

## RESEARCH SUPPORT SERVICES PRICE SCHEDULE

TO: All Investigators and Financial, Research and Grant Administrators

FROM: Gregory P. Downey, M.D., Executive Vice President for Academic Affairs

RE: Research Support Services Price Schedule  
Effective July 1, 2026

Prices are evaluated and updated no less than annually. Updated schedules will be published quarterly.

### BIOBANK

Aliquots Available	Internal Cost	External Cost
<b>Blood –</b> Including Plasma, Serum, DMSO, Plasma, Red Cells (excluding DNA and RNA)	\$35.00	\$58.10
<b>Blood –</b> DNA and RNA	\$45.00	\$74.70
<b>Tissue –</b> Including Fresh Frozen, Saline Formalin Fixed Paraffin Embedded	\$25.00	\$41.50
<b>Cells –</b> PMBC and Buffy Coat	\$50.00	\$83.00
<b>BAL –</b> Cells and Fluid	\$70.00	\$116.20
Nasal Brushings	\$75.00	\$124.50
Other Samples*	\$25.00- \$150.00	\$41.50- \$249.00

*\*Please see Biobank Application or contact the Biobank directly for a listing of Other Samples available.*

In addition to the charges above, there is also a one-time fee for each request of \$75.00 for Research Informatics Services for identification of samples.

Please see [Finding Biobank Samples](#) for more information on what is available and how to access the Integrated Biorepository.

## BIOBANK, continued

### Charges for Investigator Supplied Samples

	Internal Costs	External Costs	
Aperio Scans per Slide	\$8.00	\$13.00	per slide
Freezer Storage Set Up and first month (-80 Freezers)*	\$650.00	\$1,000.00	per rack
Freezer Storage per month (-80 Freezers)	\$60.00	\$110.00	per rack
Freezer Storage Set Up and first month (-80 Freezers)*	\$1,750	\$2,750	per shelf
Freezer Storage per month (-80 Freezers)	\$100	\$160	per shelf
Freezer Storage Set Up and first month (LN Freezers)*	\$500.00	\$1,000.00	per rack
Freezer Storage per month (LN Freezers)	\$70.00	\$95.00	per rack
Additional Biobank assistance with Sample Preparation, Collection or Storage	\$50.00	N/A	per hour
Sample Collection for Collaborations outside of NJH <i>Includes all supplies. Does not include storage costs.</i>	N/A	\$80.00	per sample
Additional Biobank assistance with Sample Preparation, Collection or Storage for non-National Jewish Health projects.		\$80.00	per hour

\* Boxes and vials are to be provided by the investigator.

For a quote on renting an entire freezer please contact John Yang at [YangJ@njhealth.org](mailto:YangJ@njhealth.org)

**BIOLOGICAL RESOURCE CENTER**  
**Per Diem Rates *Updated 7/1/2025***

<b>MOUSE- charged by CAGE</b>	<b>Internal</b>	<b>External*</b>
Small microisolator	\$1.27	\$2.10
Large microisolator	\$2.54	\$4.21
Quarantine/ABSL2/Biohazard mouse	\$1.54	\$2.56
Small MI+ Special water	\$1.40	\$2.32
Small MI+ Special diet (excludes diets purchased by PI)	\$1.40	\$2.32
Small MI+ Special water & diet	\$1.51	\$2.51
Large MI + Special water	\$2.80	\$4.65
Large MI + Special diet (excludes diets purchased by PI)	\$2.80	\$4.65
Large MI + Special water & diet	\$3.03	\$5.03
Quarantine/ABSL2/Biohazard + special water	\$1.75	\$2.91
Quarantine/ABSL2/Biohazard + special diet	\$1.75	\$2.91
<b>RAT- per CAGE</b>	\$3.31	\$5.49
<b>RAT Quarantine/ABSL2/Biohazard</b>	\$3.69	\$6.13
<b>Hamster- per animal</b>	\$2.73	\$4.54
<b>Guinea Pig- per animal</b>	\$3.91	\$6.50
<b>Rabbit- per animal</b>	\$7.17	\$11.90
<b>Rabbit-doe + litter</b>	\$10.75	\$17.84
<b>Technical Assistance- colony management/tail/ID- per hour</b>	\$50.00	\$83.00
<b>Research Support Services- per hour</b>	\$66.00	\$109.56
<b>Animal Ordering Fee- per order</b>	\$24.26	\$40.26
Treatment Fee	\$3.20	\$5.31
Cage inserts- cost per insert used	\$4.40	\$7.30
Animal on BRC HOLDING PROTOCOL		
Non- compliance overcrowding/emergency wean fee	\$33.00	\$54.78
1 Day Gas Anesthesia Machine &/or Monitoring Equipment Rental	\$59.54	\$98.83
1/2 Day Gas Anesthesia Machine &/or Monitoring Equipment Rental	\$29.77	\$49.41
Exportation fee for animal shipment- domestic	\$88.00	\$146.08
Exportation fee for animal shipment- international	177.00	\$293.82
Importation fee for animal shipment- domestic	\$88.00	\$146.08
Importation fee for animal shipment- international	\$177.00	\$293.82

