Alexandria now hub for CAUS Northern Virginia programs

By Sarah Newbill

The recent acquisition of property adjacent to Virginia Tech’s Washington- Alexandria Architecture Center at 1001 Prince Street, Alexandria, has enabled all northern Virginia programs offered through the College of Architecture and Urban Studies to now be located on the same city block.

Public-administration-and-policy programs once offered at the Northern Virginia Center in Falls Church, plus the Urban Affairs and Planning program and the Metropolitan Institute, (originally on King Street in Alexandria) are now next door at the new 1021 Prince Street location. The Washington-Alexandria Center has offered bachelor’s and master’s degrees in architecture, a master’s in landscape architecture, and a Ph.D. in environmental design and planning. Additional programs offered from the Prince Street location now include graduate programs in public administration (M.P.A. and Ph.D.) led by Professor Jim Wolf; the Institute for Public Policy Research (IPPR) directed by Renee Toal; the urban-and-regional-planning program (M.U.R.P.) coordinated by professor Chris Nelson; and the public-and-international-affairs program (M.P.I.A.) coordinated by professor Gerard Toal. All of these new programs are now associated with the college’s newly formed School of Public and International Affairs directed by John Randolph, former head of the Urban Affairs and Planning department.

Other Tech programs joining the 1021 Prince Street location include Science and Technology Studies, coordinated by Barbara Allen in the College of Liberal Arts and Human Sciences, and the natural-resources program coordinated by David Traugier in the College of Natural Resources.

“We are very excited about having all our programs located together,” CAUS Dean Paul Knox said. “They complement one another and provide our faculty members and students with exciting possibilities for study and research in the metropolitan region.”

For more information about new as well as existing programs located in Alexandria and Northern Virginia, contact Jim Bohland, executive director of Northern Virginia Operations, at 703-837-1425, or via e-mail at jayjon@vt.edu.

University receives gift of Spamender software

By Amy Boyce

Virginia Tech has received a gift of 35,000 licenses for Spamender™ software from Evolvian with a retail value of $1,048,250.

Evolvian is a software company that provides solutions to problems in communications. According to Evolvian, by 2005, spam is expected to account for 70 percent of e-mail traffic. Spam wastes time, can be offensive, and reduces the productivity of employees. Spamender™ is an anti-spam technology solution that works uniquely for each end user to provide spam protection. The software works directly with Microsoft Outlook and will be made available to all Tech students, employees, and alumni.

The founding partner and CEO of Evolvian, Shivon Dosky, is a Virginia Tech alumnus, having graduated in 1989 with an electrical-engineering degree. Several years ago, Dosky recognized the need for better anti-spam solutions. Dosky, along with a team of software developers, e-mail application architects, and Internet and customer-service experts, formed what is now Evolvian. The company began studying the problem of unwanted e-mail and developed new and innovative ideas that form the basis of Spamender™.

Dosky chose to make a donation of Spamender™ software to Virginia Tech because of his close ties to the university and his respect for the university’s commitment to technology. “Virginia Tech is a state-of-the-art university,” Dosky said. “The students, faculty and staff members are all receptive to new technology and software.”

John Krallman, Virginia Tech’s director of Information Technology (See UNIVERSITY on 2)

Pressure processing laboratory unveiled

By Angela I. Correa

A new technology came to Virginia Tech this summer that may greatly benefit the food-processing sector, and improve the quality, safety and security of the U.S. food supply.

The new high-hydrostatic-pressure-processing (HPP) vessel puts into use a discovery made by a West Virginia Extension researcher B.H. Hite in 1899. The discovery was that applying substantial pressure evenly on a food product or other sample could effectively ‘sterilize’ or ‘pasteurize’ that product, by inactivating many food spoilage and pathogenic organisms. This inactivation of harmful micro-organisms could occur while the product was still raw or processed, and did not significantly affect appearance, texture or flavor in the majority of cases. It has taken a century for technology to catch up with this finding, and it is only recently that high hydrostatic pressure has been feasible on a commercial scale.

