Congressmen announce $1.6 million for Danville research institute

By Susan Felker

U.S. Senator George Allen and Fifth District Representative Virgil Goode on Wednesday jointly announced $1.592,000 in funding for research at the Advanced and Applied Polymer Processing Institute (AAPPI), one of the research centers of the Institute for Advanced Learning and Research (IALR) in Danville. IALR will receive the funds via the Small Business Administration under the terms of the Consolidated Appropriations Act of 2004.

In making the announcement, Allen stressed the importance of finding new ways to stimulate the region’s economy and praised IALR and its partners for their work in harnessing the power of advanced polymer and other research for the benefit of Southside Virginia. Goode reflected on the power of collaborative efforts in effecting change, noting that federal funds can only strengthen the partnership.

“This federal allocation will accelerate our collaborative efforts to stimulate the growing polymer industry in Southside with new technologies, ultimately creating new jobs and prosperity,” said Virginia Tech President Charles W. Steger in thanking Allen and Goode for their on-going support for the Institute for Advanced Learning and Research.

“This is an experiment in distributed research as a basis of economic development for the benefit of society, one in which everybody wins.”

IALR Executive Director Tim Franklin said that polymer research scientist Ron Moeller, director of AAPPI and associate professor of engineering at Virginia Tech “has been cultivating business and research contacts and now he will have funding for personnel and equipment to commence the research operation, given all the groundwork he has done. We are delighted that this AAPPI funding will enable us to launch one of the research centers in the very near future. It is exciting to inaugurate this effort targeting small and medium-sized businesses that will drive job growth in the Southside economy.”

Tech faculty members are developing six research initiatives, one of them AAPPI, (See CONGRESSMEN on 2)

Brown announces plans to retire as CNR dean

By Clara B. Cox

Gregory N. Brown, dean of the College of Natural Resources at Virginia Tech since 1992, will retire from the university at the end of June 2004. Brown, the only dean the college has had since it was established, is also associate director of the Virginia Agricultural Experimental Station and a tenured professor.

“Greg Brown is a highly respected, talented and energetic individual who is leaving a lasting mark on the college and university. He is a man of integrity, a go-to person in time of need. While we wish him the best in his well-earned retirement, his leadership, dedication, and vision will be sorely missed,” said Mark McNamee, provost and vice president for academic affairs, in announcing Brown’s decision to retire.

Brown, who will be 66 in February, said he has enjoyed his time at Virginia Tech and serving in the role of dean. “We have outstanding faculty and staff members here, and I’ll miss them and many parts of the job. But I feel that I am ready to retire and that it is time for someone younger with vision and energy to come in.”

Brown delayed his retirement when he was tapped as interim dean of the College of Agriculture and Life Sciences Jan. 1, 2003, a position he held for seven months while still serving as dean of Natural Resources. He also remained to oversee completion of the 9,000-square-foot Cheatham Hall addition, which was dedicated in March. The enlarged Cheatham Hall houses administrative and faculty offices as well as classrooms. The agriculture/natural resources building under construction adjacent to Cheatham will provide a number of laboratories for the College of Natural Resources.

(See BROWN on 2)

College of Business launches executive MBA program

By Sookhan Ho

The Pamplin College of Business is launching an executive MBA program in the Washington, D.C. area in February.

The 18-month, accelerated program is designed for senior-level professionals and adapted to their work schedule, said Pamplin Dean Richard E. Sorensen. “It combines the resources of Virginia Tech’s Blacksburg campus with the convenience of location in the Washington metropolitan area.”

Classes, which begin February 6, will meet Friday afternoon and evening and continue all day Saturday every other weekend. The overall program focuses on ethical and entrepreneurial leadership in a global environment and strategic management of information technology. Students will participate in a 10-day, faculty-led program abroad designed to explore international business practices, the global political and regulatory environment, and the effect of cultural differences on business. All courses will be led by faculty members who are experienced in teaching and interacting with executives and relating course material to business situations.

The program will meet accreditation requirements and graduating students will receive the master of business administration. Prospective students must have at least eight years of professional management experience, a college degree, previous course work in quantitative analysis and a working knowledge of computer applications.

(See COLLEGE on 2)

Architectural, interior design programs move up in rankings

By Sarah Newbill

For the fifth year, DesignIntelligence and the Almanac of Architecture and Design asked the leaders of the country’s best design firms to rank which colleges and universities have the most outstanding programs. For 2004, the Virginia Tech architecture undergraduate program ranked fourth in the nation, up from fourteenth in 2003, and the interior-design program ranked eighth, up from tenth place, in 2003. The annual rankings are compiled in conjunction with Counsel House Research.

