

## **2021 CORE FACILITY USER FEES**

Fees have been calculated using a cost recovery method, and are intended to offset the cost of operating the facilities. This cost recovery model will ensure continued investment into these facilities, bringing researchers at Westmead world class technology to conduct their research.

This document is for researchers to use for grant applications in 2021. In December 2021 fees will be increased by the CPI rate and then rounded up to the nearest dollar after the increase has been applied. Please include the CPI increase (recommended 2%) in your budget costs related to the 2022 and 2023 budget.

The fee schedule below is for INTERNAL USERS ONLY. The EXTERNAL ACADEMIC and COMMERCIAL users will be charged 1.5 times and 3 times more respectively.

### **WESTMEAD BIOBANK**

Westmead Biobank offers services from sample receipt and processing, to sample storage and distribution. Biospecimen collections can be managed from receipt through to processing and storage, or one-off services can be ordered. Customised processing services are available for project-specific requirements.

## Specimen receipt and primary processing

SERVICE	DESCRIPTION	SERVICE FEE#
Specimen Receipt <sup>^</sup>	Biobank staff pick-up from clinical collection point on campus	\$18 per collection
	Delivered to WIMR by courier	\$10 per delivery
	Delivered to Biobank lab in person	No charge
Blood processing	Blood fraction aliquots (whole blood/buffy coat/plasma/serum; ≤ 8 aliquots per sample)	\$15 per sample
	Blood spot card	\$5 per card
Tissue processing	Snap-frozen in LN <sub>2</sub>	\$12 per sample
	Formalin-fixed	\$6 per sample

<sup>^</sup> Biobank staff are on-call to receive specimens from 8:30 AM to 5:00 PM, Monday – Friday. Special arrangements may be made for after-hours specimen receipt. Specimen receipt services include recording sample tracking data and log of receipts.

#### **Downstream sample processing**

SERVICE	DESCRIPTION	SERVICE FEE #
DNA/RNA Extraction^	QIAamp DNA Blood Maxi Kit (3-10ml)	\$23 per sample
	QIAamp DNA Blood Midi Kit (0.3–2 ml)	\$13 per sample
	QIAamp DNA Blood Mini Kit (1–200 μl)	\$11 per sample
	QIAGEN RNeasy Plus mini kit (cells and tissue samples)	\$80 per batch of 1-4 samples
	DNA/RNA extraction – other kits or sample types	\$53 per hour
DNA/RNA Quantitation	Qubit™ (< 30 samples)	\$3 per sample
	Spectrophotometer	\$3 per sample
2D barcoded aliquots	Aliquots and data entry ≤ 8 aliquots per sample	\$7 per sample
Histology Services	Tissue microarray (TMA) construction	\$53 per hour
	FFPE sectioning (first slides)	\$9 per slide
	FFPE sectioning (subsequent slides)	\$4 per slide

<sup>^</sup> QIAGEN kits are used for the standard DNA/RNA extraction services listed. Customised extraction services can be arranged for different kits or sample types. # Separate charges apply for consumables

<sup>#</sup> Separate charges apply for consumables

# Biobank storage, retrieval and shipping

Storage space within the Westmead Biobank storage facilities can be rented on an annual basis. The facility is inventory managed by Biobank staff and samples are stored and retrieved on a cost/hour basis.

FACILITY / SERVICE	DESCRIPTION	FEE <sup>#</sup>
-80°C Freezer	SBS box format – 1 tray (≤ 7 boxes; 672 vials)	\$123 / tray / year
	SBS box format – 1 rack (≤ 42 boxes; 4,032 vials)	\$410 / rack / year
	SBS box format – 1 shelf (≤ 294 boxes; 28,224 vials)	\$1,842 / shelf / year
	2" box format – 1 tray (≤ 5 boxes; 500 vials)	\$123 / tray / year
	2" box format – 1 rack (≤ 25 boxes; 2,500 vials)	\$410 / rack / year
	2" box format – 1 shelf (≤ 175 boxes; 17,500 vials)	\$1,842 / shelf / year
LN <sub>2</sub> vapour phase tank	2" box format – 1 box (≤ 100 vials)	\$41 / box / year
	2" box format – 1 rack (≤ 12 boxes)	\$410 / rack / year
Controlled ambient	Slide cabinet – 1 drawer (≤ 380 slides)	\$26 / drawer / year
	FFPE blocks – 1 drawer (≤ 280 blocks)	\$21 / drawer / year
	Blood spot cards – 1 box (≤ 100 cards)	\$6 / box / year
Storage service^	Specimen storage and inventory update	\$14 / ¼ hour
	Specimen retrieval and inventory update	\$14 / 1/4 hour
Shipping	Coordination of dispatch or receipt of samples by courier	\$14 / 1/4 hour + courier charge

