply. Please enquire with contact.</p>

Group <ul style="list-style-type: none">- Thermo Scientific Multicollector ICP-MS Neptune XT- Agilent ICP-MS LA7700 series- NWR 213 Laser Ablation System- Frieberg Instruments ESR Spectrometer- Bruker Tracer III pXRF	Dr Renaud Joannes-Boyou renaud.joannes-boyau@scu.edu.au (02) 662 03271	
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TRANSLATIONAL RESEARCH INSTITUTE Facilities or Assets:

Instrument/Facility	Website/Contact	Fee
Flow Cytometry	https://www.tri.edu.au/tri-fcs	
Sorter Beckman Coulter MOFLO ASTRIOS		
Sorter BD FACSARIA FUSION (two systems)		
Sorter Miltenyi Biotec AUTOMACS PRO SEPARATOR		
Analyser BD ACCURI C6		
Analyser Beckman Coulter GALLIOS (two systems)		
Analyser Beckman Coulter CYTOFLEX S (two systems)		
Analyser BD LSR FORTESSA X-20 (3 systems)		
Analyser Merck-Millipore IMAGESTREAMX MK II		
Analyser Mindray BC-5000 Haematology Analyser		
Analyser BD FACSYMPHONY A5		
Microscopy	https://www.tri.edu.au/microscopy	
Olympus FV1200 LS Confocal Microscope		
Olympus FV3000 LS Confocal Microscope		
Nikon/Spectral SPINNING DISC Confocal Microscope		
OMX BLAZE Super Resolution Microscope		
MULTIPHOTON Imager		
Olympus OLS4100 Surface Scanner		
Nikon Upright Brightfield Microscope		
Olympus BX63 Upright Epifluorescence Microscope		
Olympus IX73 Inverted Epifluorescence Microscope (4 systems)		
Olympus VS120 Brightfield Slide Scanner		
Perkin Elmer VECTRA III Spectral Autoscanner		
Olympus IX81 Live Cell Imager		
PhaseFocus LIVECYTE Live Cell Imager		
Histology	https://www.tri.edu.au/histology	
Sample processing, sectioning, staining and finishing		
Tissue Processor and		

Embedding Station		
Slide and Cassette Printers		
Microtomes		
Cryostats		
Ventana Automated IHC Platform		
Automated Stainer and Coverslipper		
Automated Tissue Microarrayer		
Proteomics	https://www.tri.edu.au/proteomics	
LC Q-EXACTIVE PLUS Mass Spec		
LC Q-EXACTIVE HF Mass Spec		
BRAVO Robot System		
Off-Gel Electrophoresis		
DIRECT DETECT		
BIORUPTOR Homogeniser		
Preclinical Imaging	https://www.tri.edu.au/preclinical-imaging-facility	
Visualsonics VEVO 2100/LAZR		
Perkin Elmer IVIS Spectrum		
Lions Australia Bruker Skyscan 1272		
Molecubes B-CUBE and X-CUBE PET-CT systems		
Bruker Minispec LF50H		
Faxitron Ultrafocus 100		
Perkin Elmer 2480 Wizard Gamma counter		
Targeted Radiotherapy Services		
Biological Resources (Mouse and Rat Facility)	TRI-AF-ResearchRequest@tri.edu.au	
Experimental and Breeding wings		
Quarantine Facilities		
Cytotoxic and Infectious Suite		
PC3 Facility (limited capacity)		
Technical, breeding and training services		
Gnotobiotic (and Germ-Free) Facility	GnotoRequests@tri.edu.au	
Isolators		
Isocages		
Production of gnotobiotic and germ-free mice for sale		
Technical services and expertise to conduct full experimental projects		
Training		
Clinical Research Facilities	https://www.tri.edu.au/CRF	
Adult facility and Paediatric facility		
Clinical and office space		
Patient facilities		
Nursing support		
Gym facilities		

Support for design, approval and conducting trials		
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