

# SPECTRUM



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TODAY'S EDITION

See page 4 for additional news coverage.

## Gwen Lloyd Receives NSF CAREER Award

By Jean Elliott

Gwen Lloyd, a mathematics educator in the Department of Mathematics who also teaches methods courses in the Department of Teaching and Learning, recently received a CAREER award from the National Science Foundation (NSF). The Faculty Early Career Development (CAREER) Program is a foundation-wide activity that offers the NSF's most prestigious awards for new faculty.

Lloyd's award will support the development of an integrated program of research and education and was received from the Research in Education, Policy, and Practice (REPP) program—part of the Directorate of Education and Human Re-

sources (EHR). The grant is for \$438,354 for the years 2000-2005. The project is titled, "Building a Theory of Teacher Learning With and About Mathematics Curriculum: The Role of Innovative K-12 Materials in Elementary Teacher Education."

Lloyd will focus on the professional development of prospective elementary teachers in the context of current mathematics-education reform efforts in the United States.

"Numerous empirical studies over the past decade have indicated that teachers' attempts to enact reform visions in their classrooms are fraught with conceptual and practical challenges, many of which relate to teachers' lack of personal familiarity with reform-oriented instructional practices and representations of math-

ematics," Lloyd said. "In light of this situation, this project creates opportunities for prospective teachers to learn about mathematics and pedagogy by working with reform-oriented K-12 curriculum materials, and examines how such experiences can promote meaningful, long-term changes in prospective teachers' conceptions and classroom practices."

In the mathematics and methods courses required of prospective elementary teachers, strategies will be developed for using reform-oriented curriculum materials to support the transformation of prospective teachers' conceptions of mathematics, teaching, and learning. The specific challenges that teachers encounter through engagement with curriculum

(See LLOYD on 4)

## Engineering Staff Association Honors Cole and Berry

By Liz Crumbley

Lovedia Cole of industrial and systems engineering (ISE) and David Berry of materials science and engineering (MSE) have been selected by the College Association for Staff in Engineering to receive the 2000 Exemplary Employee Awards for outstanding contributions and service.

For the past 10 years, Cole has been program support technician for ISE's graduate program. The first point of contact for applicants to the program, Cole also works with all of the candidates as they pursue their graduate degrees and maintains contact with former students after they receive their degrees. "Her rapport with students is outstanding," said J.W. Schmidt, director of ISE's graduate program, in nominating Cole for the award.

"Lovedia is one of the most treasured assets in the ISE department," said Ph.D. candidate Barbara Fraticelli. "In fact, Lovedia is one of the main reasons I decided to come to Virginia Tech. All of the other schools I looked at had excellent academic programs in my area, but none of the other schools had an ambassador as effective as Lovedia."

John Tester, who recently completed

(See ENGINEERING on 4)

## Quality Living Without Depleting Earth's Resources

By Sally Harris

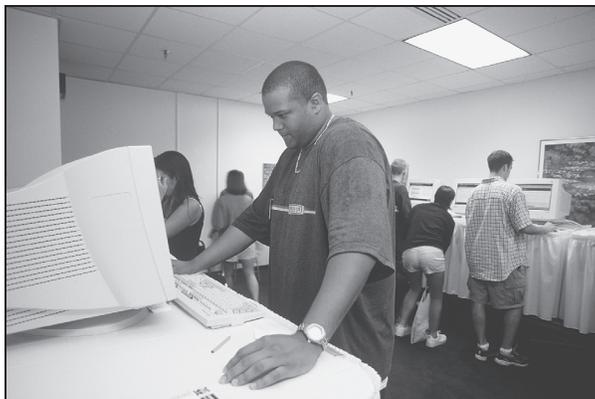
The challenge of having a high-quality of life while living within the natural limits of the Earth was the central question addressed at a recent meeting on Advancing Community Sustainability.

Held at the Hotel Roanoke and Conference Center June 1-3, the meeting was conducted by Tech's School of Public and International Affairs with sponsorship from COTA, the National Oceanographic and Atmospheric Administration, the Virginia Department of Environmental Quality, and the Vital Signs Project.

There is growing consensus among scientists and policy makers that human communities are consuming more resources and producing more wastes than the Earth can replace or absorb. "If humans are to have a livable future, we must radically change the way we design and operate our communities," according to Richard Rich, chair of the Department of Political Science in the College of Arts and Sciences and organizer of the conference. "Speakers at the Advancing Community Sustainability meeting presented ways to redirect our practices and reform our institutions to improve the quality of life we enjoy while protecting the Earth's ecosystems for future generations."