The surveys were targeted to individuals in each firm who have direct experience with the hiring and performance of graduates, asking them to choose the institutions that produced graduates most prepared for real-world practice.

The survey also examined how architecture and design firms rank the academic programs of the colleges and universities in their own regions, dividing the country into four regions. In the southern
Executive MBA Program, visit web site http://

peers from a range of industries, and a high

more intense MBA program, small classes with

“with significant experience who seek a shorter,

said, will serve a new constituency of managers

program at its Northern Virginia Center in

MBA program in Blacksburg and a part-time

or gisdata@vt.edu.

available by appointment; patrons needing access to this

collection can make arrangements via the Reference Desk in

the lobby of Newman or by contacting Ed Brooks at 1-9225

library hours are available at http://www.lib.vt.edu/services/
circ-reserve/Newman.Current.html. Additionally, Electronic

Consulting Services (ECS) in the Torgersen Tower will

be available by appointment; patrons needing access to this
collection can make arrangements via the Reference Desk in

the lobby of Newman or by contacting Ed Brooks at 1-9225

gisdata@vt.edu.

The university currently offers a full-time

Graduate Commencement,

International Graduation Reception,

Fall 2003 Grade Sheets Due.

Music Event, 8 p.m., Blacksburg Presbyterian Church: Virginia Tech Symphonic Choir and Blacksburg Master Chorale Joint Concert.

Fall 2003 Final Grades Available: Web View.

Half-day Christmas Holiday for Faculty and Staff Members.

The Torgersen Bridge will be closed from December 21 through January 4, reopening on January 5. As a result, the library Information and Assistance Desk located in

library side of Torgersen Hall, will also be closed during that

period.

Reference and information assistance will be available at the Reference Desk in the lobby of Newman Library; library hours are available at http://www.lib.vt.edu/services/circ-reserve/Newman.Current.html. Additionally, Electronic Consulting Services (ECS) in the Torgersen Tower will

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The Office of the Vice Provost for Research and the Office of Sponsored Programs will be closed for business on December 29, 30, and 31. Combined with the holiday
closings, the office will be closed at noon, December 24 and will

re-open at 8 a.m. on January 5. Persons with proposals due the

weeks of December 29 or the January 5 should contact their pre-

award administrator as soon as possible.

English-language refresher courses offered

The English Language Institute will offer two intensive English-language skills refresher classes during the semester

break, from January 5 to January 16. Designed for graduate

students, post-doctoral fellows, visiting scholars, and members

of the international research community, this two-week program

will be held at the English Language Institute, 840 University

City Blvd., Suite 2, in Blacksburg.

The “Advanced Writing Laboratory,” which will be held from

10 a.m. to 2 p.m., will assist students with their professional

writing skills. The 1:30 to 3:30 p.m. class, “Punctuation and

Oral Presentation,” will help participants increase their

confidence in both their formal and informal speaking ability.

Students may elect to take either or both courses. Fees are $150

per class including textbooks and students must register by

January 2. Classes with fewer than five students will be

canceled. For more information, contact Judy Snoke at

eislnske@vt.edu or 1-6963.

Research database available

Members of the university community interested in

research funding and receiving personalized funding alerts

now have access to Community of Science (COS) Inc.

Community of Science, which operates the largest and

most-comprehensive research database on the web, is

available to faculty members at no charge. Faculty members

who enter their information in the Virginia Tech Expertise

Database (VTED) at www.research.vt.edu/tied can conduct

targeted funding searches using the COS database.

For more information, contact Larry Quisenberry at 1-

5452 or by e-mail at lquisenb@vt.edu. Also learn more at

www.cos.com/.

to assist with and stimulate economic expansion. Building upon an existing cluster of

polymer industries in Southside, APPPI

will develop new polymer-processing technologies to license for local commercial

development. The goal is to stimulate the economic revitalization of Southside Virginia

through the development of entrepreneurial, new polymer-related businesses; to strengthen

established polymer-based corporations in the

region to create jobs; and to offer advanced educational opportunities within the industry.

The university has already announced that it

would relocate polymer research equipment and intellectual property at APPPI.

Other research efforts will focus on

robotics, motor sports, biodefense, horticulture and forestry, and bioinformatics.

Danville Community College President Carlyle Ramsey stressed the college’s going

commitment to support Virginia Tech’s Southside polymer research through rapid

prototyping and curriculum development at IALR.

