NIH National Institutes of Health

NIH NATIONAL CANCER INSTITUTE

NCI Vaccine Branch Flow Cytometry Core Facility

Building 41, Room C310, D702A

FACS Core Instruments

FACS Analyzers

- **LSRIIB (Monty)**
  - 4 Lasers (488nm, 532nm, 640nm, 405nm)
  - 18 Colors
- **FACSymphony A5 (Pegasus)**
  - 5 Lasers (488nm, 532nm, 640nm, 405nm, 355nm)
  - 28 colors
- **FACSymphony A5 (Apollo)**
  - 5 Lasers (488nm, 532nm, 640nm, 405nm, 355nm)
  - 28 colors
- **FACSymphony A5 (Andromeda)**
  - 5 Lasers (488nm, 532nm, 640nm, 405nm, 355nm)
  - 28 colors

Cell Sorters

- **FACSAriaIII (Athena)**
  - 4 Lasers (488nm, 561 nm, 640nm, 405nm)
  - 18 Colors
- **Astrios EQ (Poseidon)**
  - 5 Lasers (488nm, 561nm, 405nm, 640nm, 355nm)
  - 19 Colors
- **Sony MA900**
  - 4 Lasers (488nm, 561nm, 405nm, 628nm)
  - 12 Colors
  - Installation in February 2021
- **Miltenyi autoMACS**
  - Magnetic Bead Sorter

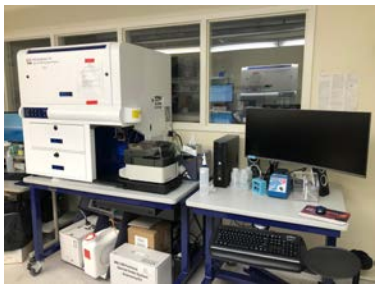
Applications Supported

- **Multicolor Immunophenotyping**
  - Lineage markers
  - Activation and memory markers
  - Intracellular cytokine production
- **Cell sorting**
  - Infectious cell sorting
  - Fluorescent protein sorting
  - 96 well cell sorting
- **Stem cell analysis and sorting**
- **RNA transcript + Phenotypic Analysis**
  - PrimeFlow
  - PCR + FACS
- **Phosphorylated Protein Analysis**
- **Proliferation and Cell Cycle Analysis**
  - Cell Cycle
  - BrdU
  - Ki67
  - CFSE
- **Apoptosis**
  - Active Caspase 3
  - Annexin V
  - JC1
  - TUNEL
- **Quantitative Flow Cytometry**

And anything else that can be measured by flow cytometry

FACS Analyzers

FACSymphony A5 (Apollo)



FACSymphony A5 (Pegasus)

Cell Sorters

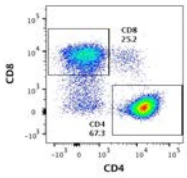
FACSAria III

Astrios EQ

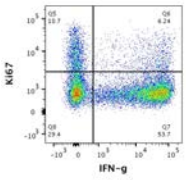
Sony MA900 will be installed in February 2021

FACS Applications

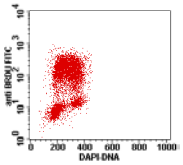
Immunophenotyping



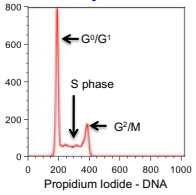
Intracellular Analysis



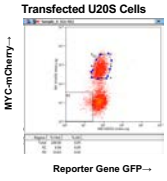
Proliferation



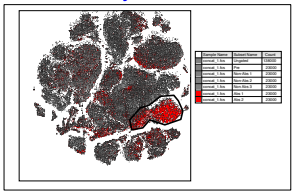
Cell Cycle



Cell Sorting



tSNE Analysis of 26 color FACS



Personnel and Location

Sophia Brown
41/D804
240-760-6584
sophia.brown@nih.gov

Kathy McKinnon
41/B715
240-760-6659
mckinnonkm@nih.gov