The topics they addressed included such things as controlling urban sprawl, building resource-efficient housing, creating resilient local economies, using alternative energy sources and waste-treatment processes, developing sustainable jobs, ending dependence on the automobile, protecting urban watersheds, and promoting environmentally sound products, businesses, and production processes. The audience of state, local, and federal officials,

(See LIVING on 4)



Entering freshman Anton Jones from Salem, Virginia sets up his e-mail account during summer orientation.

## Biomedical Informatics Research Group Develops Diagnostic Software

By Jeffrey S. Douglas

A multi-disciplinary informatics research group working in the Virginia-Maryland Regional College of Veterinary Medicine has created a Java-based "problem-list-generator" learning tool that helps veterinary students improve deductive reasoning skills as they learn the art and science of diagnosing disease.

Currently being beta-tested by second year students in the VMRCVM, the software is the "brainchild" of veterinary clinical pathologist Holly Bender and a 16-member inter-disciplinary team of faculty members and graduate students from across the university collaborating at the Biomedical Informatics Research Group.

The technology appears so successful the United States Department of Agriculture has funded the group with a Higher Education

Challenge Grant to develop a diagnostic training module for food-animal diseases using the technology.

Bender began working on the project to improve the way veterinary students learn how to apply knowledge in a problem-solving environment. While first-year students enrolled in the DVM curriculum spend much of their time learning facts, second-year students are challenged to begin developing higher-order thinking skills by applying their knowledge in case-based problems.

"This can be a very painful process," said Bender, an associate professor in the Department of Biomedical Sciences and Pathobiology. "This software facilitates their thinking."

One of the biggest problems she saw in her

(See BIOMEDICAL ON 3)

## Sarin of ISE receives national education award

By Liz Crumbley

Subhash Sarin of industrial and systems engineering (ISE) has won the 2000 Albert Holzman Distinguished Educator Award, the top educational award from the Institute of Industrial Engineers (IIE).

The award recognizes outstanding educators who have contributed significantly to industrial engineering through teaching, research, and publication.

Since joining the Tech faculty in 1983, Sarin has been elected by ISE students as one of the top five outstanding faculty members in the department.

In 1997 the Virginia Tech Student Engineers' Council selected Sarin to receive the College of Engineering Sporn Award for excellence in undergraduate instruction. In 1998, Sarin received the Pletta Award for outstanding teaching and public service from the Virginia Engineering Award Committee.

Before coming to Tech, Sarin was on the faculty of Ohio State University. He studied as an undergraduate at the University of Delhi in India, and received his M.S. from Kansas State University and Ph.D. from North Carolina State University.

(See SARIN on 4)

# ACTIVITIES

## EVENTS

### Friday, 7

Summer Arts Festival Program, 6 p.m., Henderson Hall lawn.

Summer Arts Festival Program, 7 p.m., Squires Studio Theatre.

### Saturday, 8

Summer Arts Festival Program, 7 p.m., Squires Studio Theatre.

### Sunday, 9

YMCA Hike, 1:30 p.m., Lancaster House parking lot.

### Monday, 10

Faculty Development Workshop, Newman New Media Center: Call 8029 for information.

### Tuesday, 11

Faculty Development Workshop, Newman classroom B: Call 8029 for information

Faculty Development Workshop: Call 8029 for time, location.

Faculty Development Workshop, 202 Hancock: Call 8029 for information.

### Wednesday, 12

Family/Work/Life Resources Program, noon-1 p.m.,

DBHCC, conference room G.

"With Good Reason," 7 p.m., WVTF: Topic TBA

Summer Arts Festival Program, 7 p.m., Squires Studio Theatre.

### Thursday, 13

Summer Arts Festival Program, 7 p.m., Squires Studio Theatre.

### Friday, 14

Salary and Wage Paydate.

Summer Arts Festival Program, 6 p.m., Henderson Hall lawn.

Summer Arts Festival Program, 7 p.m., Squires Studio Theatre.

### Saturday, 15

YMCA Hike, 11 a.m., Lancaster House parking lot.

Summer Arts Festival Program, 7 p.m., Squires Studio Theatre.

### Monday, 17

Last Day to Drop.