IALR’s mission is to develop and attract technology and talent critical to Southside Virginia’s economic transformation through advanced learning, strategic research and

technology transfer, IALR Conference Center activities, IALR outreach programs, and

technology infrastructure development. The institute will move into its new quarters at 150

Slayton Avenue, Danville, in January 2004

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Continued from 1

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Continued from 1

The college, created by legislative mandate, evolved from a School of Forestry

and Wildlife Resources in the College of Agriculture and Life Sciences. It opened in

1993 as the College of Forestry and Wildlife Resources, and under Brown’s guidance, its

name was changed in 1999 to the College of Natural Resources. “In my estimation, changing

the name of our college opened a lot of doors to us relative to contacts with funding agencies and

prospective students,” he said.

With Brown at its helm, the college has

changed dramatically during its 10-year history. Its physical space has been increased by

15,000 square feet and will grow by another 22,000 square feet with the college’s share of the

new agriculture-and-natural-resources building now under construction. The student body has

increased, and a high percentage of the majors

find jobs in their fields. The faculty has grown from 55 to nearly 70, and the department of

geography has been moved into the college.

Extramural research grants and contracts

have more than doubled, from $4 million during the early days of the college to more than $8

million projected for this year. Private fundraising has resulted in a substantial

endowment, and the college now has seven

named professors. International programs,

including student exchanges, study-abroad

programs, and research and development programs, have grown substantially.

The college’s program offerings have also expanded. It now offers courses at Virginia Tech’s Northern Virginia Center and represents the

only natural-resources higher-education presence in Northern Virginia. The State Council of Higher Education for Virginia recently

approved the college’s proposed master-of-natural-resources program. An

option in urban forestry has been implemented, and a water-resources-management option and an

environmental-education option are being designed. The college has developed a “3+2”

program, which culminates in a bachelor’s degree from another institution and a

professional master’s degree from Virginia Tech, in concert with two other institutions:

Delaware State University, a historically black college (HBC), and James Madison University.

Work is under way with other HBCs to expand the program.

When the college began, it had no women and no members of ethnic minority groups on its faculty. During Brown’s tenure, seven

women and three people of color were recruited to faculty positions. “This leaves a long way to go, but it is a start,” he said.

Sharron Quisenberry, dean of the College of Agriculture and Life Sciences, will chair the search committee for Brown’s replacement.
University administrators recognize Merola for restructuring efforts

By Clara B. Cox

Joseph Merola, professor of chemistry and former senior administrative fellow in charge of restructuring at Virginia Tech, has been recognized by President Charles Steger and Provost Mark McNamee for his work on extensive restructuring at the university. “Joe has left his mark on Virginia Tech both as interim dean of the Graduate School and, most recently, as the senior administrative fellow in charge of restructuring,” Steger told members of the university community who gathered recently to honor Merola.

McNamee also had words of praise for Merola. “What better leader could we have selected to coordinate this effort than Joe Merola?” As his five teaching awards attest, Joe knows how to get his points across and how to do it in a way that keeps people informed. Joe knows the university and has impressed many people with his leadership skills,” he said.

Merola has served on many department, college, and university committees and was associate dean for research and outreach in the College of Arts and Sciences when he was tapped in January 2001 to serve as interim dean of the Graduate School. When that position was filled on a permanent basis, McNamee asked him to lead the university’s restructuring process. “We needed a point person, someone who knew Virginia Tech and could provide guidance as the campus community started examining—and then making—major changes in the academic structure of the university,” McNamee said.

During the restructuring process, McNamee added, “Joe worked closely with the faculty, administrators and staff to make the changes as effective as possible.”

Steger and McNamee presented Merola with a certificate of appreciation on behalf of the university.

Merola has been at Virginia Tech since 1987, having come here from Exxon’s Corporate Research and Engineering Co., where he was a senior research chemist.

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Sarin appointed to endowed professorship

By Liz Crumbley

Subhash Sarin has been appointed the Paul T. Norton professor of the Grado Department of Industrial and Systems Engineering (ISE). The endowed professorship was established in 1988 in honor of Paul Norton, who in 1920 became the founding head of ISE’s forerunner, the Department of Commercial Engineering.

Sarin, who joined the Virginia Tech faculty in 1983, is the founding director of ISE’s Electronics Manufacturing Research Laboratory. His expertise is focused in the areas of operations research and the design and scheduling of manufacturing systems. He has been principal investigator on 40 funded projects at the university.

Sarin’s work also was critical in obtaining $4.3 million in funding from the Commonwealth Technology Research Fund to establish Virginia Tech’s Center for High Performance Manufacturing, for which he serves as an associate director.

Sarin received the College of Engineering Sport Award for 2003 and an endowed professorship inаг 1997 and the Engineering Dean’s Award for Excellence in Teaching in 1999.