\*Outside institutions will be charged an additional 66% (current NIH indirect rate).

\*Supplies purchased by the BRC for investigators will include an additional 10% fee for administrative and shipping costs.

## ANIMAL PHYSIOLOGY CORE

Available Services	Unit	Internal	External
Flexivent (includes labor and reagents)	Per mouse	\$50	\$85
Micro CT Scanning and Basic Processing (includes labor) In-Vivo Mouse Lung Scans	Per mouse	\$60	\$155
Micro CT Scanning and Basic Processing (Includes labor ) In-Vivo Rat Lung Scans	Per rat	\$100	\$280
All Other Attended Micro-CT Scanning (includes labor)	Per hour	\$75	\$360
Unattended High Resolution Scanning Time	Per hour	\$25	N/A
Surgery	Per hour	\$125	\$305
Training	Per hour	\$85	\$145

Please email [APC@NJHealth.org](mailto:APC@NJHealth.org) with any questions.

## BIOSTATISTICS AND BIOINFORMATICS

Updated 6/5/2025

<b><i>General Services</i></b>	
Statistical Planning, Analysis and Manuscript Collaboration	
Internal Pricing	\$180/hour
External Pricing	\$300/hour

Please contact Matthew Strand, PhD at [strandm@njhealth.org](mailto:strandm@njhealth.org) to request services and for more information.

Note: JMP & SAS yearly software licenses are no longer offered through NJH.

## GENOMICS CORE FACILITY

The NJH Genomics Core provides expert guidance on experiment design and approach with a diverse set of technologies to advance your project at any stage of development. Our mission is to get you the best genomic data and analysis to help move your research and pre-clinical projects forward. Contact our experienced team to plan solutions for your project and research goals.

Prices below are for **internal investigator initiated sponsored projects only.**

Please contact Trey Farmer [FARMERTM@NJHealth.org](mailto:FARMERTM@NJHealth.org) for project based quotes and any other externally initiated projects.

### **Library Prep Services (bulk and single cell)**

mRNA Library Prep		10x 3' or 5' Library Prep		10x 3' or 5' OCM Library Prep	
# of Samples	Price/Sample	# of samples	Price/Sample	# of samples	Price/Sample
1-24	\$120.00	1-4	\$2,000.00	4	\$1,130.00
25-48	\$85.00	5-8	\$1,840.00	8	\$975.00
49-72	\$80.00	9-12	\$1,785.00	12	\$920.00
73+	\$75.00	13+	\$1,760.00	16+	\$900.00

\*Additional library prep services offered upon request

- Total, Ribo-depleted, and Ultra-Low RNA-seq
- RNA/DNA Targeted Panel Sequencing (Includes FFPE DNA and RNA samples)
- WGS/WES
- ATAC and Methyl-seq
- 10x ATAC, Multiome, Flex, and antibody staining
- Illumina Single Cell 3' RNA-seq
- Other company supported library prep kits

