FLOW CYTOMETRY SHARED SERVICES

CIBR: Center for Innovative Biomedical Resources

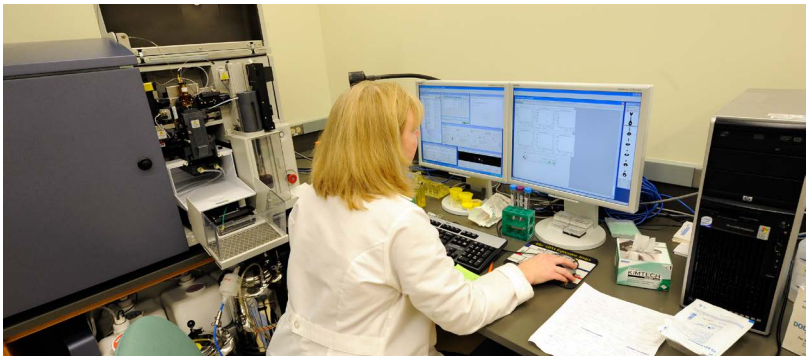
CORE INSTRUMENTATION

The facility has state-of-the-art analysis instruments used for quantitative analysis.

- **BD LSRII Flow Cytometer with High Throughput Sampler Option**
- **BD FACS CANTO Cytometer**
- **BD FACScan Flow Cytometer**

The facility is also equipped with two state-of-the-art high speed cell sorters.

- **BD FACSAria I**
- **BD FACSAria II**



MISSION

The University of Maryland Greenebaum Comprehensive Cancer Center Flow Cytometry Shared Service (FCSS) offers equipment and technical expertise to the entire campus, as well as outside clients in conducting research in all areas of basic and applied biomedical sciences. The FCSS provides full-scale, state-of-the-art flow cytometry services from sample acquisition through data analysis to cell sorting.

CORE SERVICES

The FCSS provides state-of-the-art instrumentation and technical support for sample acquisition and cell sorting, data analysis and interpretation, as well as training and experimental consultation and strategic planning.

- Operator-assisted sample acquisition
- Sample acquisition by user
- High throughput sample acquisition
- Operator-assisted data analysis with FlowJo or FACSDiva
- Data analysis by user on FCSS workstation
- Operator-assisted cell sorting
- Training for sample acquisition on analytical instruments
- Training on FACSDiva operating system
- Experimental planning and consultation

ORDERING

Online scheduling and ordering is available through iLabs.

https://cibr.umaryland.edu

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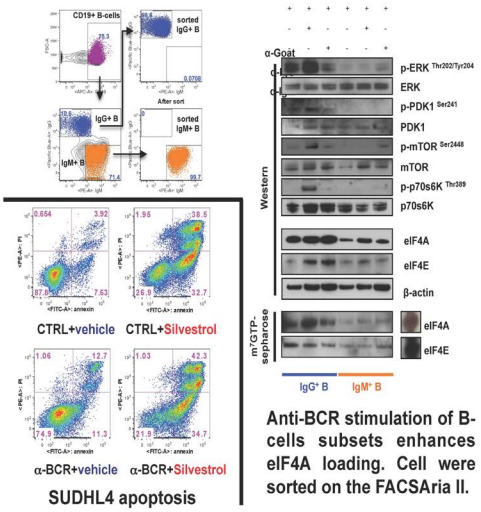
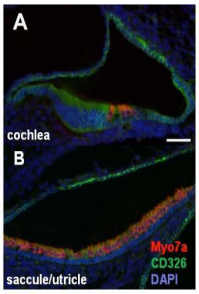
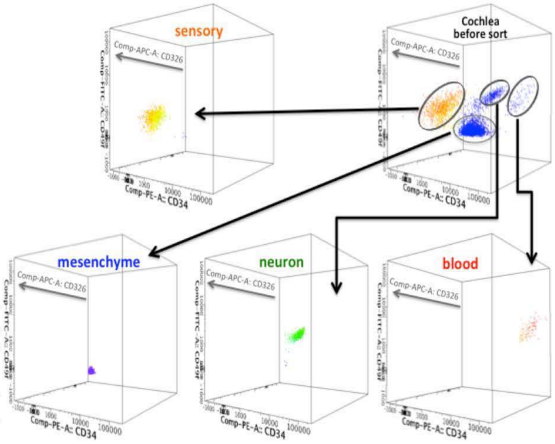


Anti-BCR stimulation of B-cells subsets enhances eIF4A loading. Cell were sorted on the FACSAria II.

Steinhardt JJ, Peroutka RJ, Mazan-Mamczarz K, Chen Q, Houng S, Robles C, Barth RN, DuBose J, Bruns B, Tesoriero R, Stein D, Fang R, Hanna N, Pasley J, Rodriguez C, Kligman MD, Bradley M, Rabin J, Shackelford S, Dai B, Landon AL, Scalea T, Livak F, Gartenhaus RB. Inhibiting CARD11 translation during BCR activation by targeting the eIF4A RNA helicase. **Blood**. 2014 [Epub ahead of print] PMID: 25320244



Immunofluorescent staining of mouse inner ear cochlea and vestibule with Myo7a, CD326 and DAPI. Sorting of sensory epithelial, mesenchymal, neuronal and blood vessel precursor cells from P0 mice using anti-CD49f-FITC, CD34-PE and CD326-APC.



Simultaneous sorting of mouse inner ear cells into four subsets on FACSAria I.

Hertzano R, Elkon R, Kurima K, Morrisson A, Chan SL, Sallin M, Biedlingmaier A, Darling DS, Griffith AJ, Eisenman DJ, Strome SE. Cell type-specific transcriptome analysis reveals a major role for Zeb1 and miR-200b in mouse inner ear morphogenesis. **PLoS Genet**. 2011: e1002309. PMID: 21980309

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