Faculty Development Workshop, Newman New Media Center: Call 8029 for information.

### Wednesday, 19

Family/Work/Life Resources Program, noon-1 p.m., Personnel classroom, Southgate.

"With Good Reason," 7 p.m., WVTF: Topic TBA

### Thursday, 20

Staff Senate, 5:30 p.m., 1810 Litton-Reaves.

### Friday, 21

Summer Arts Festival Program, 6 p.m., Henderson Hall lawn.

## BULLETIN

### Volunteers needed for research on kitchen space and storage design

A study of kitchen space and storage design standards is being conducted at the Center for Real Life Kitchen Design in Wallace Hall. Men, women and children of all ages, sizes and abilities are needed to perform tasks in the Center's kitchen spaces. About two hours will be required. Cooking experience is not a requirement. The study will begin in mid-July. If you are interested in volunteering, leave a message at 1-7732, or email [crlkd@vt.edu](mailto:crlkd@vt.edu). A staff person will call to schedule an appointment.

## Wireless Telecommunications Center forms affiliation with defense contractor

By Judy H. Hood

The Center for Wireless Telecommunications ([www.cwt.vt.edu](http://www.cwt.vt.edu)) at Virginia Tech has formed a new industrial affiliation with the Gaithersburg, Md. facility of BAE Systems.

BAE Systems North America is the fourth-largest defense contractor and third-largest aerospace and defense company in the world and one of the largest in North America. The Gaithersburg operations, formerly Watkins-Johnson Company's Telecommunications

Group, is now a business unit within the Aerospace Electronics sector of BAE Systems. The group will now be known as the Gaithersburg Facility. It is organized as a business unit within the Aerospace Electronics division of BAE SYSTEMS North America.

As a Technology Development Center of Virginia's Center for Innovative Technology, the Center for Wireless Telecommunications (CWT) combines the resources of financial and engineering experts in all facets of the wireless

telecommunications industry. The center's faculty, staff, and students conduct research on radio-frequency (RF) systems and components, antennas, satellite communication, wireless networks, and business and regulatory issues affecting wireless telecommunications. The center draws on resources from nationally recognized research groups and Virginia's many satellite communications, telecommunications, and electronics companies.

The Gaithersburg Facility specializes in

RF electronic products and state-of-the-art equipment for applications in communications surveillance, direction finding, and signal processing.

CWT offers cost-effective university teams and existing laboratories to help companies leverage their resources and achieve stronger results. The center has been involved in projects ranging from space telecommunications to television marketing.

## Forestry expands digital resources

By Lynn Davis

Extension specialist Jeff Kirwan and Forestry Professor John Seiler are bringing the ever-expanding digital resources of the college to the public schools of Virginia. Last year they launched a project aimed at middle-school students called FORSite (Forestry Outreach Site).

This on-going project has students investigating trees on their school grounds, then reporting and analyzing data over the Internet. In addition, undergraduates from the college travel to schools to make presentations about forestry. One of the goals is to make the general public more aware

of forestry practices and the contribution that forestry makes to Virginia's economy.

The newest phase of the project is a web site just for teachers. This "teacher's edition" presents information about forestry by grade so that it can be used in tandem with the state's Standards of Learning (SOL). For example, a fifth-grade teacher faced with teaching the standard of learning about cell structure, can visit the web site, click on the grade and the specific SOL, and find information about cell structure in wood and how it relates to paper and other forest products produced in Virginia.

## Chen receives Fulbright award

Joseph S. Chen, assistant professor in Hospitality and Tourism Management, has been awarded a Fulbright grant to conduct research in Taiwan. Chen departs in July for a two-month appointment at Shih-shin University in Taipei where he will concentrate on developing curriculum with respect to marketing, tourism behavior, tourism impacts and tourism technology for Taiwan.

Dr. Chen is one of approximately 2000 U.S. grantees who will travel abroad for the 2000-2001 academic year through the Fulbright program. Established in 1946 under legislation introduced by the late Senator J. William Fulbright of Arkansas, the program's purpose is to build mutual understanding between the peoples of the United States and the rest of the world.

"I believe that the Fulbright Senior Scholar Award helps U.S. scholars gain better international exposure with affirmed, munificent assistance from host countries, as well as promotes collaborative works between the United States and international scholars to reveal critical challenges facing tomorrow's world," Chen said.