### **Spatial Transcriptomics Services**

10x Visium HD 6.5x6.5		10x Visium SD 6.5x6.5		10x Visium SD 11x11	
# of Visium Slides	Price/Visium Slide	# of Visium Slides	Price/Visium Slide	# of Visium Slides	Price/Visium Slide
2	\$7,470.00	2	\$5,000.00	1	\$9,210.00
3	\$7,225.00	4+	\$4,640.00	2	\$8,490.00
4+	\$7,110.00			3	\$8,250.00
				4+	\$8,130.00

\*Additional spatial transcriptomics services offered upon request

- Bruker Nanostring GeoMx DSP

**Sample QC and DNA/RNA Extractions**

TapeStation Sample QC		DNA/RNA Extractions	
DNA (Genomic/HS/Standard) RNA (HS/Standard)		Extraction Type	Price/Sample
# of samples	Price/Sample	DNA/RNA All Prep	\$55.00
1-4	\$30.00	RNA	\$40.00
5-8	\$20.00	PAXgene RNA	\$45.00
9-12	\$15.00	DV200 Scoring	\$45.00
13+	\$12.50		

**Sequencing**

NextSeq 2000 Sequencing		
Sequencing Kit (XLEAP)	Cost/Run	Estimated Output (Clusters)
P4 300	\$3,625	1.8B
P4 200	\$3,450	1.8B
P4 100	\$2,375	1.8B
P4 50	\$2,000	1.8B
P3 300	\$2,575	1.2B
P3 200	\$2,250	1.2B
P3 100	\$1,925	1.2B
P2 600	\$3,175	400M
P2 300	\$1,425	400M
P2 200	\$1,350	400M
P2 100	\$1,200	400M
P1 600	\$1,725	100M
P1 300	\$1,100	100M
P1 100	\$925	100M

## Genomics Data Analysis

Analysis of data generated by the Center for Genes, Environment, and Health varies from basic analysis, which produces the output files typical for a given application, to complex characterization of the genes or loci implicated by the experimental study. For analysis needs that involve the creation of custom analysis scripts or implementation of programs to investigate specific questions of the data, support will be available.

Bioinformatics Services	NJH	External
Basic Analysis Support for: <ul style="list-style-type: none"><li>• DNA-seq (Whole Genome, Exon, or Targeted)</li><li>• RNA-seq</li><li>• ChIP-seq</li></ul> Microarray Analysis Functional Characterization Alignment, Mapping, QC and Quantification Statistical Analysis	\$180 / hour	\$300 / hour

Please contact Rachel Blumhagen at [blumhagenr@njhealth.org](mailto:blumhagenr@njhealth.org) to request an individualized quote and initiate your project.



## CTRC INFLAMMATION AND IMMUNOLOGY CORE

To be updated 9/1/2025

Procedure	Price
Single Paxgene RNA extraction	\$250
12 batched Paxgene RNA extractions	\$70.00 per sample
Single Paxgene DNA extraction	\$250.00
12 batched Paxgene DNA extractions	\$70.00 per sample
Cell RNA extraction	\$312.50
12 batched cell RNA extractions	\$70.00 per sample
BAL processing	\$175.00
Sputum processing	\$150.00
PBMC processing	\$150.00
BALF storage	\$12.50
Differential cell count	\$15.00
Staining for differential cell count	\$9.00
Supernatant storage	\$1.25 per well
Buffy coat storage	\$3.00
Urine processing and storage	\$12.50
Whole blood storage	\$2.50
Serum/plasma processing and storage	\$12.50
Cell cryopreservation	\$14.00 per vial
CD4+ cell isolation	\$95.00
Hourly Rate	\$120.00
Cell culture	call lab for pricing
ELISA	call lab for pricing
Flow cytometry	call lab for pricing
LPT	call lab for pricing
Elispot	call lab for pricing

Please contact Beth Canono, Lab Manager, CTRC Inflammation and Immunology Core Lab, [canonob@njhealth.org](mailto:canonob@njhealth.org) for questions or pricing for external projects.