The Virginia Tech unit is a Quintus Food Technologies, Inc. It has a 35-liter batch capacity, and is the only commercial scale unit in operation under the direction of a university anywhere in North or South America. The HPP laboratory is available for a variety of university research projects, including, but not limited to, food, vaccine, polymer, and drug research.

The data on HPP is building quickly, and the process holds promise for use with a wide variety of foods and beverages. It safely extends shelf life without sacrificing quality or good taste. It also makes it possible to accomplish the process in new ways, and is being made available to food processors and distributors as well as university researchers.

Emerging Leaders Workshop honors Smith’s leadership

By Tom Giffin

For six years, the Virginia Tech Graduate School has offered the Emerging Leaders Workshop to give rising college sophomores and juniors at historically black colleges and universities (HBCU) an opportunity to prepare for graduate school and careers. From the beginning, Emmett E. Smith Jr, of Richmond, an engineering specialist at E.I. DuPont Co., has provided leadership to the university-industry collaborative effort.

Plummer named Equal Opportunity interim director

By Sherri Box

President Charles Steger has announced that Ellen Plummer, director of the Virginia Tech Women’s Center and adjunct faculty member for the Women’s Studies program, has been named interim director of the Office for Equal Opportunity. She is replacing Mel Gillespie, who is leaving the university to accept a position at another institution in the mid-west. The appointment is effective September 8.

“I have great confidence that the leadership Ellen brings to the position will continue to build our record of success in the Office for Equal Opportunity,” Steger said. In the short time she has been at Virginia Tech, Steger said Plummer has been very active in promoting university-wide efforts to enrich and enhance the diversity of the institution at all levels.

She is currently serving on the Commission on Equal Opportunity and Diversity and she has served as chairwoman for the Equal Opportunity and Affirmative Action Committee. Plummer has also been a member of the President’s Advisory Council on Multicultural Affairs, the Diversity Summit Planning Committee and the Dean of Students’ Campus Climate Task Force.

Plummer received her undergraduate degree in human development and family relations in 1982 and her master’s degree in Community Organizing/Policy and Planning in 1986 from the University of Connecticut. She is currently working on her Ph.D. at Virginia Tech in higher-education administration with an anticipated graduation date of fall 2004.

Before coming to Virginia Tech, Plummer served at Duke University as the senior administrative assistant in the pre-major advising office and assistant to the director. She is currently working on her Ph.D. at Virginia Tech in higher-education administration with an anticipated graduation date of fall 2004.
PBK chapter seeks to identify society members

Virginia Tech’s Phi Beta Kappa (PBK) chapter, the Mu chapter of Virginia, wishes to identify any faculty, staff, graduate student, or post-doc members of the society who are on campus but have not already joined the chapter. The PBK chapter sponsors a variety of talks and other events to which it would like to be able to invite all PBK members. Interested PBK members should send a note to pmetz@vt.edu.

Outreach offers contract training for small businesses

The first Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) proposal preparation workshop on October 2 in Blacksburg will cover how to prepare a competitive Phase I proposal. Phase I entails conducting a feasibility study on a technology pinpointed for development. The second workshop on October 3 will guide enrollees through preparation of a Phase II proposal, which would provide plans for prototype development and validation of the targeted technological advance. Cost is $60 per person for the day-long training. Lunch is provided.

Big coal hauler inspires science teachers

Quillen who arrived at Tech in 1996, now runs the only graduate program of its kind in the nation for science teachers about how coal is mined and used to generate electricity. Academic backing for the program comes from the Department of Teaching and Learning. John Burton, department chair, said he was an early supporter of Quillen’s ideas because “far too many people simply don’t understand where electricity comes from. Many people have a negative opinion about coal mining even though coal is used to produce over 50 percent of our electricity and is of great economic importance in our region.”

EMERGING

Continued from 1

In a ceremony at the Hotel Roanoke recently, Graduate School Dean Karen DePauw recognized Smith for his contributions to the program, saying, “He has acted as a leader of the Steering Committee, he has taken a leadership position in championing the program to corporate sponsors across the nation, and he has taken the front-and-center leadership position in working with the young people. He understands that leadership means giving of yourself and of your time.”