Recipients of Fulbright awards are selected on the basis of academic or professional achievement and because they have demonstrated unusual leadership potential in their fields. On July 22, Chen returns to receive the *Journal of Hospitality and Tourism Research* (JHTR) "Best Article" Award at the 2000 Council of Hotel, Restaurant, and Institution Educator Annual Conference in New Orleans. JHTR is a top-tier refereed journal in the area of hospitality and tourism management. The topic of Chen's award-winning article is, "The use of logit analysis to enhance market segmentation methodology."

The Fulbright program, America's flagship international educational-exchange program, is sponsored by the Bureau of Educational and Cultural Affairs, United States Department of State. For 54 years, Fulbright programs have exchanged nearly a quarter million people—86,000 Americans who have studied, taught or researched abroad and more than 144,000 students, scholars and professionals from other countries who have engaged in similar activities in the United States.

## 1999 patent recipients honored

Virginia Tech faculty members, students, and staff members who received 30 patents during 1999 were honored by the university and Virginia Tech Intellectual Properties, Inc. (VTIP) at a reception at the German Club on May 10.

"The creativity and contributions to the growth of knowledge and technology transfer that patents signify are an important form of scholarship," said Len Peters, vice provost for research and dean of the Graduate School. President Charles Steger said "the patents

awarded to Virginia Tech faculty and staff members and students in 1999, most of which have been licensed, represent a significant resource for economic development."

Michael Martin, executive vice president of VTIP, presented plaques and certificates. A full list of patent recipients is available on *Electronic Spectrum* at <http://www.unirel.vt.edu/spectrum/>.

# EMPLOYMENT

## CLASSIFIED POSITIONS

The following classified positions are currently available. More details of these positions, specific application procedures/position-closing dates may be found on the Personnel Services web site at <http://www.ps.vt.edu>. Available positions are also listed on the Job Line, a 24-hour recorded message service. For information on all job listings, call 1-5300. Some of the following positions include state benefits. Positions with numbers beginning with a "W" are hourly/do not include state benefits. Individuals with disabilities desiring assistance or accommodation in the application process should call by the application deadline.

Closing date for advertised positions is 1 p.m. Monday. An EO/AA employer committed to diversity.

### Full Time.

**Accounting Supervisor (Accountant Senior)**, N/A, Grade 11, VT Foundation.  
**Animal Care Supervisor**, 6998J, Grade 11, Veterinary Teaching Hospital.  
**Animal Care Technician B**, 496J, Grade 5, Veterinary Teaching Hospital.  
**Animal Care Technician C**, 2639J, Grade 7, Veterinary Teaching Hospital.  
**Banquet Manager (Food Operations Manager Assistant)**, 1118G, Grade 6, DBHCC.  
**Budget Analyst**, 6927T, Grade 10, Budget/Financial Planning.  
**Business Researcher**, 7616D, Grade 11, Virginia Technical Information Center.  
**Computer Network Support Technician Senior**, 3492G, Grade 10, Environmental Health/Safety.  
**Computer Operations Technician Senior**, 1064T, Grade 8, Scholarships/Financial Aid.  
**Computer Systems Engineer**, 0180T, Grade 14, Computer Science.  
**Data Warehouse Architect**, 6701L, Grade 0, Information Systems/Computing.  
**Desktop Computer Support Technician**, 1899A, Grade 8, CNS.  
**Development Associate For Student Calling Program**, 1450L, Grade 8, University Development.  
**Electrician**, 7565G, Grade 7, Physical Plant.  
**Electronic Technician**, 2738T, Grade 9, University Registrar.  
**Enrollment Services Assistant**, 1448J, Grade 7, College of Human Resources/Education.  
**Enrollment Services Assistant (Academic Adviser)**, 7618T, Grade 7, Biology.  
**Executive Secretary**, 4406T, Grade 6, Mining/Minerals Engineering.  
**Executive Secretary**, N/A, Grade 6, VT Foundation.  
**Executive Secretary**, N/A, Grade 6, Vice President for Information Systems.  
**Executive Secretary Senior**, 0098, Grade 7, Industrial/Systems Engineering.  
**Fiscal Assistant**, 435G, Grade 5, Physical Plant.



VIRGINIA POLYTECHNIC INSTITUTE  
AND STATE UNIVERSITY

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**Fiscal Technician**, 1377F, Grade 6, Bursar's Office.

