**Facilities and Resources**

**Updated: September 1, 2020**

**Fields Relevant for Emory Multiplexed Immunoassay Core (EMIC) Users**

**Other:**

**EMORY MULTIPLEXED IMMUNOASSAY CORE (EMIC)**

A screenshot of a cell phone

Description automatically generatedThe **Emory Multiplexed Immunoassay Core (EMIC)**, one of the **Emory Integrated Core Facilities (EICF)** uses the multiplexed immunoassays to bring a powerful research platform to help investigators from Emory University and external researchers. The EMIC is located in a laboratory 665E on the 6th floor of the Whitehead Biomedical Research Building. The EMIC performs and analyzes multiplex immunoassays to measure the levels of single or multiple targets within a single, small volume sample on the Meso Scale Discovery (MSD) platform. EMIC houses two high-sensitive imaging detection system Meso Scale Discovery SECTOR2400 and Quickplex SQ120. MSD uses electrochemiluminescence via a cooled scientific-grade CCD camera to detect binding events with a broad dynamic range and exceptional sensitivity(pg/ml). MSD supports a wide variety of assays from different research area: immunology, neurobiology, oncology, toxicology, cardiovascular, metabolic etc. MSD measures protein levels in many biological matrices (plasma, serum, CSF, urine, stool tissues, etc).

The EMIC houses two plate readers (SECTOR2400 and QuickPlex SQ120) to meet the needs of its users. These instruments require no customer calibration or maintenance, no complicated fluidics, and no between-read cleaning. The combination of rapid read times (90 seconds per plate) and the ability to perform multiple, simultaneous tests on a single sample increases productivity, conserves sample, and delivers results quickly. The MSD platform has a wide variety of commercially available assay kits and a full line of components and reagents for developing customized assays.