The Emerging Leaders program offers an annual summer workshop where the students receive group and individual attention with emphasis on self-assessment, goal setting, networking, and leadership skills. They meet with industry representatives to talk about graduate school, course selection, and career plans. Activities include mock job interviews with corporate professionals, for example. Sponsors at this year’s event were AltriaGroup, Cisco Systems, ConocoPhillips, DuPont, Federal Express, G.E. Financial, Hewlett Packard, Lockheed Martin, Merck and Company, NASA-Langley, and Pioneer.

LABORATORY

Continued from 1

this without the use of additives or heat treatments that may decrease the quality of the final product. In terms of post-treatment microbiological analyses, the results of HPP are similar to those that can be achieved through irradiation, but HPP has none of the negative publicity that has accompanied the advent of irradiation technology.

The mission of the HPP Laboratory is to make this cutting-edge technology available to as many people as possible in the food industry and beyond. A number of food-related projects are already under way, but a number of non-food projects have also been proposed, such as one that will test the usefulness of HPP in pharmaceutical and vaccine manufacturing.

UNIVERSITY

Continued from 1

Acquisitions said, “At Virginia Tech, we pride ourselves on using the most advanced technology available. SpanMender is an indispensable addition to our arsenal. With SpanMender, we are able to provide our users with a robust, flexible, client-based solution to the challenge that span presents. We are delighted that Evolvan has provided such an effective tool for our users.”

Smith graduated from Virginia State University in 1976 and has been with DuPont for 27 years. He has numerous awards and recognitions to his credit, including the 2002 Virginia High-Tech Partnership Award from Governor Mark Warner. His accomplishments include developing a $5 million Computer Enrichment Center at North Richmond YMCA, creating an award-winning pre-college math and science summer program at Virginia State for high-school students, and creating local/HBCU internship program at DuPont Spruance that has employed 80 college students over the last six years.

Trained faculty and staff are available to help researchers design a testing protocol that makes maximum use of the resources available.

International, middle, and high-school educators learned firsthand where electricity comes from, in Virginia Tech’s “Coal to Electricity” energy-education program. Now in its seventh year, the summer series examines extraction and transportation of coal, electricity generation and transmission, environmental issues, energy economics, and environmental topics such as land reclamation.

Seventeen science teachers from around the state were selected to attend the free, two-week program held July 13 through 25. Jointly sponsored by Virginia Tech and corporate and governmental agencies, teachers develop lesson plans for their classes that address the energy standards included in the Virginia Standards of Learning in science.

But this educational series isn’t just a lecture course. While visiting a surface mine in Wise County, they also learned how to drive a two-story-high, 150-ton coal hauler. “For the teachers, it’s like looking up at the Empire State Building,” Mary Quillen, program founder and director said. “The thought of handling a million-dollar piece of equipment is a little intimidating at first but once teachers climb inside, they discover they can drive with the best.”

Big coal hauler inspires science teachers

Outreach offers contract training for small businesses

The opportunity results from a grant awarded to Virginia’s Center for Innovative Technology (CIT) by the U.S. Small Business Administration through the Federal and State Technology (FAST) Partnership Program. The $100,000 award is the second maximum grant for Virginia. Proposal participants will match this amount out of existing funds.

The workshop emphasizes academic success, community service, and ethical behavior with the goal of developing leaders who will share what they have learned with their peers and younger people in the community.

“Emmett Smith is a role model for such leadership qualities,” said Marilyn Kershaw, director of graduate-student recruiting at Virginia Tech and co-director of the program with Roosevelt Ratliff Jr., assistant vice president for leadership development at Claflin University.

Small businesses in Southwest and Southside Virginia and Virginia Tech faculty members will be able to learn how to win federal government contracts to support development and commercialization of new technologies, thanks to a partnership between Virginia Tech’s Outreach Program Development, part of University Outreach and International Affairs, and the Center for Innovative Technology.

PBK chapter seeks to identify society members

Planning Calendar information noted

The 2003-2004 University Planning Calendar has been distributed to faculty and staff members through the university mail system.