## FLOW CYTOMETRY/MICROSCOPY

Updated 7/8/2025

<b>Microscopy Services</b>	<b>Internal</b>	<b>BSL-2 Samples (1,2)</b>	<b>External</b>	<b>External BSL- 2 (1,2)</b>	
LSM700 Confocal	\$55.00	\$65.00	\$91.00	\$108.00	Per hour
Marianas Spinning Disk	\$75.00	\$85.00	\$125.00	\$141.00	Per hour
All other microscopes	\$55.00	\$65.00	\$91.00	\$108.00	Per hour
<b>Flow Cytometry Services</b>	<b>Internal</b>	<b>BSL-2 Samples (1,2)</b>	<b>External</b>	<b>External BSL- 2 (1,2)*</b>	
Flow Analysis	\$65.00	\$75.00	\$108.00	\$125.00	Per hour
Cytek Aurora BD LSRII					
BD FACS Symphony A5 BD Fortessa	\$80.00	\$90.00	133.00	\$149.00	Per hour
Sorting with assistance	\$130.00	\$140.00	\$216.00	\$232.00	Per hour
Sorting without assistance	\$115.00	\$125.00	\$191.00	\$208.00	Per hour
	<b>Internal</b>	<b>BSL-2 Samples (1,2)</b>	<b>External</b>	<b>External BSL- 2 (1,2)*</b>	
Technician Hourly Rate	\$60.00	\$70.00	\$100.00	\$116.00	Per hour
Training Rate	\$60.00	\$70.00	\$100.00	\$116.00	Per hour

1. *Running BSL-2 samples requires annual IBC approval.*
2. *There will be an additional 30-minute charge for all BLS-2 samples to allow for required cleaning.*

**HISTOLOGY**  
Updated 7/8/2025

Description	Internal Rates	Outside Rates
Process & Embed in Paraffin per Block	\$3.75	\$6.25
<b>Paraffin Sectioning</b>		
Per Slide	\$2.65	\$4.75
Custom Sectioning - \$ per hour	\$50.00	\$83.00
<b>Frozen Sectioning</b>		
Set up time & 1st slide	\$25.00	\$41.50
Additional slides	\$8.75	\$14.50
Custom Sectioning - \$ per hour	\$55.00	\$91.25
<b>Staining &amp; Coverslipping</b>		
H&E stain	\$3.75	\$6.25
Level 1 Special Stains	\$5.15	\$8.50
Level 2 Special Stains (Trichrome, Pentachrome, Warthin-Starry)	\$7.75	\$12.75
Immunohistochemistry (Client provides primary antibody)	\$13.00	\$21.50
Immunohistochemistry (Histology provides primary antibody)	\$14.70	\$24.50
<b>Immunohistochemistry Development</b>		
1st workup/iteration	\$210.00	\$348.50
Each subsequent workup/iteration	\$105.00	\$174.25
<b>Equipment Usage</b>		
Cryostat - \$ per hour	\$33.00	\$54.75
<b>Biobank Services</b>		
Aperio scans per slide	\$8.00	\$13.25

Technician time –National Jewish Health and University of Colorado investigators \$50.00/hour

## INSTITUTIONAL REVIEW BOARD

The following charges apply to all studies *with the exception of single site federally-funded studies*.

NJH HRPP Determinations	
Non-Human Subjects Research Determinations	\$0
Exempt Research Determinations	\$500
Single-Site Studies reviewed by BRANY IRB	
Full Board Initial Review	\$2,500
Expedited Initial Review	\$500
Continuing Reviews	\$2,000
Annual Check ins (Expedited Only)	\$100
Amendments	\$0
Personnel Changes	\$0
Closure	\$0
HIPAA Determinations	\$0
Single/Multi-Site Studies reviewed by an IRB other than BRANY	
Local Review of External/sIRB - Industry	\$2,000
Local Review of External/sIRB – all other	\$1,000

Questions on payment options, contact your Department Chair. Questions on invoicing, please contact Julie Banta [bantaj@njhealth.org](mailto:bantaj@njhealth.org).

