Dr. Lloyd Mitchell, our newest faculty member, initiates successful East-Coast, West-Coast Exchange Program

Spring Semester 2005, our newest faculty member, Dr. Lloyd Mitchell, initiater of the East-Coast, West Coast Exchange Program and a senior faculty member Dr. William Porter of the Department of Geological, Environmental and Marine Sciences took four ECSU students to Mt. St. Helens in the state of Washington. The students were Asani Brewton and Brian Campbell, Geology Majors, Karitsa Williams and Brandi Brehon, Math & Computer Science Majors. These students performed preliminary research on the physical characteristics, culture and economics of the local area. Students and faculty experienced a fabulous aerial panorama of the volcanic mountain with a driving tour of the various landscapes around the mountain. In 1980, Mount St. Helens erupted, which drew attention from all over the world and it became a natural attraction, which provides diverse opportunities, all through the year, to explore the natural and remarkable beauty of the surrounding landscape. Additionally, Mt. St. Helens erupted again in 2005, but not while our students and faculty were there. Also, the group visited the Earth Science Department at Pierce College, where their faculty have initiated future collaborations with ECSU for student internship opportunities. This trip to Washington, also included visits to Rainier National Park, Mount Hood and Northwest Trek. Students presented the results of their research at the Cascades Volcanic Observatory in Vancouver, Washington. Over the Christmas break, Miss Sharain Halmon, a courageous Geology Major traveled by airplane, without her parents, for the first time to discover first hand this awesome mountain experience. Sharain’s adventures included a tour of Mount St. Helens, where she saw the damage caused by the 1980 eruption and the slow recovery process by (See “Mountain,” Continued on page 3)

Message from the Chairperson, Dr. Francisco San Juan

The 2005-2006 Academic Year has been a banner year for the Department in terms of enrollment, research activities for both faculty and students, and in terms of the number of research grants submitted and funded. Unfortunately, Dr. Kathleen Fischer is retiring at the end of this semester for personal reasons. The search for her replacement is underway. The entire Department and I would like to thank her for the dedication and hard work that she has done to make marine environmental science program successful. During her tenure, Dr. Fischer updated the curriculum and developed new courses, created new hands-on class activities, acquired several funded research grants, and did an excellent job in mentoring students. We wish her well in all future endeavors.

Enrollment reached a record high of 30 students, despite the graduation of a total of five students during the May and December 2005 Commencement. Three of our graduates are currently enrolled in graduate school and one will begin graduate studies, Fall 2006. A total of six funded activities will be ongoing this summer. One is the continuation (Year 2 of 3) of the MSEIP grant, Dr. San Juan, P.I., for faculty enhancement. The others include a new N.C. Space Grant (Drs. Rossbach and Porter) for teacher training in Martian Geology, Burroughs Wellcome (Dr. Porter and Dr. Fischer) for high school student workshops in Earth Sciences and the Watershed Watch undergraduate program with the University of New Hampshire (Drs. Porter and Fischer). Ms. Elizabeth Noble will be responsible for the Currituck Sound Restoration Project, the SAV Cooperative Habitat Mapping Program and the Burroughs Wellcome project activities.

See Chairperson,” Continued on page 4)
Above: L-R, Kimberly Cones, Geology Major and Derrick Turner, Criminal Justice Major, ENSC 440, Global Environmental Issues students are participating in a video conference as part of Global Seminar with other universities.

Pictured at the right: Center Position is Dr. Kathleen Fischer with her students, whose names are mentioned above.