Sufficient numbers of calendars have been printed to provide all full-time university employees with a calendar. Additionally, the numbers should be sufficient to place a calendar in graduate-student lounges. However, members of the campus community are asked to limit themselves to one calendar.

Due to extensive changes in the university’s organizational structure, some departments may not have received a calendar for all of their faculty and staff members. To request additional calendars, send an e-mail detailing the number of calendars required, the department name, and mail code to spectrum@vt.edu.
University forms partnership with Northern Virginia civil-rights foundation

By Sarah Newhill

Through a new project with the Tinner Hill Heritage Foundation, Virginia Tech’s faculty and staff members in Alexandria have been busy coordinating activities to help further the foundation’s cause.

The non-profit organization sponsors a variety of activities that honor the civil-rights leaders of Tinner Hill in Fairfax, and recently awarded $2,000 in prizes for an in-house student design competition coordinated by Tech’s Washington-Alexandria Architecture Center (WAAC). The students were charged with designing a new cultural center for the Tinner Hill area, site of the first rural NAACP in the United States, at the location where the original Tinner home once stood.

The winning team consisted of Scott Stephens, T.J. Finney, and Jon Zellweger, three graduate Virginia Tech students, who were presented a $1,000 award by the foundation and $500 for second place to the team of Jonathan Lopez and Kelly Browning, and $250 awards of merit to teammates Cecilia de la Vega and Laura Croce, and to individual entrant Mary Sachse.

The purpose of the competition was to study design issues and generate design ideas for foundation members that would help them envision a cultural center as a focal point for the community, as well as aid them in hiring a professional architect for the design phase. Paul Emmons, the WAAC architecture professor who helped coordinate the competition called the Tinner Hill competition in June.

The students were encouraged to reproduce the old Tinner house, a two-story wooden clapboard structure destroyed in 1960, the remnants of which are currently situated on the African American Historic Trail. Students were also encouraged to keep in mind questions such as “How can the proposed cultural center recreate the character of the original homestead while creating a structure for different needs with contemporary services ranging from indoor plumbing to Internet and parking and “How can the design tie into the existing Tinner Hill Museum located across the busy street?”

Completion rules required that students incorporate other design elements such as a front-porch orientation space for visitors, living rooms, a theater room, a museum, meeting room, administrative office, interpretive garden, signage, and plaques.

Tech’s relationship with the foundation was formed earlier this year when foundation board members sought collaboration with the university on a series of projects. “I saw the relationship as an excellent example of how Virginia Tech can work with community organizations to meet their needs while giving our students an excellent learning experience,” said Jim Bohland, executive director of Tech’s Northern Virginia operations, who held the initial meeting with Tech and the Tinner Hill board. In addition to the design competition, Tech is working on other projects with the foundation. Associate Professor and Director of the Race and Social Policy Research Center, Susan Concept, has been writing proposals to secure funding for future research and programming at the site, and a graduate student is doing oral histories of the Tinner family and other African Americans in the area.

Foundation Vice President Dave Eckert, who served as a judge for the competition, said he and the other board members have been extremely impressed with both the enthusiasm and professionalism of working with Tech’s faculty and students. “The partnership with Virginia Tech, and specifically with the department of architecture, has been a blessing to the Tinner Hill Foundation. They have not only given us moral support, they’ve given us technical support and all that we needed to take a project from a dream to the start of the process of making it happen,” he said.

Other members of the jury included WAAC faculty members Susan Piedmont-Palladino and Brian Kane. Nearly 20 students participated in the competition.

NRC praises Tech’s handling of radioactive material

By Susan Trulove

An unannounced visit by the Nuclear Regulatory Commission has resulted in positive remarks for Virginia Tech’s handling of radioactive materials at the university.

Doug Hess, director of the Environmental Health and Safety (EHS) office at Virginia Tech, said he has been a rational advocate for education and safe use of radioactive materials at the university. Doug’s programs have made it possible for our scientists to optimize their use of analytical tools to solve problems,” Hess said.

In addition to policies, procedures, and oversight for ordering, handling, and disposal of radioactive materials, such as isotopes used in research, EHS offers radioactive-material safety training, laboratory and nuclear-medical trainer initial training and testing, and refresher programs on line.

