

# Pilot Grant Applicants' services and rates

The [Heterogeneity of Aging Core](#) offers a wide range of analytical services and instrumentation for analyzing the heterogeneity of aging. The core offers sequencing and single cell analysis, imaging services, mass spectrometry services, and consultation. Please contact Core Directors to setup a consultation. Services and rates are detailed below.

**SEQUENCING AND SINGLE CELL ANALYSIS** services are available through the core at the following rates:

10X Chromium Single Cell Solution	Rate (Per sample)
10X Chromium Training	Free
10X Chromium Next GEM Single Cell 3' GEM v3.1	\$1,096.00
10X Chromium Next GEM Chip G Single Cell Kit	\$227.00
10X Chromium Next GEM Single Cell ATAC v1.1	\$1,141.00
10X Chromium Next GEM Chip H Single Cell Kit	\$227.00
10X Chromium Next GEM Single Cell 3' GEM v3.1 Feature Barcoding	\$1,096.00
10X cDNA Library preparation	\$150.00
Instrument Usage Fee (Per hour). This Includes Machine Usage, Workstation, all the necessary equipment and consumables including index primers)	\$50

Illumina Sequencing for 10X Genomics Sequencing Run Configuration (28/8/91, 50/8/16/50)	Rate
MiniSeq: (25M reads)	\$1,145.00
NextSeq500: MidOutput (130M reads)	\$1,639.00
NextSeq500: HighOutput (400M reads)	\$ 3,367.00
NovaSeq SP (~0.8B reads)	\$3,826.00
NovaSeq S1 (~1.6B reads)	\$5,565.00
NovaSeq S2 (~3.3-4.1B reads)	\$10,584.00
NovaSeq S4 (~8-10B reads)	Please inquire

SMART-Seq V4	Rate
SMART-Seq library prep Training	Free
Ultra Low input RNA-Seq cDNA Prep (SMART-seq V4)	\$146.00
Nextera XT/Flex DNA Library Prep	\$105.00
Single Cell RNA-Seq Library Prep: Full 96-well plate (SMART-seq V4 + Nextera XT)	\$8,228.00

## ALL RATES SUBJECT TO CHANGE<sup>§</sup>

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SMART-Seq scRNA sequencing	Rate
MiniSeq 75 Cycle (SR75, PE37, ~25M reads)	\$991.00
MiniSeq 150 Cycle (PE75, ~25M reads)	\$1,145.00
HiSeq 4000 50 Cycle (SR50 ~350M reads)	\$1,117.00
NextSeq 75 Cycle (High-output, SR75, PE37, ~400M reads)	\$2,048.00
NextSeq 150 Cycle (Mid-output, PE75, ~130M reads)	\$1,639.00
NextSeq 150 Cycle (High-output, PE75, ~400M reads)	\$3,367.00
NovaSeq SP 100 Cycle (PE50, ~0.8M reads)	\$3,826.00
NovaSeq S1 100 Cycle (PE50, ~1.6B reads)	\$5,565.00
NovaSeq S2 100 Cycle (PE50, ~3.3-4.1B reads)	\$10,584.00
NovaSeq S4 200 Cycle (PE100, ~8-10B reads)	Please inquire

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Access to **HIGH-END LIGHT MICROSCOPY IMAGING MICROSCOPES** and **IMAGING SERVICES** are available. Generally, LM scope time is ~\$35/hour for unassisted usage, whereas imaging by SD-NSC staff is performed at a rate of \$75/hour. Image analysis is similarly \$75/hour when performed by SD-NSC staff, but workstations are available for \$8/hour. Training is available at a rate of \$75/hour.

More involved projects including live-to-EM CLEM imaging, and/or deep learning-based model training and prediction are also available for a set rate, depending on the scope of the project.

The core also offers a range of EM preparation and imaging services, listed below:

## ELECTRON MICROSCOPY

EM offerings	Sample preparation	Imaging	Analysis	Time Frame	Notes
<b>TEM</b>	\$200 / sample. Includes ultramicrotomy and 2 hours of imaging.	\$50 / hour (autonomous - please inquire: special training required) / \$100 / hour (assisted)	\$50 / hour (2 hours) + \$75 / hour	6 weeks / 4 samples, respective to queue	For quantitative approaches, demand references and detailed approach, and charging \$75
<b>SEM</b>	\$100 / 5 samples. \$50 / stub (mounting and sputtering) (first 2 included)	\$50 / hour (autonomous - please inquire: special training required) / \$100 / hour (assisted)	\$50 / hour (2 hours) + \$75 / hour	3 weeks / 5 samples, respective to queue	For quantitative approaches, demand references and detailed approach, and charging \$75
<b>Negative staining</b>	\$100 / up to 4 grids	\$50 / hour (autonomous - please inquire: special training required) / \$100 / hour (assisted)	\$50 / hour (2 hours) + \$75 / hour	1 week / 4 grids, respective to queue	
<b>EELS</b>	Sample dependent	\$100 / hour	Sample dependent	Sample dependent	
<b>Chip mapping</b>	\$150 / up to 4 samples. Ultramicrotomy: \$50 / block sectioned (first 2 included)	\$50 / hour (autonomous - please inquire: special training required) / \$100 / hour (assisted)	\$50 / hour (2 hours) + \$75 / hour	6 weeks / 4 samples, respective to queue	
<b>VP hydrated samples</b>	Included in imaging time	\$100 / hour	\$50 / hour (2 hours) + \$75 / hour	Same day, respective to queue	
<b>tSEM</b>	\$100 / up to 4 samples. Ultramicrotomy: \$50 / block sectioned (first 2 included)	\$50 / hour (autonomous - please inquire: special training required) / \$100 / hour (assisted)	\$50 / hour (2 hours) + \$75 / hour	6 weeks / 4 samples, respective to queue	

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3D-EM offerings	Sample preparation	Imaging	Analysis	Time Frame	Notes
<b>3View</b>	\$400 / up to 4 samples + \$100 / pin	\$500 / 50GB of aligned data	Free training (2 hours) + \$50 / hour first 20 hours, \$75 / hour	8 weeks / aligned volume	Encourage quantitative approaches with discounts on analysis
<b>S3EM (Serial Sections in the SEM)</b>	\$200 / up to 4 samples, \$150 / ribbon (up to 100 sections)	\$35 / hour (2 hours assisted), \$75 / hour (assisted) + \$35 / hour (overnight)	Free training (2 hours) + \$50 / hour first 20 hours, \$75 / hour	8 weeks / aligned volume	
<b>Tomography</b>	\$100 / up to 4 samples. Ultramicrotomy: \$50 / block sectioned (first 2 included)	\$125 / hour	\$75 / hour	2 weeks / aligned volume	

Immuno-EM techniques	Sample preparation	Imaging	Analysis	Time Frame	Notes
<b>Array Tomography</b>	\$500 / up to 4 samples	Optimizing IF: \$30 / block; Ribbon: \$50; SEM rates	Free training (2 hours) + \$50 / hour first 20 hours, \$75 / hour	10 weeks / aligned volume	
<b>Pre-embedding labeling (room temp)</b>	\$200 / 4 samples	\$35 / hour (2 hours assisted), \$50 / hour (autonomous)			
<b>Pre-embedding labeling (AFS)</b>	\$400 / 4 samples	\$35 / hour (2 hours assisted), \$50 / hour (autonomous)			
<b>Post-embedding labeling (AFS)</b>	\$400 / 4 samples	\$35 / hour (2 hours assisted), \$50 / hour (autonomous)			
<b>Immuno-negative staining</b>	\$200 / 4 grids	\$35 / hour (2 hours assisted), \$50 / hour (autonomous)			

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The [Heterogeneity of Aging Core](#) offers a variety of Mass Spectrometry services and we encourage you to contact the Core Directors to discuss the feasibility of your project and experimental design prior to submitting samples.

## MASS SPECTROMETRY

Proteomics	Cost	Notes
Gel band analysis	\$200 / gel band	Submit cut bands-Comassie or sliver stained
LC-MS/MS analysis	\$160 / sample	Protein identification and semi quantitation by label free analysis Samples will be trypsin digested by the core prior to analysis
SILAC Analysis	\$160 / sample	Proteome wide quantitation by incorporation of heavy amino acids. Pulsed SILAC can be used to determine protein turnover rates SILAC incorporation is done by the researcher prior to sample submission to the core
TMT Analysis	\$60 / sample for TMT labeling \$160-\$500 LC/MS/MS analysis (up to 10 plex)	Samples are TMT labeled by the core
PTM Analysis	\$80 / sample for enrichment	Phosphopeptide enrichment is done by the core. Samples can be run label free or in combination with TMT quantitation
Protein Interactome	\$160 / sample	Immunoprecipitation is to be done by the researcher. Elute from beads, submit eluate to the MS core for sample prep and analysis
APEX/ BioID	\$160 / sample	Construct design and enrichment is to be done by the researcher. Elute from beads, submit eluate to the MS core for sample prep and analysis Can be coupled with TMT analysis for improved quantitation

Metabolomics/ Lipidomics	Cost	Notes
Lipidomics Untargeted, Global	\$90 / sample	
Metabolomics- Targeted quant	\$40 / sample	Targeted methods available include amino acids, free fatty acids, short chain fatty acids, bile acids. Custom targeted method can be developed. Contact the core for more information

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