<sup>^</sup> The charge for storage/retrieval of specimens into/out of the biobank storage facility is waived when booked in conjunction with biobank processing services

# **Biobank Equipment**

EQUIPMENT	DESCRIPTION	NON-ASSISTED	OPERATOR ASSISTED	TRAINING#
EpMotion 5075	Automated Liquid Handling System	\$21 per hour	\$74 per hour	\$105 per person
Qubit4 Fluorometer	For measuring DNA, RNA and protein quantity	Consumable only	\$53 per hour	\$52.50 per person

<sup>#</sup> Re-training is required if the user hasn't used the instrument >12 months. 50% discount will apply for all retraining sessions.

## **CONTACT DETAILS**

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<sup># 10%</sup> discount will apply to annual storage fees after the first year of storage.

## **WESTMEAD BIOINFORMATICS CORE SERVICE**

The Westmead Bioinformatics Core Service is located at WIMR.

TRANINING & SERVICES	TYPES	DESCRIPTION	CHARGE
TRAINING	Technique	Data manipulation and visualisation in R	\$210 per person
		Nanostring analysis in R	\$210 per person
		RNAseq	\$210 per person
		scRNAseq	\$210 per person
		T-cell receptor analysis	\$210 per person
		ChIP-seq	\$210 per person
		Accessing publicly available data	\$210 per person
		Genome insert mapping	\$210 per person
		Annotating gene lists	\$210 per person
		Data manipulation and visualisation in R	\$210 per person
		Nanostring analysis in R	\$210 per person
SERVICES *		Data Analysis	\$53 per hour
		Experimental Design	\$53 per hour
		Protocol Testing/Pilot Study	\$53 per hour
PIPELINES **		RNAseq: Raw data to DE (<10 samples)	\$210
		scRNAseq: Raw data to DE (<20000 cells)	\$530
	Urgent service surcharge &	Within working hours	+50% on top of the normal charge
		After hours during working days	+100% on top of the normal charge
		On weekends or public holidays	+200% on top of the normal charge

<sup>\*1)</sup> Bioinformatics currently offers data analysis packages for genomics, cytometry and proteomics.

#### **CONTACT DETAILS**

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#### WESTMEAD CYTOMETRY CORE FACILITY

The Westmead Cytometry Core Facility is located at WIMR & CMRI.

EQUIPMENT	TYPE	NON- ASSISTED (per hour)	OPERATOR ASSISTED (per hour)	TRAINING# (per person)
Analyser - simple (2 laser) – Canto	Cell analyser	\$21	\$74	
Analyser - intermediate (3 laser) - Cantoll	Cell analyser	\$32	\$85	\$210
Analyser - advanced (5 laser) - LSRII & Fortessa	Cell analyser	\$40	\$93	
Analyser - high parameter (8 laser) - Symphony	Cell analyser	\$46	\$99	\$52.50
Sorter - ArialII / Influx	Cell sorter – FACS	\$52	\$79	\$420 (ArialII only)
Cell sorter setup		-	\$79 per sort	-
AutoMACS	Cell sorter – magnetic	\$21	\$74	\$52.50
GentleMACS	Tissue dissociator	\$6	\$58	\$52.50
Analysis PC	Analysis	\$1	\$54	See data analysis below
Analyser - <24hr cancellation	Cell analyser	25% of booking	25% of booking	-
Sorter - <24hr cancellation	Cell sorter	\$79	\$79	-

<sup>#</sup> Retraining is required if the user hasn't used the instrument >12 months. 50% discount will apply for all retraining sessions.

<sup>\*2)</sup> Cost is dependent on project requirements and aims. Please see Bioinformatics Advanced Specialist for project specific price estimates.

