BIOASSAY CORE MENU

Effective 8/19/2026

FULL-SERVICE MENU

Core staff perform the assay.

IMMUNOASSAYS (price of kit not included)

Meso Scale Discovery Immunoassay $50/hr

Validated single and multiplex immunoassays. Thousands of choices, see https://www.mesoscale.com for available kits

Luminex Immunoassay $50/hr

Validated single and multiplex immunoassays Thousands of choices, see https://www.rndsystems.com/products/luminex-assays-and-high-performance-assays for available kits.

ELISA $50/hr

Enzyme-linked immunosorbent assays available in direct, indirect, sandwich, and competitive platforms. ELISA Kits and ELISA Components | Thermo Fisher Scientific - US

SAMPLE PREPARATION

Tissue Homogenization via Omni Bead Ruptor Elite w/Cryo $10/hr

Breakdown whole tissues for multiple downstream applications such as protein, RNA, DNA extractions, and ELISAs.

Tissue Slices via Leica Vibratome VT1200 $20/hr

Vibrating blade prepares small tissue slices from larger tissue samples for multiple downstream applications.

Cardiomyocyte Isolations $450/$650

From human that are either fresh or frozen. Cell suspensions can be used for 'omics and/or functional studies. Specimens may be acquired from the Nebraska Cardiovascular Biobank and Registry (for additional fee(s)).

RENT-A-TECH

Hourly service $50/hr

Hire our experienced research technologists on an ad hoc basis to assist you with completing experiments in your laboratory or in the Bioassay Core.

Testing $10/sample

Myocoplasma testing

Testing service for cell culture media using the MycoStrip 2.0. Testing will be performed on the last Friday of each month. Labeled samples must be dropped off by Thursday end-of-day.

BIOASSAY CORE CONTACT

For new projects, please contact the core before finalizing experimental plans to confirm capabilities, review experimental design, and verify staff and resource availability.

Matt Waas, PhD
Email: mwaas@unmc.edu
Jennifer Schneider, BS
Email: jschneider@unmc.edu

Location: DRC1 1022

Hours of Operation: Monday through Friday, 8am – 5pm

All hourly rates are billed in 15-minute increments.

TRAINED USER SELF-SERVICE MENU

Hands-on training required to independently operate equipment.

IONOPTIX FUNCTIONAL ASSAYS

Muscle Tissue Slice $150/hr

Measure force, mechanical work-loops, and calcium transients.

Isolated Primary Myocytes $150/hr

Measure contractility, sarcomere length, stretch, and calcium transients.

Amorphous Cells/Tissue $150/hr

Measure contractility, stretch, and calcium transients from stem-cell derived, neonatal, or spheroid tissues.

Culture Pacing System $10/hr

Culture whole tissue slices, isolated myocytes, or stem-cell derived myocytes using IonOptix C-Dish electrode assemblies. Available in multiple culture dish options for your needs.

INSTRUMENTATION

Meso Scale Discovery SQ120 $10/hr

Perform the assay yourself, bring the plates to analyze on our plate reader. Time to read one plate < 5 minutes!

iBright FL1000 Imaging System $10/hr

Image and analyze your protein and nucleic acid gels, or chemiluminescent and fluorescent western blots.

Varioskan LUX Multimode plate reader $10/hr

Microplate reader capable of absorbance, fluorescence intensity, and luminescence-based measurements.

Vetscan HM5 $8/sample

Hematology analyzer offering comprehensive complete blood count and a 3 or 5-part differential. Supports up to 15 different species, not including humans.

EQUIPMENT

Whitley H135 HEPA Hypoxystation $20/day

Tissue culture workstation with programmable environmental control over percentages of oxygen, nitrogen, and carbon dioxide.

Eppendorf epMotion 5073 $10/hr

Liquid handling robots automate complex and tedious pipetting tasks.

Opentrons OT-2 HEPA $10/hr

Liquid handling robots automate complex and tedious pipetting tasks that require a HEPA purified environment.

Thermo Scientific KingFisher Flex

$10/hr

Automated magnetic-particle processing system for 96-well plates

TRAINING

Hands-on training to independently operate core equipment and instrumentation $10/hr