EQUIPMENT - UNIVERSITY OF CALIFORNIA, LOS ANGELES

Meyer Laboratory — The laboratory is equipped all necessary equipment for performing the proposed work, including:

- Luminex MAGPIX multiplexed assay system
- Multiple electrophoresis units
- Thermocycler
- Swing-bucket centrifuge
- Fixed-angle high-speed centrifuge
- Two microfuges
- Two bacterial shakers and incubators
- Photographic equipment for documentation of gels and microscopy
- Refrigerators
- Standard freezers
- One –80℃ freezer
- NanoDrop spectrophotometer

Cell culture facilities (biological safety cabinets, incubators, microscopes, assorted other equipment) are all contained in a tissue culture room exclusive to the Meyer lab. Included in the Meyer lab's cell culture facility in one of the Meyer lab incubators is an Incucyte Zoom live-cell imaging system. This system provides real-time monitoring of cells in culture and is equipped with software and hardware for automated cell migration, proliferation, and apoptosis assays. A second inclubator contains a custom-built selective plane illumination (SPIM) imaging system for long-term 3D cultures.

Shared Bioengineering Department Equipment

- Dynamic light scattering analyzer
- BD Accuri Benchtop Flow Cytometer
- Backup freezers
- Milli-Q water
- Ice machine
- Spectrophotometer
- Plate reader: 96 & 384 well, Multimode (UV/VIS/IR/Luminescence/Fluorescence)
- Centrifuges
- Autoclave

In addition, there is extensive shared equipment and services available across the UCLA campus. As a member of the Jonsson Cancer Center and the Broad Stem Cell Center, Dr. Meyer has access to extensive resources within the core facilities including flow cytometry, genomics, molecular screening, small animal imaging, translational pathology, high-throughput sequencing, imaging, and biostatistics. These services are available to members of the centers at a subsidized rate.

Shared Core Equipment

Advanced Light Microscopy/Spectroscopy Core The Advanced Light Microscopy/Spectroscopy Core is housed within the California NanoSystems Institute and provides consultation, services and support for the application of novel spectroscopic methods and advanced image analysis techniques for the study of macromolecules, cellular dynamics and nanoscale characterization of bio-materials. Equipment includes:

- Confocal SP8-SMD
- Confocal SP8 Compact

- Confocal SP5 Blue
- Confocal SP5 STED
- Confocal SP2 MP-FLIM
- Confocal microALEX-FCS
- Wide-Field CCD Microinjection Inverted
- Wide-Field NUANCE Microinjection Upright
- Wide-Field CCD IN SITU Upright
- *In vivo* Maestro 2
- Leica LMD7000
- Leica RM2235 Rotary Microtome
- Leica M205 FA Fluorescence Stereomicroscope
- Dissection Microscope and Microinjector
- DMIL Microscope with SPOT Camera
- SP8 Analysis Workstation

Flow Cytometry Core The Janis V. Giorgi Flow Cytometry Core Laboratory is a part of the UCLA medical school and offers consultation, services and support for flow analysis and sorting. As a member of the Jonsson Comprehensive Cancer Center the Meyer lab receives a discounted rate on all services.

- LSRFortessa X-20 SORP
- SORP BD LSRII Analytic Flow Cytometer
- SORP BD HTLSRII Analytic Flow Cytometer
- SORP BD LSRII (IMED) Analytic Flow Cytometer
- ImageStreamx MarkII Imaging Flow Cytometer
- Helios (a CyTOF system) Mass Cytometer
- FACSAriaIII High-Speed Cell Sorter contained in a BioProtect IV class II biosafety cabinet
- FACSAria I (II) High-Speed Cell Sorter
- SORP FACSAriaII High-Speed Cell Sorter
- RoboSep Magnetic Cell Separator

Information Technology

- The engineering school provides all faculty, students, and staff with access to software development tools, office software, and statistical software for common and specialized needs (e.g. MATLAB).
- UCLA provides all campus members with unlimited storage versioned and stored off-site through the Box service.
- The Meyer lab maintains two high-performance, 32-core servers for computationally intensive jobs. In addition, the Hoffman2 cluster on campus provides support for larger computational tasks with 13,340 cores and over 50TB of memory.
- All computers in the Meyer lab are automatically and continually backed up to off-site storage.