<sup>\*\*1)</sup> Includes alighnment, gene counts, basic QC and a comparison nominated by researcher. New Pipelines under construction.
\*\*2) Cost is based on most common use cases- please contact us

for requirement-based cost estimates

<sup>&</sup>amp; subject to staff availability

SERVICES	DESCRIPTION	CHARGE (PER HOUR)
Project support	Consultation (free of charge for the first hour)	\$53
	Experimental design	\$53
	Panel design	\$53
	Sample acquisition	\$53
	Data analysis	\$53
	Panel troubleshooting	\$53
3D Printing	Design + print material at cost	As per quote
Multiplex Cytokine Testing	Sample preparation and acquisition using the LegendPLEX kit (kit included)	\$58 per sample
Others	Other assisted services	\$53
Urgent service &	Within working hours	+50% to the normal charge
	After hours during working days	+100% to the normal charge
	Weekend/public holidays	+ 200% to the normal charge

<sup>&</sup>amp; subject to staff availability

### **CONTACT DETAILS**

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## WESTMEAD ELECTRON MICROSCOPY FACILITY

The Westmead Electron Microscopy Facility is located at ICPMR, Westmead Hospital.

EQUIPMENT	ТҮРЕ	NON-ASSISTED (per hour)	OPERATOR ASSISTED (per hours)	TRAINING <sup>#</sup> (per person)
TEM - Jeol, Hitachi, Tecnai	Transmission Electron Microscope	\$42	\$95	\$210
Leica UC6	Ultramicrotome	\$21	\$74	\$210
Leica UC7/FC7	Cryo-Ultramicrotome	\$32	\$85	\$315
HHV BT150	Carbon Coater	\$11	\$64	\$105
FEI Vitrobot	Plunge freezing device	\$42	\$95	\$210

SUBSCRIPTION	OPTIONS
Subscription – 10% discount**	\$2,000
Subscription – 20% discount**	\$2,500
Subscription – 30% discount**	\$5,000
Subscription – 50% discount**	\$10,000 and higher

<sup>\*\*</sup> Prepaid subscription (valid for 12 months) is for multiple researchers within the same project to access selected equipment and no consumables, training or service charges included.

<sup>#</sup> Retraining is required if the user hasn't used the instrument >12 months. 50% discount will apply for all retraining sessions.

SERVICES	DESCRIPTION	CHARGE
Project Support	Consultation (free of charge for the first hour)	\$53 per hour
	Experimental design	\$53 per hour
	Protocol testing	\$53 per hour
	Image analysis	\$53 per hour

Technique	Manual process aldehyde fixed cells/tissues (max 6 samples/six blocks per sample) to epoxy resin	\$105
	Auto process (up to 16 samples/6 blocks per sample) aldehyde fixed cells/tissues to epoxy resin	\$53
	Manual process aldehyde fixed cells/tissues (max 6 samples/six blocks per sample) to acrylic resin	\$105
	Fix and process one (1) sample/4 blocks aldehyde fixed cells/tissue for Tokuyasu technique	\$79
	Cryo-fixation of cell monolayers on sapphire discs by HPF (max 10 discs)	\$105
	Process cell monolayers on sapphire discs by FS/LT embedding for immunolabelling (max 10 discs)	\$105
	Process cell monolayers on sapphire discs from HPF using FS/LT embedding + TAMOI for morphology/tomography	\$470
	On-section immunogold labelling using Leica IGL	\$79
	Fix and process cells/tissues for Serial Block Face SEM	\$209
	Negative stain	\$27
	Grid film coating (formvar/pioloform)	\$27
Urgent service &	Within working hours	+50% to the normal charge
	After hours during working days	+100% to the normal charge
	Weekend/public holidays	+ 200% to the normal charge
Others	Other assisted services	\$53 per hour

<sup>&</sup>amp; subject to staff availability

SERVICES PACKAGES*	DESCRIPTION	CHARGE
TEM Morphology	Tissue (4 blocks)	\$625
	Cell Monolayer (4 blocks)	\$610
	Negative stain (4 grids)	\$210
	Cryo TEM (4 grids)	\$945
	Electron Tomography	\$1,510
Immuno EM	Frozen sections - 2 Immuno EM runs	\$1,370
	Resin sections - 2 Immuno EM runs	\$1,550
CLEM	CLEM Frozen sections - 2 Immuno EM runs	\$1,480
	CLEM Resin sections - 2 Immuno EM runs	\$1,660
SEM Morphology Processing	SBFSEM Processing (no microscopy)	\$295
	Array Tomography Sample Processing (no microscopy)	\$580

<sup>\*</sup>service packages include a 10% discount for standard workflow including sample preparation, sectioning and digital image acquisition. Additional requirements may be charged differently.

