

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 February 1, 2025

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

BIOBANK

Aliquots Available	Internal Cost	External Cost
Blood – Including Plasma, Serum, DMSO, Plasma, Red Cells (excluding DNA and RNA)	\$35.00	\$58.10
Blood – DNA and RNA	\$45.00	\$74.70
Tissue – Including Fresh Frozen, Saline Formalin Fixed Paraffin Embedded	\$25.00	\$41.50
Cells – PMBC and Buffy Coat	\$50.00	\$83.00
BAL – 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

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

MOUSE- charged by CAGE	Internal	External*
Small microisolator	\$1.21	\$2.00
Large microisolator	\$2.42	\$4.01
Quarantine/ABSL2/Biohazard mouse	\$1.47	\$2.44
Small MI+ Special water	\$1.33	\$2.21
Small MI+ Special diet (excludes diets purchased by PI)	\$1.33	\$2.21
Small MI+ Special water & diet	\$1.44	\$2.39
Large MI + Special water	\$2.67	\$4.43
Large MI + Special diet (excludes diets purchased by PI)	\$2.67	\$4.43
Large MI + Special water & diet	\$2.89	\$4.79
Quarantine/ABSL2/Biohazard + special water	\$1.67	\$2.77
Quarantine/ABSL2/Biohazard + special diet	\$1.67	\$2.77
RAT- per CAGE	\$3.15	\$5.23
RAT Quarantine/ABSL2/Biohazard	\$3.52	\$5.84
Hamster- per animal	\$2.60	\$4.32
Guinea Pig- per animal	\$3.73	\$6.19
Rabbit- per animal	\$6.83	\$11.33
Rabbit-doe + litter	\$10.24	\$16.99
Technical Assistance- colony management/tail/ID- per hour	\$48.00	\$79.68
Research Support Services- per hour	\$64.00	\$106.24
Animal Ordering Fee- per order	\$23.50	\$39.01
Treatment Fee	\$3.15	\$5.23
Cage inserts- cost per insert used	\$4.20	\$6.97
Animal on BRC HOLDING PROTOCOL		
Non- compliance overcrowding/emergency wean fee	\$31.50	\$52.29
1 Day Gas Anesthesia Machine &/or Monitoring Equipment Rental	\$56.70	\$94.12
1/2 Day Gas Anesthesia Machine &/or Monitoring Equipment Rental	\$28.35	\$47.06
Exportation fee for animal shipment- domestic	\$85.00	\$141.10
Exportation fee for animal shipment- international	\$170.00	\$282.20
Importation fee for animal shipment- domestic	\$85.00	\$141.10
Importation fee for animal shipment- international	\$170.00	\$282.20

*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 with any questions.

BIostatISTICS AND BIOinformatics

Updated 2/6/25

General Services	
Statistical Planning, Analysis and Manuscript Collaboration	
Internal Pricing	\$120/hour
External Pricing	\$195/hour

*Up to one hour of free consultation; a [Services Request](#) must be filled out beforehand.

To request services or to learn more about available support, please visit the [Biostatistics](#) and the [Data Sciences Network](#) pages on the SpyderWeb, or access the [Service Request form](#) directly.

Please contact Matthew Strand, PhD at strandm@njhealth.org to request more information.

Yearly Software Licenses (valid 7/15/24-7/14/25) – Internal Only	
JMP	No longer offered through NJH
SAS (includes installation)	\$1,750/computer

Please email biostats@njhealth.org to request JMP or SAS licensing.

GENOMICS CORE

Please contact Trey Farmer FARMERTM@NJHealth.org for project based quotes.

Equipment Run Charges

Equipment	Price	Units
ABI 7900HT Real-time PCR	\$20.00	per run
Agilent Bioanalyzer 2100	\$16.00	per run
Covaris S2	\$25.00	per hour
Synergy HT Multi-Detection Microplate Reader	\$10.00	per run

Sequencing

Agilent Bioanalyzer (labor included): The Agilent 2100 Bioanalyzer is a microfluidics-based platform for sizing, quantification and quality control of DNA, RNA, proteins and cells on a single platform. Results are delivered within 30-60 minutes. This is an essential QC check prior to NGS.