**Seven** full-time food-operations positions available; five part-time positions.

**Food Operations Manager A/Sous Chef**, 2820H, Grade 8, Residential/Dining Programs/Southgate Food Court.

**Food Operations Manager A/Sous Chef**, 0940H, Grade 8, Residential/Dining Programs/Southgate Bake Shop.

**Food Operations Manager Assistant/Assistant Manager**, 6573H, Grade 6, Residential/Dining Programs/Vet Med Cafe.

**Food Operations Manager B/Executive Chef**, 0837H, Grade 10, Residential/Dining Programs/West End Market.

**Food Operations Manager B/Executive Chef**, 1781H, Grade 10, Residential/Dining Programs/Dietrick Dining Hall.

**Food Production Worker A/Food Production Supervisor**, 0549, Grade 3, Residential/Dining Programs/Hokie Grill.

**Front Desk Clerk (Office Services Assistant)**, 2569G, Grade 4, DBHCC.

**Grants Administrator**, 3917J, Grade 10, Sponsored Programs.

**Grants Specialist (Fiscal Manager)**, 7613T, Grade 9, Virginia Bioinformatics Institute.

**Health Educator Senior**, 7393J, Grade 10, Schiffrt Health Center.

**Highway Equipment Operator B**, 0310G, Grade 5, Physical Plant.

**Housekeeping Lead Worker**, 732C, Grade 2, Physical Plant/Housekeeping.

**Housekeeping Worker**, 7605C, Grade 1, Physical Plant.

**Housekeeping Worker**, 1631G, Grade 1, DBHCC.

**Housekeeping Worker**, 2241H, Grade 1, Residential/Dining Programs.

**Housekeeping Worker Senior**, 0269H, Grade 3, Residential/Dining Programs.

**Installation/Repair Technician**, 6780F, Grade 8, University Libraries.

**Interpreter For The Deaf**, 7472J, Grade 8, Dean of Students.

**Laboratory Mechanic C**, 7606T, Grade 8, Center for Power Electronic Systems.

**Laboratory Specialist**, 7439M, Grade 8, Biochemistry.

**Laboratory Specialist**, 3385J, Grade 8, Veterinary Medicine.

**Laboratory Specialist**, 7624T, Grade 8, Chemical Engineering.

**Laboratory Specialist Senior**, 7614T, Grade 9, Biology.

**Learning Technology Systems Integrator**, 7426L, Grade 15, Educational Technologies.

**Manufacturing Processes Laboratory Supervisor**, 0999T, Grade 11, Industrial/Systems Engineering.

**Medical Technologist**, 2637J, Grade 9, Veterinary Teaching Hospital.

**Motor Vehicle Operator A**, 2862G, Grade 2, Physical Plant/Grunds/Hauling.

**Office Services Specialist**, 1314J, Grade 5, Counseling Center.

**Office Services Specialist**, 1858T, Grade 5, Engineering Fundamentals.

**Office Services Specialist**, 1812F, Grade 5, University Libraries.

**Office Services Specialist**, 1506T, Grade 5, Philosophy.

**Office Services Specialist**, 3078T, Grade 5, Statistics.

**Office Services Specialist**, 1740J, Grade 5, Schiffrt Health Center.

**Offices Services Specialist**, 6757F, Grade 5, University Libraries.

**Oracle DbA**, 6779D, Grade 0, Information Systems/Computing.

**Program Support Technician**, 0028T, Grade 6, Scholarships/Financial Aid.

**Program Support Technician**, 7627T, Grade 6, College of Engineering.

**Program Support Technician**, 1928J, Grade 6, UUSA.

**Program Support Technician**, 1534J, Grade 6, Graduate School.

**Program Support Technician**, 6418M, Grade 6, CALS Extension (Personnel/ Benefits Section).

**Program Support Technician Sr**, 1033F, Grade 7, University Libraries/Tech Svcs.

**Program Support Technician Sr**, 6715J, Grade 7, Graduate School.

**Programmer**, 6656F, Grade 10, University Libraries.

**Programmer**, 7625T, Grade 10, Psychology.

**Programmer**, 1864F, Grade 10, University Libraries.

**Programmer Analyst**, 7365T, Grade 12, College of Engineering.

**Public Relations Assistant Specialist (Sales/Catering Manager)**, 6473G, Grade 8, DBHCC.

**Publications Manager**, LC050L, Grade 10, Alumni Relations.

**Security Guard**, W020470G, Grade 2, Police Department.

**Security Lead Guard**, 1357G, Grade 3, Police Department.

