Facilities, Equipment and Other Resources

Laboratory
In Dr. X’s Lab there are two hoods, a sink, and sufficient counter space for two students to be working on simultaneously. As additional counter space, two adjacent instrument rooms can be used by students. The major equipment is located in two easily accessible, adjacent rooms with additional counter space.

Clinical/Animal
N/A

Computer
The PI has a personal DELL PC Latitude D830 in her office. She has two computers in the instrument rooms adjacent to her laboratory to operate the stopped flow instrument and spectrofluorometer that are also used for data analysis. All computers have a mix of licensed software and freeware available. The PI and the people in her laboratory also have access to the departmental computer lab.

Office
Dr. x has a one person 100 ft² office. Dr. x’s laboratory and the two instrument rooms have several working areas at which students can work in private. Students on the project have access to student lounges and the department computer room.

Other:
The department employs one secretary, who assists faculty in ordering of equipment and supplies, one instrumentation specialist, who maintains and oversees repair of departmental equipment and trains students on instrumentation, and one stockroom manager, who assists faculty in purchasing supplies and with inventory, waste disposal, and lab safety. The PI has computer and technology support. The Office of Information Technology at Montclair State provides technical assistance to all faculty, staff and administration, including support for supported software, desktop environments and peripherals, network connectivity, computer password maintenance, and hardware and software configurations. The Sokol Seminar room of the College of Science & Mathematics (CSAM) is available for speakers, workshops and other CSAM activities. There is a student study lounge with wireless access.

Major Equipment
Dr. x has the following equipment in two instrument rooms adjacent to her laboratory: SX20 Stopped Flow Spectrophotometer with UV, fluorescence, and rapid scanning capabilities (Applied Photophysics), FluoroMax 4 Spectrofluorometer (HORIBA Jobin Yvon), and a Micro-Volume UV-Vis Spectrophotometer for Nucleic Acid and Protein Quantitation NanoDrop2000 (NanoDrop Products).

The following instrumentation is located in the x Laboratory: micro scales, water purifier, gel electrophoresis equipment for oligonucleotide purification and protein analysis, chromatography equipment necessary for enzyme isolation, temperature controlled incubator, temperature controlled water bath, micropipettors, and a small autoclave. Various molecular biology enzymes, vectors, cell lines, reagents, and kits are available for mutagenesis.

The following instrumentation is accessible in the MSU Department of Chemistry and Biochemistry: two UV-vis spectrophotometers (Cary 300 Bio), and two fluorescence spectrophotometers (Cary Eclipse), HPLC, DNA synthesizer, speed vac, preparative and analytical ultracentrifuges, FPLC (Akta, GE Healthcare), autoclaves, -80 °C Revco freezer, -30 °C freezer, temperature controlled incubators, a large autoclave, and ovens.

Educational Evaluation Facilities
Dr. T will be performing the educational evaluation utilizing her computer. Her secure office is located in the Sprague Library at Montclair State University. For the evaluation, she will be utilizing the Macbook Pro laptop computer that is supplied by the Research Academy for University Learning.