## LIVE CELL CORE

	Internal Cost	External Cost	
Brushed human bronchial epithelial cells: Passage 1 (P1): 0.5 million cells	\$75	\$150	vial
Brushed Human Nasal Epithelial Cells	\$75	\$150	vial
BAL Fluid (1ml aliquots)	\$75	\$150	vial
BAL cell pellet in RLT	\$75	\$150	vial
Tracheobronchial epithelial cells from normal human donors: Passage 0 (P0): 1 million cells	\$75	\$150	vial
Tracheobronchial Epithelial cells in TRIzol/RLT	\$75	\$150	vial
Tracheobronchial Epithelial cells in RIPA Buffer	\$75	\$150	vial
Tracheobronchial Epithelial cell pellets	\$75	\$150	vial

Please contact Nicolette Schaunaman [SchaeferN@NJHealth.org](mailto:SchaeferN@NJHealth.org), (303) 398-1589, with questions and for a quote.

## Lung Tissue

	Internal Cost	External Cost	
Lobe	\$400	\$660	each
Lobe- 1/2	\$200	\$330	each
Trachea	\$300	\$495	each
Large Lung Piece	\$250	\$410	each
Small Lung Piece	\$50	\$85	each
Lymph Nodes	\$100	\$165	each
Fresh Macrophages/ AMs	\$100	\$165	<20 million
Fresh Macrophages/ AMs	\$150	\$250	20-50 million
Fresh Macrophages/ AMs	\$200	\$330	50-100 million
Frozen Macrophages	\$75	\$123	per vial
Blood	\$50	\$85	per vial
Adipose Tissue	\$50	\$85	each
Pulmonary Artery	\$50	\$85	each
Alveolar Macs	\$100	\$165	each
**Whole Lung available to internal clients by special request at actual price.			

Please contact Pat Hume at 303-398-1807 or [HumeP@NJHealth.org](mailto:HumeP@NJHealth.org) for more information or to be added to the Lung Tissue email list.

## MASS SPECTROMETRY LABORATORY

**Mass Spectrometry Laboratory (MSL) at NJH** represents a rare research facility mostly dedicated to the focused quantitative analysis of lipid signaling molecules and other small molecules by the LC-MS/MS with a special emphasis given to the detection of a low level bioactive analytes. MSL constantly works at the extension of the spectrum of quantified biologically active lipids and at the expansion towards classical metabolomics/lipidomics to be able to provide comprehensive overview of lipidome and metabolome along with focused quantitative view at selected signaling metabolites.

Full cycle of the analyses by the LC-MS/MS varies substantially depending on the number of analytes of interest, the complexity of biological matrix, and peculiarities of data processing that can demand high data processing time for particular analytes. Usually, the analyses are performed in a series of experiments that requires separate instrument and data processing times and in some cases a special sample preparation procedure. Therefore, the pricing indicated below provides minimal approximate charges; please, ask Dr. Berdyshev (x1964) for an estimate when discussing your experimental needs. When analyzing cells in culture or tissues, additional "normalization" experiments are required (determination of total lipid phosphorus or total protein content per sample) that adds additional charge to the analysis.

List of Analytical Groups	Internal Price, per Analytical Group	External Academic Price per Analytical Group
Set 1. Sphingoid bases (C18 base, sphingosine, dihydrosphingosine); ceramides (C18-sphingosine as a base); dihydroceramides (C18-dihydrosphingosine as a base), ceramides with alfa-hydroxy fatty acids. Set 2. Sphingosine-1-phosphate (S1P, C18-base), dihydrosphingosine-1-phosphate (DHS1P, C18-base). Ask for phytosphingosine-1-phosphate (extra \$10/sample if analyzed with S1P-DHS1P). Set 3. Lysophosphatidic acids (14:0, 16:0, 18:0, 18:1, 18:2, 20:4, 22:5, 22:6-LPA) Set 4. Lysophosphatidylcholines (ester-based), sphingosylphosphorylcholine (SPC). Set 5. Endocannabinoid anandamide (20:4-NAE), its endogenous analogs (16:0-22:6-NAEs), and 2-arachidonoylglycerol (2-AG). Set 6. Oxidized lysophosphatidylcholines POVPC and PGPC. Set 7. Cholesterol and Selected oxysterols. Set 8. Sphingomyelins. Set 9. Glycosylceramides (glucosyl/galactosyl-ceramides), lactosylceramides. Set 10. <i>Cis</i> -Urocanic acid, <i>trans</i> -urocanic acid, pyroglutamic acid	BAL, Plasma, Serum - <b>\$80/sample;</b>  Cells in culture - <b>\$85/sample;</b>  Tissues - <b>\$90/sample</b>	BAL, Plasma, Serum - <b>\$130/sample;</b>  Cells in culture - <b>\$140/sample;</b>  Tissues - <b>\$150/sample</b>