(See SARIN on 4)

Video-network research bolstering security wins NSF grant

By Liz Crumbley

Wireless-video-sensor networks have the potential to significantly enhance national security and emergency-response efforts, and the National Science Foundation (NSF) is supporting research at Virginia Tech aimed at extending the lifetime and strengthening the performance of these networks.

Assistant Professor Thomas Hou and Professor Scott Midkiff of the university’s electrical and computer engineering department have received a $225,000 Information Technology Research (ITR) grant to study factors that affect network lifetime.

“An important property of sensor networks is the ability to prevent, detect, respond to and recover from both man-made and natural catastrophes,” said Hou.

“Midkiff believes that improving network topology—the arrangement by which network components are connected—is the key factor in maximizing power efficiency. ‘An analysis of power dissipation at sensor nodes suggests that communication consumes significantly more energy than any other activity,’ Hou said. ‘By adjusting the topology of the network, we can optimize the transmitter power of video-sensor nodes and extend network lifetime.’

As part of the ITR project, Hou and Midkiff also plan to develop a software toolkit that will implement the topology control techniques they discover, and to incorporate their findings into an advanced wireless and sensor-networks course at Tech.

Hou, who joined the Tech faculty in 2002, is a co-recipient of the 2002 Institute of Electrical and Electronics Engineers (IEEE) International Conference on Network Protocols Best Paper Award and the 2001 IEEE Transactions on Computer Systems for Video Technology Best Paper Award.

Since coming to the university in 1986, Midkiff has become a leader in a number of wireless and computer technology initiatives at the university. He is the director of the NSF-sponsored Integrated Research and Education in Advanced Networking program and an associate of both the Center for Wireless Telecommunications and the Mobile & Portable Radio Research Group.

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EMPLOYMENT

By Liz Crumbley

For the past several years, Virginia Tech has accepted applications for vacant positions through our website. This service has become increasingly popular because it allows candidates to store a job application and easily apply for other positions at any time. In addition, applicants find it more convenient to file applications electronically.

The university currently takes over 20,000 applications per year for classified positions and over 75 percent of all applicants submit their applications through the web site. In addition, approximately 15 percent of applicants use a continuing center to type an application. With the rapid increase in the number of positions accepted and the need to improve efficiencies in the hiring process from the university, it may become necessary to implement a new applicant-management system. This system will work in a very similar manner to the current system, however, we regret that we are unable to convert applications from the old to the new system. The new system became operational November 15, and requires that all applications for all classified positions be submitted electronically through the new web site.

Employees, including those that have previously filed an application with us, can log in to our new applicant-management system to create a new user account and enter a new application. As with our current system, applicants can apply for multiple positions and save an application for future use. In addition, applicants can attach documents such as formatted resumes and cover letters to application as well as check the status of openings over the web site.

We believe that our new system will improve the application process for those who want to work at Virginia Tech. We would like to suggest that applicants log in to the old existing system at https://www.ps.vt.edu/onlineappplication/ to print a copy of the most recent application on file. However, this access will only allow applicants to read and print applications. To search for current information, go to www.jobs.vt.edu.

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FACULTY POSITIONS

For information on all faculty positions go to www.jobs.vt.edu.

INSTRUCTIONAL

Agriculture and Extension Education. Assistant Professor.


Engineering Fundamentals. Assistant/Associate Professor.

Materials Science and Engineering. Assistant/Full Professor (four positions).

Music Department. Music Instrumental Conductor.

Music Department. Assistant Professor of Music (Keyboards)/Choral Music. Art/Art History. Digital Artist.

Art/Art History. Foundations Specialist/Coordinator.

NON-INSTRUCTIONAL

Fisheries and Wildlife Sciences. Postdoctoral Associate.

Virginia Bioinformatics Institute. Plant Molecular Biologist (2 positions).

Virginia Bioinformatics Institute. Fungal Molecular Biologist.


Virginia Bioinformatics Institute. Fungal Molecular Biologist/Medical Mycologist.

Virginia Bioinformatics Institute. Microbiologist in Plant-Microbe Interactions.

Center for Geospatial Information Technology. Senior Project Associate (Alexandria, VA Office).

University Development. Director of Development for Veterinary Medicine, Virginia-Maryland Regional College of Veterinary Medicine.

University Development. Director of Special Events, Advancement Services.

Virginia Bioinformatics Institute. Proposal Coordinator.

