

# **BIOASSAY CORE MENU**

## **IMMUNOASSAYS** (price of kit not included)

### Meso Scale Discovery Immunoassay \$55-\$100

Validated single and multiplex immunoassays. Choose from >1,000 assays. See <a href="https://www.mesoscale.com">https://www.mesoscale.com</a> for available kits. Service fees vary based on manual vs automated preparation and number of samples.

## **Luminex Immunoassay**

\$50

Validated single and multiplex immunoassays. Choose from >1,000 assays. See <a href="https://www.rndsystems.com/products/luminex-assays-and-high-performance-assays">https://www.rndsystems.com/products/luminex-assays-and-high-performance-assays</a> for available kits. Service fees vary based on manual vs automated preparation and number of samples.

## **Proteome Profiler Antibody Arrays**

\$120-\$250

Validated single and multiplex immunoassays. Choose from >1,000 assays. See <a href="https://www.rndsystems.com/products/proteome-profiler-antibody-arrays">https://www.rndsystems.com/products/proteome-profiler-antibody-arrays</a> for available kits. Service fees vary based on manual vs automated preparation and number of samples.

ELISA \$75

Antibody-based enzyme-linked immunosorbent assay. Commonly used to detect single proteins.

Western Blot \$175-\$250

Antibody-based detection of a single protein on a membrane of proteins separated by gel electrophoresis.

## **SELF-SERVICE EQUIPMENT**

Meso Scale Discovery Quickplex 120 \$10 / hr

Analyzer for Meso Scale immunoassays.

Luminex Bio-Plex MAGPIX Reader \$10 / hr

Analyzer for Luminex magnetic bead-based assays.

iBright FL1000 Imaging System \$10 / hr

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

Varioskan LUX Multimode plate reader \$10 / hr

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

#### **Eppendorf epMotion 5073m**

\$10 / hr +

consumables

Liquid handling robot to automate tedious or complex pipetting tasks, including NGS library preparation, real-time PCR set-up, magnetic beadbased and filter-based purification, cell-based assays or any other routine pipetting tasks.

Omni Bead Ruptor Elite with Cryo Unit \$10 / hr

For grinding, lysing, and homogenizing biological samples prior to molecular extraction. The BR-CryoCooling Unit prevents the increase of sample temperature during the homogenization process.

Curiox HT200 Laminar Wash system \$20 / hr

Automated, high-throughput preparation (labeling, washing) of cells for flow cytometry or other applications where minimum cell loss is required.

Vibratome \$20 / hr

Vibrating blade to cut thin slices of tissue for examination.

IonOptix \$50 / hr

System for performing functional phenotyping of cardiac and skeletal muscle slices, isolated primary myocytes, stem-cell derived myocytes, and spheroids.

## **CARDIOMYOCYTE ISOLATION**

Human Cardiomyocyte Isolation

\$450/\$650

(isolated from fresh tissue; prices shown are for 1 or 2 tissues per day)
Cells can be used for 'omics or functional studies. Specimen collection
is through Nebraska Cardiovascular Biobank and Registry (additional
fees apply for specimen collection) and dependent upon surgery.

**Human Cardiomyocyte Isolation** 

\$450/\$650

(isolated from fresh tissue; prices shown are for 1 or 2 tissues per day)
Cells can be used for 'omics studies, not functional. Based on available
cryopreserved inventory in the Nebraska Cardiovascular Biobank and
Registry (additional fees apply for specimen collection).

**Porcine Cardiomyocyte Isolation** 

\$450/\$650

(isolated from fresh tissue; prices shown are for 1 or 2 tissues per day) Cells can be used for 'omics or functional studies. Specimen collection is conducted by the investigator.

### **CARDIAC TISSUE SLICE PREPARATION**

Human cardiac tissue

\$50-\$150

Slices prepared from fresh tissue can be used for 'omics or functional studies. Specimen collection is conducted through Nebraska Cardiovascular Biobank and Registry (additional fees apply) and dependent upon surgery.

Porcine cardiac tissue

\$50-\$150

Slices prepared from fresh tissue can be used for 'omics or functional studies. Specimen collection is conducted by the investigator.

Rodent cardiac tissue

\$50-\$150

Slices prepared from fresh tissue can be used for 'omics or functional studies. Specimen collection is conducted by the investigator.

### **IONOPTIX FUNCTIONAL ASSAYS**

(applicable to cardiac and skeletal muscle, isolated cells and amorphous cells and tissues from human, porcine, rodent models)

Tissue Slice

\$100-\$300

Calcium, force, mechanical work, pressure-volume loops from cardiac and skeletal muscle.

Isolated primary myocyte

\$100-\$30

Transient analysis, sarcomere spacing, cell length, simultaneous, synchronized calcium photometry and cell shortening measurements; stretch-force protocols.

### Amorphous cells / tissues

\$100-\$30

Simultaneous, synchronized calcium photometry and cell shortening measurements; contractility measurements for stem cell-derivatives, neonatal rat ventricular cardiomyocytes, cardiac spheroids.

## **RENT-A-TECH**

Hourly service

\$50 / hr

Do you occasionally need an experienced researcher to help you complete experiments? Hire our experienced research technologists on an ad hoc basis to assist you with completing experiments in your laboratory or in the Bioassay Core. Note: Bioassay Core personnel cannot assist with live animal experiments, radioactive or infectious materials. Schedule 2-3 weeks in advance to ensure availability.

## **TRAINING**

Hands-on training to independently operate Bioassay Core equipment

\$20 / hr