

EQUIPMENT

Dr. Siddiqui's Cellular Biochemistry Laboratory is equipped with a UV/VIS spectrometer (Perkin Elmer), a luminescence spectrometer (Perkin Elmer) for fluorescence assays, a Pharmacia 1-D and 2-D electrophoresis system, a Powerblock II thermocycler, a Nuair biosafety cabinet, incubators (Fisher), a Beckman J-6M centrifuge, an Eppendorf refrigerated microfuge, Olympus CK40 and BX40 microscopes, a Kodak Image Station IS2000MM (Eastman Kodak Company, Rochester, NY), a Microfire digital camera, Shimadzu 2010 series gas chromatography and HPLC equipments. Common equipment shared by MRI investigators includes ABI PRISM 7900 Fast Sequence Detection System (Applied Biosystems), Bioanalyzer (Agilent Technologies, Waldbronn, Germany), Series 110 HPLC pump and detectors, NUAIR Laminar flow hoods, NAPCO Model-6200 CO₂ incubators, Forma Scientific -80°C freezers, a liquid nitrogen tank CRYO-100, a Beckman-GPR centrifuge, an Beckman-L70 ultracentrifuge, a Beckman-TL100 ultracentrifuge, a Beckman J6M centrifuge, fluorescent microscopes Leica DMR and Leica DMRB equipped with digital camera and connected to a PC, an Olympus BH2 fluorescent microscope with digital camera Nikon, a Labconco Freezone 4.5 freeze dry system, a Beckman LS6000IC liquid scintillation counter, and a VERSAmax tunable microplate reader connected to a PC. The institute supports the operation of three Becton Dickinson (San Jose, CA) flow cytometers, which permit antigenic characterization and intracellular analysis of diverse cell types. The FACSCalibur benchtop analyzer is equipped with a 15 mW air-cooled argon-ion laser emitting a 488 nm wavelength. One of the institute's two FACStar^{PLUS} cell sorters is equipped with an Enterprise II ion laser capable of multiple wavelength outputs including ultraviolet (50 mW) and 488 nm (150 mW). The second sorter utilizes two independent laser operating systems. The primary laser is a Spectra-Physics 100 mW air-cooled argon laser emitting at a 488 nm wavelength, while the second Spectra Physics helium-neon laser (35 mW) generates a 633 nm wavelength. Affymetrix Fluidics Station 400, Affymetrix GeneChip 3000 confocal scanner, Affymetrix MicroArray Suite software and Microarray Data Portal, a proprietary analytic and informatics algorithm developed by the Indiana University is available to PI at the Center for Medical Genomics at the Indiana University School of Medicine (IUCMG). An Agilent 1100 HPLC and detectors are also available for the PI to use at Purdue University.