### Emory Transgenic and Gene Targeting Core - MAJOR EQUIPMENT

**Updated: April 2023**

**Specific Fields Relevant for TMF Users**

**Emory Mouse Transgenic and Gene Targeting Core (TMF)**: The Emory Mouse Transgenic and Gene Targeting Core provides state of the art equipment and expertise for making genetically engineered mouse models, moving alleles on or off campus, or cryopreserving existing strains of mice. With laboratories and animal facilities located on the ground floor of the Health Sciences Research Building (HSRB), the TMF provides rodent-related services that are supported by the following infrastructure.

**Microinjection/Gene Editing (EG42)**

Microinjection Station #1:

Leica DMi8 Inverted microscope with Phase contrast and DIC optics

Narishige manual micromanipulators

Eppendorf microinjectors

Eppendorf FemtoJet 4i transjector

Prime Tech PMM4G Piezo Impact Drive

Brook Industries heating/cooling Thermal Stage System

Microinjection Station #2:

Leica DMi8 Inverted microscope with Phase contrast and DIC optics

Narishige manual micromanipulators

Eppendorf microinjectors

Eppendorf FemtoJet 4i transjector

Brook Industries heating/cooling Thermal Stage System

**Embryo collection, manipulation, and rederivation (EG42)**

Leica M80 Binocular Stereo Microscope with heating stage (x2)

Leica M60 Binocular Stereo Microscope

Panasonic CO2 Incubator (x2)

Sutter P-87 Micropipette puller

BTX Electroporation system

**ES Cell Culture (EG42)**

Nuaire Class II Biological Safety Cabinet

ThermoScientific centrifuge

Eppendorf Centrifuge

Panasonic CO2 Incubator

Leica DMi1 Inverted Microscope

BioRad Electroporation Unit

**Sperm/Embryo Cryopreservation (EG41)**

FTS Systems Bio-Cool IV

Locator 4 Liquid Nitrogen Dewar

MVE Liquid Nitrogen Dewars (x9)

CEROS-2 Animal Sperm Analyzer

**Molecular Biology (EG41)**

Ohaus Explorer Analytical Balance

Beckman-Coulter Allegra 64R high-speed Centrifuge

ABI 9700 thermal cycler (x2)

Thermo Scientific NanoDrop Spectrophotometer

Nuaire Class II Biological Safety Cabinet

Fisher Marathon 16KM Centrifuge

Analytik Jena VisionWorks gel imaging system