To provide a safe environment at Virginia Tech and achieve compliance with various state and federal rules, EHS offers numerous other training and certification programs on line and in their classroom for areas including laboratory and occupational safety—from safe construction practices to biohazard materials handling. Trainers also visit groups around campus.

“The importance of EHS to our ability to carry out research cannot be overstated,” said Jim Blair, interim vice provost for research. “We greatly appreciate the efforts of our students an excellent learning experience,” said Jim Bohland, executive director of Tech’s Northern Virginia operations, who held the initial meeting with Tech and the Tinner Hill board. In addition to the design competition, Tech has been working on other projects with the foundation.

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Biochemistry Department Head John Hess praised the leadership and service of Doug Smiley, director of the Environmental Health and Safety (EHS) office at Virginia Tech, said he has been a rational advocate for education and safe use of radioactive materials at the university. Doug’s programs have made it possible for our scientists to optimize their use of analytical tools to solve problems,” Hess said.

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Sen appointed interim associate dean, MBA director

By Sookhan Ho

Tarun Sen, professor of accounting and information systems, has been appointed interim associate dean of graduate and international programs and MBA director in the Pamplin College of Business, effective this July.

Sen has a Ph.D. in management-information systems from the University of Iowa. He has an MBA from the Indian Institute of Management at Bangalore, India, and an undergraduate degree in mechanical engineering from the Indian Institute of Technology at Kanpur, India.

Sen joined Virginia Tech in 1985 and has taught in the Department of Accounting and Information Systems, the Northern Virginia MBA program, and the Master’s of Information Technology (MIT) program.

He has taught graduate and undergraduate courses on data-base management systems, management-information systems, systems analysis and design, eBusiness technology and management, and software project management. His current research interests are in information-systems design, datawarehouse design and quality assurance, and industry applications of decision support systems. He has published in academic journals that include INFORMS Journal on Computing; Management Science; Decision Support Systems; IEEE Transactions on Systems, Man, and Cybernetics; and Journal of Information Systems.

Storey named director of Center for Food, Nutrition Policy

By Stewart MacInnis

Maureen Storey was named director of the Virginia Tech Center for Food and Nutrition Policy July 1. Storey has served as acting director since March 2002 when the former director, Lester Crawford, was appointed deputy commissioner of the U.S. Food and Drug Administration.

“Dr. Storey has demonstrated her ability to lead the center in accomplishing its many mission—to interject sound scientific principles into the discussion of public policies regarding food and nutrition,” said Gregory Brown, interim dean of agriculture. “We look forward to her continued leadership in this important area.”

Under Storey’s leadership, the center’s faculty and staff has experienced substantial growth, has conducted a productive research program, and it has raised the national and international visibility of the center through outreach and communication programs. The center has developed a closer relationship with federal agencies, it has participated in public-policy deliberations in the United States and in international forums, and it has conducted important conferences on major health and nutrition issues. Faculty members of the center have had four articles published or accepted for publication in peer-reviewed journals in the past academic year.

The Center for Food and Nutrition Policy is based in Alexandria and uses research, outreach, teaching, and communications to advance rational, science-based food and nutrition policy. It is designated a center of excellence by the United Nation’s Food and Agriculture Organization and this year signed a memorandum of understanding with the U.S. Food and Drug Administration to facilitate collaboration on research and outreach projects.

Earlier this year, Storey was invited by Secretary of Health and Human Services Tommy Thompson to be a private sector adviser to the U.S. delegation to the World Health Assembly in Geneva, Switzerland.

Solar-house project wins NCARB prize

By Sarah Newbill

Virginia Tech’s solar-house project was named one of six winners in the National Council of Architectural Registration Boards’ 2003 competition for Creative Integration of Practice and Education in the Academy. The juryed competition, open to National Architectural Accrediting Board (NAAB)-accredited programs, recognizes projects in new areas of study that significantly merge practice and education in a studio setting.

The project’s entry, entitled “The Art of Integration,” consisted of a one-page abstract, detailed program description, and a large display board, and identified the many collaborations between university departments, students, faculty members, and practitioners, demonstrating the integration of education with practice in this project.