**Special Services Lab Manager**, 7376T, Grade 11, EOAA.

**Storekeeper (Stock Clerk)**, 7403H, Grade 4, Residential/Dining Programs/West End Market.

**Switchboard/Operator Supervisor**, 0692A, Grade 6, CNS.

**Telecommunications Database Audit Technician**, 0642A, Grade 6, CNS.

**Trades Utilities Senior Worker**, 7115G, Grade 6, Physical Plant.

**Part Time.**

**Animal Care Technician A**, W022155J, Grade 3, Veterinary Teaching Hospital.

**Animal Care Technician A**, W022563J, Grade 3, Veterinary Teaching Hospital.

**Animal Care Technician B**, W022190J, Grade 5, Veterinary Teaching Hospital.

**Banner Desktop Support**, W022069L, Grade 7, IT Acquisitions/Seat Management.

**C-print Captionist**, W023016, Grade 10, Serrory Loss Services.

**Fiscal Technician**, W022852F, Grade 6, Bursar's Office.

**Graphic Artist**, W022443G, Grade 7, Continuing Education.

**Housekeeping Worker**, W022490H, Grade 1, Residential/Dining Programs.

**Housekeeping Worker**, W020574G, Grade 1, DBHCC.

**Housekeeping Worker**, W020214J, Grade 1, Schiffrt Health Center.

**Housekeeping Worker**, W020190C, Grade 1, Physical Plant/Housekeeping.

**Instrument/Equipment Technician**, W023046T, Grade 8, Music Department.

**Laboratory Technician**, W022700T, Grade 4, Chemistry.

**Laboratory Technician Senior**, W020117T, Grade 5, EHSS.

**Laboratory Technician Senior**, W022172J, Grade 5, Veterinary Teaching Hospital.

**Office Services Aide**, W020947L, Grade 2, IT Acquisitions.

**Office Services Assistant**, W022996J, Grade 4, College of Veterinary Medicine.

**Office Services Specialist**, W022322T, Grade 5, Undergraduate Admissions.

**Office Services Specialist**, W022260J, Grade 5, Veterinary Teaching Hospital.

**Pharmacy Assistant A**, W020839J, Grade 4, Veterinary Teaching Hospital.

**Program Support Technician**, W022536J, Grade 6, Athletics.

**Security Guard**, W023055G, Grade 2, Police Department.

**Visitor Center Receptionist**, W022957L, Grade 4, University Relations.

**Web Content Designer**, W023068T, Grade 10, Computer Science.

**University Only.**

**Electronic Technician Senior**, U7526G, Grade 10, Physical Plant.

**Executive Secretary Senior**, U729T, Grade 7, President's Office.

**Off Campus.**

**Adult Program Assistant (Office Services Assistant)**, 6101M, Grade 4, VCE-Arlington County.

**Agricultural Technician B**, 6662M, Grade 5, Agricultural Research/ Extension Center.

**Announcer**, W020800L, Grade 8, University Relations/WVTF.

**Executive Secretary**, 2092J, Grade 6, Northern Virginia Center.

**Office Services Assistant**, 6613J, Grade 4, Department of Industrial and Systems Engineering. **Tenure-track Faculty Positions.** Contact: John Casali, 250 New Engineering Building (0118). Review begins January 5.

**Department of Biomedical Sciences and Pathobiology. Clinical Instructor, Anatomic Pathology.** Contact: Ludeman Eng, Phase II, 0442. Review begins August 1.

## FACULTY POSITIONS

**Department of Industrial and Systems Engineering. Tenure-track Faculty Positions.** Contact: John Casali, 250 New Engineering Building (0118). Review begins January 5.

**Department of Biomedical Sciences and Pathobiology. Clinical Instructor, Anatomic Pathology.** Contact: Ludeman Eng, Phase II, 0442. Review begins August 1.

## BIOMEDICAL

Continued from 1

students was a tendency to jump to diagnostic conclusions on the basis of pre-conceived notions without fully considering all available evidence. To counter that, the web-based auto-tutorial forces the students to work through a process where they "arrange data abnormalities in a causal hierarchy."

For example, clinical pathologists routinely evaluate blood-and urinary-chemistry assays that provide information on blood hemoglobin, white blood cells and a range of other parameters.

