FACILITIES, EQUIPMENT, OTHER

SUNY-ESF is a multiple campus institution that includes approximately 1 million square feet of facilities in 186 buildings on 25,000 acres of land. Environmental Scholars will spend the majority of their educational time at the Syracuse Campus which lies on 12 acres and is home to seven academic buildings: Baker Laboratory, Jahn Laboratory, Walters, Bray, Marshall and Illick Hall and Moon Library. In the Fall of 2012 our new administrative and showcase building, the Gateway Building will open. The Gateway building is designed to highlight the College’s academic mission and commitment to sustainability. It will be LEED certified and will generate more energy than it needs through a combined heat and power system run on biomass that will provide steam and electricity to four other campus buildings in addition to itself. The building is specifically designed as an inspiration to our students, faculty and community.

Housing
In the fall of 2011 the first on campus dormitory, Centennial Hall, was opened which houses primarily freshmen and sophomores. Students in the Environmental Scholars Program will be housed together to create the Environmental Scholars learning community. After the first year, students will be allowed to choose their own housing arrangements.

Chemistry
The chemistry department is housed in the new 75,000 square foot Jahn Laboratory. Among its many attributes, the building has a 40-station organic teaching lab, a 20-station general chemistry teaching lab, a 20-station analytical/biochemistry teaching laboratory, a computational chemistry lab, a polymer processing lab, a variety of research laboratories, culture rooms, a laser spectroscopy lab and a rooftop atmospheric sampling station.

Biology
The biology department is housed in the 140,000 square foot Illick Hall. Illick Hall is home to the Department of Environmental and Forest Biology (EFB) and features the College’s beautiful greenhouses located on the roof of the building. It also houses the Roosevelt Wild Life Collection (named for Theodore Roosevelt, the 26th president of the U.S. and a dedicated conservationist). EFB is the College’s largest academic department, and Illick Hall contains faculty offices, laboratories and classrooms, along with a small lecture hall. Further, many faculty members carry-out their research at one or more of the College’s remote regional campuses.

Environmental Resources Engineering
Forest Engineering is housed in the recently renovated Baker Laboratory. During the demolition and reconstruction phases much attention has been paid to recycling materials, and the College has used the latest green construction practices. There is extensive use of electronic lighting controls and occupancy sensors in the rooms and a sophisticated energy management system. This digital control system regulates the building’s air handling and exhaust systems. The building also features an innovative photovoltaic system, with solar panels providing window shading to the south side of the building.

Paper Science and Bioprocess Engineering
The 85,000 square foot Walters hall is the home of Paper and Bioprocess Engineering is devoted to teaching and research in bioproducts, bioenergy, paper science, paper engineering, and allied fields. The building contains a semi-commercial paper mill for educational use. A number of alternative energy technologies are being used in Walters Hall. A “green” roof and photovoltaic panels are both
located on the lower roof of this building. The green roof is a vegetated cover that aids in controlling storm water run-off and mitigating urban heat-island effects. It conserves building energy, reduces sound transmission, and creates a pleasant, aesthetic environment that can even provide wildlife habitat. The 15.48 Kilowatt photovoltaic (PV) array mounted on the roof of Walters Hall produces approximately 1.5% of the electric power used by the College each year.

Library
ESF’s F. Franklin Moon Library contains more than 135,000 cataloged items and receives approximately 800 print journals and hundreds more electronically. The collection constitutes a special information source for the academic programs of the College, it has concentrations in such areas as botany, plant pathology, biochemistry, chemical ecology, forest chemistry, polymer chemistry, economics entomology, environmental studies, environmental design, paper science, silviculture, soil science, water resources, wildlife biology, wood products engineering and zoology. The SU Library and the SUNY-Upstate Medical Library are also available to our students, they may be searched by using an online public access catalog through the world wide web. The library is a wireless environment where students may use their own laptops for work and a few laptops are available for loan from the reserve desk.

Computing Services
Four public computing labs are maintained by ESF Computing and Network Services for general campus use. All labs are open seven days a week during most of the academic year and contain PC’s, printers and software commonly used by ESF academic programs. In addition to these ESF campus computing resources, SU’s Information Technology Services manages public computer labs where ESF students can access required resources for both class work and research. Several of these labs are open 24 hours a day, seven days a week.

Analytical and Technical Services
Analytical and Technical Services provides an array of centralized analytical services including nuclear magnetic resonance spectrometry (NMR), gas chromatography-mass spectrometry (GC/MS), liquid chromatography-mass spectrometry (LC/MS) and inductively coupled plasma-optical emissions spectrometry (ICP-OES). The unit also provides services including operation of a chemical and laboratory apparatus stockroom, microcomputer repair, instrument and equipment repair and fabrication, micromechanical repair, experimental apparatus fabrication, and coordination of scientific glassblowing repair.

Specialized Facilities
Specialized facilities on the Syracuse campus include electron microscopes; plant growth chambers; air-conditioned greenhouses’ a bio-acoustical laboratory; radioisotope laboratory; and computing center. Paper science and engineering laboratory features semi-commercial paper mill with accessory equipment. Greenhouses and forest insectary are used to produce plant and insect material for instruction. Extensive collections are available for study, including wood samples from all over the world, botanical materials, insects, birds, mammals and fish. Geographical information systems are collections of capabilities for acquiring, storing, managing, manipulating, analyzing, displaying and reporting data or information which has locational or spatial attributes. Extensive research and advanced instruction facilities are located in the College’s mapping science laboratory and these facilities continue to expand.
For consultation by the Project Director and Co-PI’s as well as support for our students:

Office of Multicultural Affairs  
www.esf.edu/students/multicultural  
ESF Multicultural Affairs exists to support underrepresented students and to foster a campus community where cultural diversity is appreciated. The office seeks to be a center of cultural learning which prepares all members of the ESF community to effectively interact with others in an increasingly diverse and global society.

Center for Native Peoples and the Environment  
www.esf.edu/nativepeoples  
Our region is home to two great intellectual traditions regarding stewardship of the earth: traditional ecological knowledge of indigenous people and scientific ecological knowledge. The mission of the SUNY-ESF Center for Native Peoples and the Environment is to create programs that draw on the wisdom of both indigenous and scientific knowledge in support of our shared goals of environmental sustainability.

In addition to serving as a bridge between traditional ecological knowledge and western scientific approaches, the Center will incorporate indigenous perspectives and knowledge for the benefit of native students and work to educate mainstream students in a cross-cultural context.