# **CONTACT DETAILS**

## **Westmead Electron Microscopy**

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# **WESTMEAD GENOMICS CORE FACILITY**

The Genomics Core Facility is located at WIMR.

EQUIPMENT	TYPE NON-ASSIST		OPERATOR ASSISTED	TRAINING#	
Tapestation 4200	Microfluidic electrophoresis system	\$27 per hour	\$80 per hour	\$105 per person	
Nanostring nCounter PrepStation	Robotic liquid handling	\$27 per hour	\$80 per hour	N/A	
Nanostring nCounter Digital Analyzer	High resolution microscope	\$27 per hour	\$80 per hour	N/A	
Digital PCR Droplet Generator	Digital PCR Droplet Generator	\$31 per hour	\$84 per hour	\$105 per person	
QX200 Digital PCR Droplet Reader	Digital PCR Droplet Reader	\$31 per hour	\$84 per hour	<ul><li>\$105 per person</li></ul>	
Covaris Evolution	Ultrasonicator	\$27 per hour	\$80 per hour	\$105 per person	

<sup>#</sup> Retraining is required if the user hasn't used the instrument >12 months. 50% discount will apply for all retraining sessions.

TECHNIQUE TRAINING	DESCRIPTION	CHARGE
Technique	NGS Library preparation	\$525 per person
	Single cell RNA-seq sample multiplexing (Hashtagging)	\$53 per person
	Nanostring data analysis	\$53 per person
	qPCR primer design and data analysis	\$53 per person
	STR data analysis	\$53 per person

SERVICES	DESCRIPTION	CHARGE
Project support	Consultation (free of charge for the first hour)	\$53 per hour
	Experimental desgin	\$53 per hour
	Pilot study	\$53 per hour
	Protocol testing	\$53 per hour
	Data analysis	\$53 per hour
DNA/RNA QC	Tapestation (standard tape for DNA/RNA); excludes consumables	\$3 per sample
	Tapestation (high sensitivity tape for DNA/RNA); excludes consumables	\$3 per sample
Next Gen Sequencing	Library Preparation**	\$53 per hour
Targeted gene expression profiling (Nanotring)	Standard scan; 12 samples per cartridge	\$209 per cartridge
	High sensitivity scan, 12 samples per cartridge	\$261 per cartridge
	miRNA Expression (Standard scan), 12 samples per cartridge	\$340 per cartridge
	miRNA Expression (High sensitivity scan), 12 samples per cartridge	\$470 per cartridge
Cell Line Authentication (STR)	without DNA extraction (includes consumables)	\$41 per sample
	with DNA extraction (includes consumables)	\$52 per sample
	STR data analysis	\$11 per sample
Urgent service &	Within working hours	+\$31 per sample
	After hours during working days	+\$62 per sample
	Weekends / public hollidays	+\$93 per sample
Others	Other assisted services	\$53 per hour

#### Notes

## **CONTACT DETAILS**

**Email:** westmead.genomics@sydney.edu.au **Website:** https://www.westmead.org.au/core-

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<sup>\*</sup> NOT including consumables

<sup>\*\*</sup> Cost is dependent on project requirements and aims. Please see Genomics Advanced Specialist for project specific pricing.

<sup>&</sup>amp; subject to staff availability

# **WESTMEAD IMAGING FACILITY**

The Westmead Imaging Facility is located at WIMR.

EQUIPMENT	DESCRIPTION	NON-ASSISTED	OPERATOR ASSISTED	TRAINING#
Image Analysis Computers	Windows or Linux OS with assorted imaging software installed	Peak*: \$13 per hour Off peak*: \$4 per hour	\$66 per hour	NA
Olympus FV1000 & Leica SP5/CLEM	Confocal microscopy	\$42 per hour	\$95 per hour	\$262.5 per person
Deltavision	Deconvolution fluorescence microscopy	\$42 per hour	\$95 per hour	\$262.5 per person
Nanoimager	dSTORM super resolution, confocal, TIRF	\$42 per hour	\$95 per hour	\$105 per person
Olympus BX53/DP80	Widefield fluorescence microscope	\$32 per hour	\$85 per hour	\$105 per person
Zeiss Live Cell Imaging	Widefield fluorescence microscope	\$32 per hour	\$85 per hour	\$105 per person
JuliBr (in-incubator)	Brightfield live cell imaging	Peak*: \$8 per hour Off peak*: \$2 per hour	\$61 per hour	\$105 per person
Zeiss LCM	Laser capture microdissection	\$32 per hour	\$85 per hour	\$105 per person
Nuance Multispectral Imaging System	Multispectral fluorescence imaging system	\$32 per hour	\$85 per hour	\$105 per person
CytoSpin	Bench-top cytocentrifuge	Disposable concentrator \$6.50 ea	\$53 per hour + consumables	\$105 per person

