

UNIVERSITY OF MARYLAND BALTIMORE (UMB) BIOBANK

CIBR: Center for Innovative Biomedical Resources

MAJOR EQUIPMENT

Hamilton Biorepository (BiOS) Freezer System

- state-of-the-art automated, ultra-low temperature (-80°C) freezer system
- equipped to accommodate over 945,000 biospecimens



MISSION

We empower academic research through secure, high-quality biospecimen services and integrated clinical data, enabling discoveries in genomics and 'omics' that drive innovation in diagnostics, therapeutics, and population health.

ABOUT

The UMB BioBank is a resource building effort that includes banking of blood samples from UMMS patients as well as collections of various biospecimens from collaborating UM researchers. State-of-the-art robotic freezer and liquid-handling equipment offers a secure and managed environment for biospecimen processing, storage and distribution. Data connected to the samples is obtained through the electronic health record and/or study-specific data collection, allowing for multi-disciplinary research that can impact a range of health issues.

CORE SERVICES

Laboratory

- Sample processing & banking
- DNA/RNA extraction & banking
- Short- and long-term sample storage (room temperature, 4°C, -20°C, -80°C & vapor phase liquid nitrogen)
- Inventory management and sample retrieval
- Shipping to outside laboratories

Clinical Research Support

- IRB protocol preparation assistance

BIOBANK USER BENEFITS

- "Outsourced" management of biospecimen banking functionalities
- Regulated, secure environment for biospecimen processing, storage & distribution
- 24/7 sample monitoring
- Standard operating procedures for sample processing, storage & distribution
- Detailed biospecimen annotation, tracking & reporting
- Dedicated, expert staff

UNIVERSITY OF MARYLAND MEDICINE (UMM) BIOREPOSITORY

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MAJOR EQUIPMENT (CONT.)

Microlab chemagic STAR liquid handling system (Hamilton)

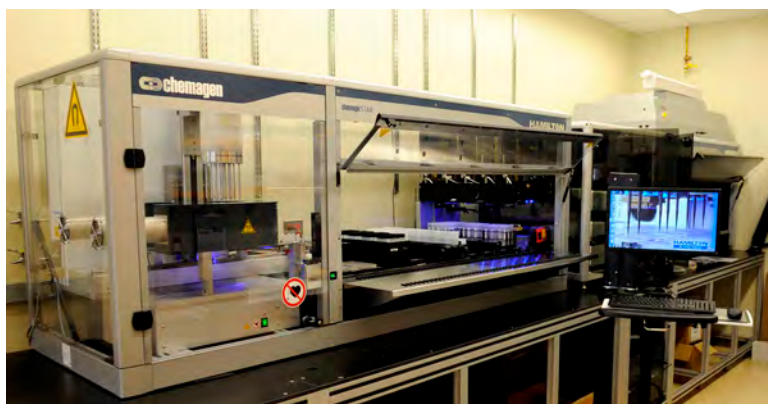
- DNA/RNA extraction

Chemagic 360 (Perkin Elmer)

- DNA/RNA extraction - high throughput, low volume samples

Microlab STAR liquid handling system (Hamilton)

- Sample aliquoting and set up specific assays using retrieved samples



CONTACT



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