2005 STUDENT SUMMER RESEARCH SYMPOSIUM

Students from the Departments of Biology, Chemistry and Physics and Geological, Environmental and Marine Sciences mentored by faculty from these Departments who are part of the National Science Foundation REU Collaborative Research Experience in Environmental Biology (Dr. Kathleen Fischer) and the Submerged Aquatic Vegetation Cooperative Habitat Mapping Program (Ms. Elizabeth Noble) made posters and gave oral presentations of their research during this symposium. Most of this research is a continuation, as long as a particular student is interested, for the duration of the grant funded program. Following are a list of Summer 2005 student participants and their research titles: Lucille Brunner, Chemistry, “TNT Residue Contamination Studies”; Ashley Cobb, Biology and Dr. M. Winrow, “Microbiological Techniques for Water Quality Sampling and Biofilms; John Crossland, Marine Environmental Science (MES), “Setting up an Aquarium at ECSU”; Amber Eure, MES, “Physiochemical Parameters of the Water Column in Currituck Sound and Mapping Currituck County Duck Blinds Using ArcGIS”; Sean Hankinson, MES, “Sampling Submerged Aquatic Vegetation Habitat: Methods and Instrumentation”; Shakira Turner, MES, GeoExplorer XT GPS: “Applications to Currituck Sound Coastal Habitat Research”; Stephanie Kudyba, MES, Summer Experience: United States Army Corps of Engineers, Duck Research Station, Jonathan White and Shanta Armwood, Chemistry, “Medicinal Effects of Traditional Medicinal Plants from Zimbabwe”, and Kaleda Green, Biology, “Medicinal Effects of Plants”.

Marine Environmental Science (MES) Senior, Shakira “Danielle” Turner (photographed at right) continued her work beyond the summer, as well as other students, some who are mentioned above and the following list of students: Stacy Webb, MES Sophomore, Vandalyn M. Moore, Senior and Krystal Johnson, Junior, Biology majors and Johnnie Stewart, Sophomore, Information Technology major. Shakira is a GPS Operator and GIS Analyst. The Currituck Sound Restoration Project funds this. Mrs. Elizabeth Noble is the Project Director and the students immediate supervisor. Being a student researcher has enriched Shakira’s undergraduate studies and she recommends all students to actively participate in research and other programs offered at ECSU.

“Award of Student Interest in Earth Science Through Problem-Based Learning, Use of Geospatial Technology, and Field Experience”

Funded by: Burroughs Wellcome, Dr. William Porter, Project Director & Geography Professor

A summer program with follow-up activities will be provided by Elizabeth City State University (ECSU) for approximately 20 high school students per year, effective Summer 2006-2009. These students from high schools in Pasquotank, Camden, and Currituck Counties will be participants of problem solving activities in earth science and will receive exposure to studying the three local environments using field data collection methods and geospatial technology. A Problem-Based Learning Approach will be used. Students and their science teachers will participate in a two-week summer workshop and an academic year program, led by Dr. William Porter, a project staff and geoscientists, each project year. The workshop will be held at ECSU in the Geological, Environmental & Marine Sciences Department (GEMS). Students, mentored by their science teachers will collect field data and analyze the data using geospatial methods, during the summer workshop. When the subsequent academic year begin, project teachers and students will present exercises from the summer workshop to other students.
the Earth Sciences Department, who talked to Sharain about graduate courses as a volcanology major. Also, she was taken on a tour of the campus. Sharain was given an opportunity to interview two employees at The Cascade Volcano Observatory on their current studies and how they monitor each volcano. Sharain also touring this facility. Sharain thanks her mentor, Dr. Lloyd W. Mitchell, who went on the East West Exchange Program with her. During Sharain’s week-long stay, her map reading skills improved and she felt comfortable navigating her way to various sites and places, such as: Tacoma and Seattle, Washington, Oregon, and Canada, for the most part, independently. She received a tremendous amount of information on the geology and tectonics of which the volcanoes and mountains are a product of and rates the entire trip as, Magnificent. Sharain would recommend a trip of this caliber to any Geology major.

Amber loves water quality research and anticipates earning a Master’s Degree from a University, in distance, no more than a 300 mile radius from northeastern North Carolina or on-line, within the next two years. Her professional plans, immediately following graduation include temporary employment in the GEMS Department at ECSU as a Research Technician. In this position, some of Amber’s duties, under Mrs. Elizabeth Noble’s immediate supervision, would include, but are not limited to: water quality and sediment analysis; maintaining continuous water quality monitoring equipment and conducting SAV transect surveys. Amber enjoyed being a student in the GEMS Department because of its small number of majors and she was able to establish personal relationships. Amber would like to especially thank Drs. Francisco San Juan, Kathleen Fischer and Mrs. Elizabeth Noble for providing opportunities for lots of hands-on experience.

