

## **Cellular and Molecular Core**

### **Directors:**

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### **Overview:**

The cellular and molecular biology resource core provides researchers at the Morehouse School of Medicine Neuroscience Institute access to state of the art scientific resources that are cost prohibitive to a single laboratory.

### **Key Capabilities:**

The molecular biology component offers support for the expression and measurement of genes in multiple cell systems. This includes an expression suite, multiple realtime PCR options, and access to the Keck-funded Affymetrix microarray suite and a SOLiD 5500 XL DNA sequencer facility for high throughput genomic research.

The cellular component offers histology and imaging support via the 2 confocal microscope facilities, which are dedicated for NI users.

The general core offers members of the NI access to high end equipment, which is considered essential for cutting edge research, for example ultra-centrifuges, Scintillation counting and spectrophotometers.

The proteomics core features the latest Waters mass spectrometric systems for the identification, and measurement of peptides derived from proteins.

### **Administration:**

The core will form a user group with the PI's from each of the 3 exploratory projects proposed in the application. The core will be subject to oversight by an administrative group consisting of the two co-directors, the scientific and administrative directors. In addition, the co-directors will coordinate training on the pieces of shared equipment. NI members wishing to use the core facilities are advised to contact the directors