

## ***OMNI Electron Microscopy charges from 1st July 2021***

### **Charges for Electron Microscope use**

From 1st July 2021 OMNI will be piloting a new tiered fee structure that will offer a reduced hourly rate for use of the electron microscopes for high users. Principal Investigators can choose whether to be charged at the casual hourly rate, as is currently done, or select a pre-paid tiered fee.

We hope this system will make longer-term imaging experiments more affordable, simplify budgeting for grant applications, encourage more users, particularly our post-graduate students, and improve the quality of the data produced.

### How the tiered fee structure works

- PIs select a tier based on their expected microscope use (within an OMNI unit)
- The account number(s) provided will be billed the tiered fee amount up front
- This can be used for the PI's entire lab group i.e. include several students/post-docs
- Equipment usage hours must be recorded at the instrument as usual
- PIs will receive a monthly statement and be notified when maximum hours for the tier have been used up
- If more hours are needed they will continue to be charged at the same hourly rate for that tier until the end of the year OR a new (higher) tier can be purchased
- Applies to a single calendar year but can start at any time of year (i.e. ends 31<sup>st</sup> December and does not carry over to the next year)
- No refunds/carry forwards unless equipment unavailable/broken (i.e. exceptional circumstances)

### Tiered fee rates

The tables below show the tiered fee charges for Health Science Division (HSD) users for the first half year (1st July 2021 to 31 December 2021) and for a full year (from 2022).

HSD 2021 rates from 1 <sup>st</sup> July		
Tier	Cost	No. hours
Casual	\$60	1
Tier 1	\$750	up to 20
Tier 2	\$1,250	20 to 40
Tier 3	\$2,250	40 to 75
Tier 4	\$3,500	>75

HSD Full Year charges from 2022			
Tier	Cost	No. hours	median hourly rate
Casual	\$60	1	\$60
Tier 1	\$1,500	up to 40	\$50
Tier 2	\$2,500	40 to 80	\$42
Tier 3	\$4,500	80 to 150	\$39
Tier 4	\$7,000	>150	\$28

### Examples of use to help you choose a Tier

h/week	No. weeks	total hours	Casual \$60/h	Tier / cost
4	12	48	\$2,880	2 / \$2,500
4	20	80	\$4,800	2 / \$2,500
8	20	160	\$9,600	4 / \$7,000
8	40	320	\$19,200	4 / \$7,000

### How to register for a tiered fee

Users must register, as usual, each year using the existing Mach Forms system. To opt into the tiered fee system the PI needs to email [omni.accounts@otago.ac.nz](mailto:omni.accounts@otago.ac.nz) and provide the PI name, Department, OMNI unit (EM or CM), account code, Tier number and names of any associated students/post-docs. Your account will be billed the Tiered Fee that month. From then on you will be sent a monthly statement of the microscope hours used.

### What the EM charges cover

For HSD users these charges are designed to cover 25% of the costs associated with the microscopes including maintenance, staff, occupancy and depreciation as per the DRIGG funding model. The HSD Schools pay for the other 75% of these operating costs. The new tiered fee system will be trialled until the end of 2023 and reviewed regularly during that time. Should use of the electron microscopes decline and result in a decrease in income we will have to return to the casual hourly rate system in order to meet our 25% income target.

### Non-HSD user rates

Non-HSD users that are not subsidised by DRIGG funding may also opt into the tiered charging option but the rates will be 4 times those listed above. We hope this will make it easier for non-HSD users to predict costs and apply for further funding from their respective Divisions to support their microscopy research.

### Charges for staff time

There is no charge for EM staff time spent training users to operate the microscopes or prepare samples. Staff time will be charged for if they are operating the microscope or preparing samples for users (\$10/h HSD; \$40/h non-HSD; \$80/h external).

### **Sample preparation charges**

Sample preparation charges have been reviewed and simplified and are shown on the next page. The simplified charges will make it easier to budget for the sample preparation costs according to the number of samples you expect to need to prepare. For any other types of sample preparation not covered by this list, please discuss with the OMNI EM staff. Additional charges may be incurred for non-routine consumables/techniques.

### HSD charges

For HSD users these charges are designed to cover the full costs of the consumables and 25% of the costs associated with staff time, and maintenance and depreciation costs for the preparation equipment as per the DRIGG funding model. The HSD Schools pay for the other 75% of these operating costs.

### Non-HSD sample preparation charges

For non-HSD users, staff time and equipment use are charged at 4x the non-subsidised HSD rate as these schools do not contribute to the operating costs of the OMNI units. Consumable costs are the same as for HSD users.

## **Electron Microscopy Sample processing charges from 1st July 2021**

	<b>HSD</b>	<b>Non-HSD</b>	<b>External</b>
<b>TEM sample preparation with resin embedding</b>			
Price per sample vial	35.00	35.00	35.00
Price for staff processing time (1 to 10 vials)	30.00	120.00	240.00
<b>High Pressure Freezing (HPF) <i>(includes LN2)</i></b>			
HPF run - up to half day of freezing	130.00	280.00	400.00
HPF run - full day of freezing	200.00	350.00	500.00
<i>Plus</i> per sample cost	7.50	7.50	7.50
<b>Automatic Freeze Substitution (AFS) <i>(includes LN2)</i></b>			
AFS run (up to 30 samples) - Epoxy resin	230.00	330.00	450.00
AFS run (up to 30 samples) - Acrylic resin	350.00	450.00	570.00
<b>Vitrobot</b>			
Vitrobot run (up to 4 grids) - by EM staff	35.00	70.00	110.00
Vitrobot run (up to 4 grids) - by user	25.00	30.00	30.00
<i>Plus</i> per sample cost of grids:			
Lacey	2.00	2.00	2.00
Quantifoil/C-Flat carbon	10.00	10.00	10.00
Quantifoil Gold	20.00	20.00	20.00
<b>Ultramicrotomy and staining (per block)</b>			
Semi-thin sections (includes trimming block) - by EM staff	10.00	25.00	45.00
Ultra-thin sections (~3 grids) & staining - by EM staff	15.00	35.00	55.00
Semi-thin sections (includes trimming block)- by user	5.00	8.00	
Ultra-thin sections (~3 grids) & staining - by user	5.00	10.00	
<b>SEM preparation</b>			
Fixation, CPD & mounting per sample/vial – by EM staff	40.00	90.00	160.00
Mounting only per sample – by EM staff	5.00	10.00	20.00
Sputter coating per run – by EM staff	30.00	35.00	40.00
Carbon coating per run – by EM staff	15.00	20.00	25.00
Fixation, CPD & mounting per sample/vial – by user	25.00	25.00	
Mounting only per sample – by user	3.00	3.00	
Sputter coating per run – by user	25.00	25.00	
Carbon coating per run – by user	10.00	10.00	
<b>Microscopy operation by EM staff for users (per hour)</b>			
<b>Training</b> in sample preparation or EM use by EM staff	FREE	FREE	FREE