RNA Nano Chip	\$135.00/chip
RNA Pico Chip	\$139.00/chip
DNA Chips (1000, 7500, 12000)	\$117.00/chip
DNA Chip (High Sensitivity)	\$155.00/chip
smRNA Chip	\$132.00/chip

Capillary Sequencing (labor included):

Sanger Sequencing- Clinical	\$50.00 per sample
Sanger Sequencing – Research	\$6.00 per sample

Labor (charged separately)	\$65.00/hour
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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">• DNA-seq (Whole Genome, Exon, or Targeted)• RNA-seq• ChIP-seq Microarray Analysis Functional Characterization Alignment, Mapping, QC and Quantification Statistical Analysis	\$120 / hour	\$195 / hour

Please contact Rachel Blumhagen at blumhagenr@njhealth.org to request an individualized quote and initiate your project, or visit the [Data Sciences Network](#) on the Spyderweb.

CTRC INFLAMMATION AND IMMUNOLOGY CORE

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 for questions or pricing for external projects.

FLOW CYTOMETRY/MICROSCOPY

Updated 1/13/25

Microscopy Services	Internal	BSL-2 Samples (1,2)	External	External BSL-2 (1,2)	
LSM700 Confocal	\$55.00	\$65.00	\$90.20	\$106.60	per hour
Marianas Spinning Disk	\$55.00	\$65.00	\$90.20	\$106.60	per hour
Flow Cytometry Services	Internal	BSL-2 Samples (1,2)	External *	External BSL-2 (1,2) *	
Flow Analysis	\$65.00	\$75.00	\$106.50	\$123.00	per hour
Sorting with assistance	\$130.00	\$140.00	\$213.20	\$229.60	per hour
Sorting without assistance	\$115.00	\$125.00	\$188.60	\$207.50	per hour
	Internal	BSL-2 Samples (1,2)	External *	External BSL-2 (1,2) *	
Technician Hourly Rate	\$60.00	\$70.00	\$95.00	\$80.00	per hour
Training Rate	\$60.00		\$100.00		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

Description	Internal Rates	Outside Rates
Process & Embed in Paraffin per Block	\$3.75	\$6.15
Paraffin Sectioning		
Per Slide	\$2.65	\$4.35
Custom Sectioning - \$ per hour	\$50.00	\$82.00
Frozen Sectioning		
Set up time & 1st slide	\$25.00	\$41.00
Additional slides	\$8.75	\$14.35
Custom Sectioning - \$ per hour	\$55.00	\$90.20
Staining & Coverslipping		
H&E stain	\$3.75	\$6.15
Level 1 Special Stains	\$5.15	\$8.44
Level 2 Special Stains (Trichrome, Pentachrome, Warthin-Starry)	\$7.75	\$12.71
Immunohistochemistry (Client provides primary antibody)	\$13.00	\$21.32
Immunohistochemistry (Histology provides primary antibody)	\$14.70	\$24.11
Immunohistochemistry Development		
1st workup/iteration	\$210.00	\$344.40
Each subsequent workup/iteration	\$105.00	\$175.00
Equipment Usage		
Cryostat - \$ per hour	\$33.00	\$54.12

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.

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 Diana Cervantes cervantesd@njhealth.org or Nicolette Schaunaman 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 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 - \$80/sample ; Cells in culture - \$85/sample ; Tissues - \$90/sample	BAL, Plasma, Serum - \$130/sample ; Cells in culture - \$140/sample ; Tissues - \$150/sample

Set 11. Free fatty acids		
Normalization Analyses (Total Lipid Phosphorus or Protein)	\$20/sample	\$30/sample
New Method Development or Exploratory Analyses	\$75/h	\$120/h
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

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) or Steve Humphries (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

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

Consulting hourly rate: \$90 for internal projects; \$150 for external academic projects

REDCap consulting hourly rate: \$90 for internal projects; \$150 for external academic projects

- In addition to free REDCap online training, individual or group training is available at \$55 per hour (\$90 per hour for external projects)
- For REDCap projects with customized programming, an Annual Maintenance fee of \$60-210 will be charged depending on the complexity of the custom programing.

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

- \$125/TiB per year

To request services, please visit the [Research Informatics Website](#) on the SpyderWeb, or go directly to the [RedCAP Survey](#).

For more information, please contact:

Bob Schell
303-270-2536