SUBSCRIPTION	OPTIONS
Subscription – 10% discount**	\$2,000-\$2,499
Subscription – 20% discount**	\$2,500-\$4,999
Subscription – 30% discount**	\$5,000-\$9,999
Subscription – 50% discount**	\$10,000 and higher

<sup>\*</sup> Peak: 9am – 5pm Mon-Fri; Off peak: 5pm-9am Mon-Fri, weekends and public holidays

<sup>#</sup> Retraining is required if the user hasn't used the instrument >12 months. 50% discount will apply for all retraining sessions.

TRAINING & SERVICES	TYPE	DESCRIPTION	CHARGE
Technique Training	Analysis software	Available upon user request	\$105 per hour
	Technique	e.g. Expansion Microscopy	\$105 per hour
Services	Project support	Consultation (free of charge for the first hour)	\$53 per hour
		Experimental design	\$53 per hour
		Pilot study	\$53 per hour
		Protocol testing	\$53 per hour
	Imaging acquisition		\$53 per hour + instrument charge
	CLEM assistance	Transferral to EM service	Quoted per service
	Figure preparation for publication		\$53 per hour
	Image analysis		\$53 per hour
	Urgent service <sup>&amp;</sup>	Within working hours	+50% on top of the normal charge
		After hours during working days	+100% on top of the normal charge
		On weekends or public holidays	+200% on top of the normal charge
	Other assisted services		\$53 per hour

<sup>&</sup>amp; subject to staff availability

<sup>\*\*</sup> Prepaid subscription (valid for 12 months) is for multiple researchers within the same project to access selected imaging equipment (excluding analysis computers).

#### **CONTACT DETAILS**

#### **Westmead Imaging**

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## **HUB PROTEOMICS FACILITY AT WIMR**

EQUIPMENT	ТҮРЕ	NON-ASSISTED	OPERATOR ASSISTED	TRAINING#
AKTA pure	High pressure liquid chromatography system (HPLC)	\$6 per hour	\$59 per hour	\$105 per person

<sup>#</sup> Retraining is required if the user hasn't used the instrument >12 months. 50% discount will apply for all retraining sessions.

WIMR Proteomics facility is also providing the technique training programs including protein sample preparation, purification and 2D gel electrophoresis as well as a wide range of services including experimental design, pilot study, protocol test, sample preparation, 2D gel, protein purification, protein interaction and data analysis. For more details, please visit <u>WIMR Proteomics webpage</u>.

### **CONTACT DETAILS**

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## **CONSUMABLES**

Please refer to the fees in PPMS.

#### APPENDIX - INCORPORATING THESE FEES INTO YOUR GRANT APPLICATIONS

## **ESTIMATING COSTS FOR BUDGET REQUESTS**

The NHMRC requires detailed costings in their budgets; for example, numbers of samples, estimated analysis hours and justification of why the characterisation techniques are required for the project. To help plan your budget request, using the fees recommended in this document, we provide the following example.

## Example:

The project requires access to an advanced microscope for one sample per week, at 4 hours per sample, for 45 weeks in Year 1.

 $1 \times 4 \times 45 = 180$  - therefore 180hrs of beam time is required.

Advanced microscope fees are \$40 per hour if operated by a user

180 x 40 = 7200 - therefore for Year 1, a total cost of \$7,200 will need to be included.

N.B. For estimates on the average number of samples per hour, please consult the appropriate Core Facility Manager.

## **JUSTIFYING BUDGET REQUESTS**

The following wording can be used in your application to justify the funding request:

"This research project requires the examination of *N* samples per *week/month/year [as appropriate]* with the advanced *microscopy and/or microanalysis [as appropriate] technique/s of [specify; e.g. atom probe tomography]*. The estimated time required for characterisation of each sample is *X* hours, at a cost of \$40 per hour of instrument time."

You should also add further specific explanation of why the chosen microscopy technique/s is/are necessary for the research.