NCARB’s web site states that “the Virginia Tech entry details a technically innovative solution to sustainable architecture,” noting the project’s well-defined goals and clearly realized solution. The jury included members of the council’s Practice Education Task Force and six deans (or department heads) of NAAB-accredited architectural programs, chosen by NCARB’s regional leadership.

The solar house project began in late 2001 as an entry in the Department of Energy’s Solar Decathlon (held in Fall 2002 in Washington, D.C.) in which the Tech solar house placed fifth.

Forty-nine entries were juried for the NCARB competition. Virginia Tech’s entry competed against Clemson University, Mississippi State University, the University of Maryland, the University of Kansas, and a team from Pennsylvania State and Washington State Universities, for the grand prize of $25,000.

For more information on the Solar House, go to www.cauw.vt.edu/etsolar.

Students donate nearly $6,000 to program

By Lori Greiner

Virginia Tech students have contributed nearly $6,000 to the Montgomery County Emergency Assistance Program (MCEAP), which provides support to thousands of individuals and families in Montgomery County.

The money was collected during the third annual Flex Out Hunger program coordinated by the Sigma Alpha Epsilon (SAE) fraternity and Virginia Tech’s Office of Student Programs. Students were given an opportunity to purchase food for the needy through their dining plan in the form of food certificates.

“The funds raised through the third annual Flex Out Hunger food drive goes a long way in restocking our food bank, which is always in need,” said Phil Pappas, president of MCEAP.

‘Liberty’ wins NASA vehicles competition

By Liz Crumbley

“The Liberty” — an electrically powered, hydrogen-fueled, twin-prop, corporate air taxi aircraft designed by undergraduate aerospace and industrial engineering students from Virginia Tech and Loughborough University in the United Kingdom — has won first place in the NASA Revolutionary Vehicles Concepts and Systems Competition.

The competition, sponsored by the NASA Langley Research Center’s Aerospace Vehicle Systems Technology Office, challenged students to develop innovative concepts and systems for all types of future aircraft. The 10 university entries submitted this year were reviewed by engineers from NASA Langley, Pratt & Whitney and NASA Glenn Research Center’s Quiet Green Propulsion Project.

The Virginia Tech/Loughborough team designed The Liberty to take advantage of modern fuel-cell and hydrogen-storage technology. The five-person corporate air taxi is powered by twin electric-motor-driven propellers and a liquid-hydrogen fuel-cell system. The system for The Liberty had to be lighter in weight and higher in efficiency than fuel-cell systems designed for automobiles, so the team designed new systems for pressure control, heat exchange and fuel storage.

“This year’s team took on the challenge of developing not only a practical design for a hydrogen fuel-cell-powered airplane, but also of designing an operational infrastructure that would ensure its commercial success,” said Jim Marchman, professor of aerospace and ocean engineering at Virginia Tech. Marchman and professor Gary Page of Loughborough are the team’s advisers.

This is the sixth year that Virginia Tech and Loughborough students have collaborated in aircraft competitions. In previous NASA-sponsored general-aviation design competitions, Virginia Tech/Loughborough teams have twice won first place, and also second place, third place and an honorable mention.

“This year marked a new competition, one that included all types of aircraft in addition to those classified as general aviation,” said Elizabeth Ward, director of education and outreach support for NASA Langley’s Aerospace Vehicle Systems Technology Office. “This difference makes the achievement of the Virginia Tech/Loughborough team all the more significant.”

A team from Embry Riddle Aeronautical University’s Prescott, Ariz. campus placed second in this year’s competition and a University of Kansas industrial design team placed third. Other notable entries, according to the NASA Langley competition web site, included a supersonic vehicle, a turbofan engine, a rotor craft and a flapping wing.

The winning teams were scheduled to present their designs and receive their awards August 2 during the Experimental Aircraft Association’s AirVenture 2003 in Oshkosh, Wis. Cash awards for the top three teams range from $5,000 to $25,000.

The 2004 competition will begin on August 15, and details will be posted by NASA Langley at http://avst.larc.nasa.gov/competition.html.