and their poster was awarded First Place. From this notable recognition, they entered into competitions off-campus and their poster was accepted at the Ocean Science Meeting in Hawaii, but unfortunately there were no funds available to cover the expenses of this trip. Stephanie attended the Estuarian Research Federation Conference held in Norfolk, VA. She is a Spring 2006 recipient of the Maurice Powers Scholarship, offered by the GEMS Department. Currently, Stephanie is an intern at the Pasquotank County Land Use Planning Office, and the NC Division of Coastal Management. She is constructing a GIS database for each agency. Ms. Kudyba plans to attend graduate school in the near future, but immediately following graduation, she plans to seek professional employment.
Dr. Mitchell has several proposals in the amount of $900,000, pending funding. The following programs, Dr. Mitchell, PI have been funded by the Department of Homeland Security and include: a Partnership Proposal in the amount of $10,000 a Faculty, Student Research Proposal in the amount of $25,000, and to date, over $15,000 for the East-Coast, West-Coast, Exchange Program.

During the year, Dr. Lloyd Mitchell developed and received approval for a Minor in Public Health and Sanitation. Inclusive of this semester, twelve students are enrolled in that area, and they have been granted funds for various training and research activities.

The Department’s boat, Research Vessel Hawk, has been totally refurbished and equipped. A captain has been hired and the boat is now ready to be used for educational and research activities. Other Departments are invited to use this asset for their own programs. A recharge center account, similar to the account for use of University vehicles, has been set-up to fund the maintenance of the vessel.

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**Alumni Updates**

- **Asani Brewton**, Geology Graduate, Fall 2005, her undergraduate research “Detailed fossil preservation and age determination of a Late Devonian marine community in West Virginia was displayed during the poster sessions at the Geological Society of America Meeting in March in Knoxville, TN. Ms. Brewton’s undergraduate mentor, Dr. Thomas Rossbach also attended the Meeting. Summer 2006, Asani will work at Minerals Management Service in New Orleans, Louisiana and Fall 2006, she will be attending graduate school at the University of New Orleans. During her undergraduate studies at ECSU, Asani received a host of awards, scholarships and excellent recommendations from the GEMS Department and other programs/departments at ECSU. Following are a few awards, received by Ms. Brewton: Academic Excellence Award for maintaining the highest GPA in Geology and in her classification (2003-2005); Vice Chancellor’s List; Chancellor’s List; UNC Campus Scholarship; National Dean’s List, etc. Ms. Brewton was also enrolled in ECSU’s Honors Program; she was a student of paleontology and a volcanology researcher for the GEMS Department and student intern with the US Forest Service in Wise, VA. This young lady, as well as many of our graduates have bright futures ahead of them.

- **Shanna Chambless**, Marine Environmental Science (MES) Graduate, Spring ‘05 is pursuing a Masters’ Degree in Natural Resources at Delaware State University.

- **Jacklyn James**, MES Graduate, Spring ‘05 is pursuing her Master’s Degree On-line in Environmental Management at the University of Maryland, University College while working at ECSU in the Chemistry & Physics Department.

- **Cleantha Samuel**, MES Graduate and Accounting Graduate, Spring ‘05 is pursuing her Masters’ Degree at Texas A&M University.

**Former Geology Student, Heather Allen, is currently attending the Bren School of Environment, University of California at Santa Barbara.**

**Other GEMS Alumni** usually keep the Department abreast of their success. Below are a few alumni names and their employers/graduate school information, who we have contacted recently: **Sunday T. Shepherd, ’98-**ChevronTexaco, San Ramon, California; **Christopher Ervin, ’04-**Eastern Kentucky University; **Matthew Woolard, ’04-**Division of Marine Fisheries -Elizabeth City, NC, **Ronald Bowser, Sr., ’77-**Minerals Management Corp., New Orleans, LA; **Jason Powell, ’96-**Bureau of Land Management (BLM)-Washington, D.C.; **Roxanne H. Lamb, ’88-US Geological Survey, Richmond, VA; **Tracy Staton, ’03-**University of South Florida; **Elijah White, ’81-**Exxon, Houston, TX; **William Mansfield, ’03-Hyman & Robie, Camden, NC, **David Swinney, ’01-**Environmental Health, Elizabeth City, NC; **Michael Johnson, ’96-BLM, Las Vegas, NV, **Alvin Jones, ’78-Minerals Management, New Orleans, LA, **Tyron Eason, ’86-US Army.**