Department of Fisheries and Wildlife. Research Associate.
Torgersen to leave admissions post

By Clara B. Cox

Karen E. Torgersen, director of undergraduate admissions since 1997, has submitted her resignation from the university effective December 31 to become associate executive director of U21pedagogica Limited (Pedagogica), a new international educational enterprise in Charlottesville.

“Karen brought a level of energy and expertise to Undergraduate Admissions that only an alumnae of the university could bring. The growth in numbers of undergraduate applications and the academic quality and diversity of those applicants is a direct result of marketing and programs,” Torgersen and her staff have initiated. “Karen’s presence in this very important university leadership position will be missed,” said David R. Ford, vice provost for academic affairs.

Torgersen, a 19-year Tech employee, joined Undergraduate Admissions in 1986 after spending two years as assistant to the director of budget and financial planning at the university. She moved through the ranks in admissions and was named interim director in 1996 and director the following year.

“Though I am very sad to be leaving Virginia Tech and I will always be a Hokie, I am excited at the prospect of being involved with this new educational initiative,” Torgersen said. “It is the wonderful people I have had the opportunity to work with that make this parting so difficult.”

Under her leadership, application numbers and the quality of the freshman class have steadily increased. She worked with CollegeNet Inc. to streamline the on-line application process, making Virginia Tech in 1995 the first university to offer an all-on-line application-and-payment system. Currently, more than 80 percent of the university’s undergraduate applicants apply on line.

Torgersen earned her bachelor’s and MBA degrees at Virginia Tech. During her employment with the university, she made presentations throughout the country, wrote for professional journals, and served on committees for a number of professional organizations.

The university will initiate a national search for her replacement.

Combined Virginia Campaign tops $193,000

Virginia Tech employees raised a total of $193,079.61 during the 2003 Combined Virginia Campaign (CVC). Tech is the largest single contributor to charitable causes in Southwest Virginia, and is one of the top five state agencies in total contributions.

The campaign is planned and implemented annually for all university employees by the CVC Steering Committee for Virginia Tech. The committee is an all-volunteer group of faculty and staff members organized in accordance with the major administrative areas of the university.

NSF grant funds study of primitive microorganisms

By Amy Mortensen,
University Relations intern

Primitive microorganisms provide important clues as to how all creatures employ a basic regulatory mechanism to conduct the business of life. Peter Kennelly, professor of biochemistry, is studying a primitive organism discovered in acidic hot springs at Yellowstone National Park to find clues about that mechanism in higher organisms.

A $400,000 grant from the National Science Foundation is allowing Kennelly to continue his investigations into the process of protein phosphorylation.

That is a process by which nature controls the structure, functions and interactions of the proteins that carry out the chemistry of life. In higher organisms, thousands of phosphorylated proteins are linked together into sophisticated networks. These networks are responsible for coordinating the multiple chemical events that take place inside each cell and modifying these processes in response to changes in the environment.

While the great size of these networks provides them with a high capacity to process a broad spectrum of environmental factors and select appropriate responses, it also renders them difficult to study, Kennelly said.

“Microorganisms carry out many of the same basic processes as higher organisms, but they do so with a much smaller set of molecular machinery,” he said.

“If you consider living cells to be a molecular puzzle, a microorganism puzzle contains from 10 to as many as 100 times fewer pieces than the human puzzle,” Kennelly said.

“Solving the first puzzle will be much faster than the second. More importantly, the parallels between microbial and human puzzles mean that completing the first puzzle will make solving the second one easier and faster,” Kennelly said.

The organism the Kennelly lab is studying is called Sulfolobus solfataricus, an extremophile from the “third domain of life” known as the Archaea. Extremophiles live in conditions far more stressful than other life forms can endure.

“The process of protein phosphorylation is so basic to controlling life’s chemistry, that it occurs in organisms of all types, from even the most extreme corners of the biosphere,” Kennelly said.

Specifically, Kennelly and his students will identify the proteins that are controlled by phosphorylation in Sulfolobus solfataricus, the protein kinases that are responsible for phosphorylating them, and the protein phosphatases that remove the phosphate groups. Ultimately, he hopes to not only identify all the pieces in the phosphorylation network, but to also dissect the functional relationships between them.

ARCHITECTURE

Continued from 1

region, comprised of 14 states from Virginia to Texas, Virginia Tech’s bachelor of architecture program ranked second (with North Carolina State University and University of Tennessee Knoxville) and the master of architecture program ranked ninth in the region.

The report also listed Virginia Tech as twelfth for Editor’s Choice value ranking among design schools with tuition under $19,999, also taking into consideration other factors such as overall reputation, technology, studios, library resources, and learning environment.

More information about the 2004 Design Intelligence report can be found at http://www.dl.net/.