Set 11. Free fatty acids		
Normalization Analyses (Total Lipid Phosphorus or Protein)	<b>\$20/sample</b>	<b>\$30/sample</b>
New Method Development or Exploratory Analyses	<b>\$75/h</b>	<b>\$120/h</b>
Price per sample without labor is estimated to be between \$40 and \$60 per sample depending on the number of analytical groups ordered.		
Additional services are available. Please contact Dr. Berdyshev for specialized quotes.		

For more information, please, consult the MSL website:

<https://sites.google.com/site/lipidomicsandmetabolomicsatnjh/>

**Contact information:**

Dr. Evgeny Berdyshev, Ph.D.

Associate Professor

Head of Mass Spectrometry Laboratory

National Jewish Health

1400 Jackson Street,

Goodman building, K924B

Denver, CO 80206

Email: [berdysheve@njhealth.org](mailto:berdysheve@njhealth.org)

Tel: 1-303-398-1964

## QUANTITATIVE IMAGING LAB

	Image Management	Quantitative Image Analysis	Customizations
Internal	\$85/scan	\$120/scan	\$200/hr
External	\$145/scan	\$200/scan	Contact for quote

### Complete Project Management

**Startup Fee (one time): \$7000**

**Project Startup Fee (one time): \$7000**

*Required for Complex Protocols*

- Image/protocol QA
- Quantitative analysis
- Multi-site image management
- Documentation, IRB
- Project tracking
- Results delivery
- Distribution
- Includes \$500 Project Initiation fee

**All projects:**

\$500 one time project initialization

\$500 annual storage fee (up to 4TB)

**Cloud Image Transfer Management for Multi-site projects (Ambra)**

Storage (per exam): \$6

Contact QIL for Custom Project Options.

Discounts available for bulk projects. Based on complexity and customizations.

Please reach out to Alex Kluiber ([kluibera@njhealth.org](mailto:kluibera@njhealth.org)) or Steve Humphries ([humphriess@njhealth.org](mailto:humphriess@njhealth.org)) in the QIL to schedule a consultation and determine how your proposed project will fit into the categories above. Additional services are available and quoted on an individual basis.



## RESEARCH INFORMATICS & COMPUTING CORE (RICC) SERVICES

*Additional Updates Planned for 9/1/2025*

The Research Informatics and Computing Core (RICC) empowers researchers with advanced informatics services to efficiently manage and utilize data throughout the entire research lifecycle. By leveraging our secure data management tools, cutting-edge computational and research data warehouse infrastructure, and expert support services, RICC helps researchers navigate the complexities of data-driven research, accelerating the discovery process.

### Services Include:

- Design Services
  - Research Proposal & DMSP Consultation
  - Grant Proposal Narratives
- Data Collect & Store Services
  - Research Data Storage
  - Collaborative Tools & Software
  - Electronic Lab Notebooks
  - REDCap
  - FreezerWorks Lab Specimen Management
- Data Management Services
- Data Delivery Services
  - Research Data Warehouse & Data Delivery
  - Honest Broker
- High-Performance Compute

**Design Services, Data Collection & Storage Services; Data Management Services and Data Delivery Services – project based:** \$120/hour for internal projects; \$200/hour for external academic projects

**REDCap consulting hourly rate:** \$120/hour for internal projects; \$200/hour for external academic projects

### REDCap Annual Maintenance Fee:

- For all active REDCap projects there will be an annual maintenance fee of \$100

**The Research Data Storage (RDS) service offers high-performance, scalable, and secure storage optimized for large-scale research data and computational workloads.**

- \$150/TiB per year

To request services, please contact:

Bob Schell; [schellr@njhealth.org](mailto:schellr@njhealth.org); 303-270-2536