By systematically identifying all available data as they relate to normative values, hypothesizing about mechanisms responsible for the aberrations, and factoring those into a problem-solving hierarchy, the students build a deductive "argument for the complete pathogenesis of the disease," Bender said.

"They're thinking better," Bender said.

"They're accounting for their decisions better."

A second project under way is developing a set of 16 web-based interactive tutorials that describe the physiological processes behind disease states affecting different organ systems.

The Biomedical Informatics Research Group has been meeting once a week for two-and-a-half years and includes faculty members, graduate students and professional students from the departments of Teaching and Learning, Computer Science, Accounting and Information Systems, the VMRCVM, and the University of Virginia at Wise.

"I have been struggling with this problem for close to 20 years," Bender said. "It takes the talents of professionals in these key fields to approach the problem with novel solutions." The tool is currently undergoing a formal assessment as the subject of a graduate-level instructional-technologies course led by Greg Sherman in the Department of Teaching and Learning.

The group has been funded with

approximately \$200,000 by the University Center for Innovation in Learning, ASPIRES and Reach-Out Grants over the past several years, Bender said, and it appears that university seed funding is beginning to reap dividends.

"Several years ago Provost Meszaros began an initiative to stimulate faculty research productivity by providing "seed" funding and encouraging the development of interdisciplinary collaborations," Bender said. "I think the success of this program is a direct validation of her vision."

The \$90,000 USDA project is just one example of what Bender believes are many other applications for the new software technology, including continuing education for practicing veterinarians, extending the tool to assist experts in clinical pathology, and improving case analysis by other disciplines including human medicine and other health-related fields.

## Norris receives Willa Cather Fiction Prize from Helicon Nine Press

By Sally Harris

Lisa Norris, who just received the Willa Cather Fiction Prize from Helicon Nine Press for her book of short fiction called *Toy Guns*, experiences "interlocking circles" in her life, both geographically and professionally.

Norris earned her first degree at Virginia Tech in 1979 in forestry and went on to work as a fire dispatcher, Appalachian Trail ranger, and biological technician. But she later earned degrees in English and creative writing and became a teacher and a writer.

In addition, Norris loves the West, particularly Idaho, but also has a special place in her heart for Blacksburg, where she now teaches in English department in the College of Arts and Sciences.

Both her forestry background and the landscapes in which she thrives influence her essays and short stories, including those that won the Willa Cather Fiction Prize. The prize, given by Helicon Nine Press, includes \$1,000 plus publication of the book in the fall of 2000. Norris will give a reading in Kansas City as part of the publication.

Helicon Nine Editions established the prize in 1991 to honor Cather, a writer "from the heartland whose works reflect the poetic mood, pioneer spirits, and creative energy of America." An advisory panel chooses 10 finalists and submits the entries to a distinguished writer for final selection. This year's judge was Al Young, author of more than 20 books of poetry, fiction, and memoirs; world traveler; and writing and literature teacher at places such as Stanford, the University of California at Santa Cruz, and the University of Michigan.

"All 10 stories in this disturbing collection revolve around Americans' passionate devotion to guns, gun-toting, sexually tinged violence, and the womanly pursuit of power and dignity," Young said of Norris's collection. "From the

### ENGINEERING

Continued from 1

his Ph.D. in ISE, characterized Cole as "the personal cheerleader for each student coming through the department. She always has a kind word to say even in the most difficult circumstances, and has encouraged me numerous times when I was less than enthusiastic about my own progress in my doctoral pursuit."

Berry, who joined the MSE staff as laboratory instrument maker in 1997, oversees the department's laboratory teaching instrumentation and facilities in Hancock and Holden halls. "David's position is extremely critical to the department's proper functioning, and he is doing an outstanding job at it," said Carlos Suchicital, MSE facilities manager. "He holds the difficult position of being the only technician in a highly interdisciplinary department."

Ron Kander, associate professor of MSE, noted that Berry typically goes above and beyond his job requirements to assist faculty and staff members and students. "David is truly a role model for how a dedicated and well-trained laboratory technician can impact the quality and productivity of both the teaching and research function of a department," Kander said.

In addition, Berry is sitting in on some MSE courses to improve his understanding of lab activities, and is pursuing a degree in engineering. A letter of support signed by several MSE students cited Berry's "vast knowledge of electrical and mechanical systems" and praised his daily efforts to help "countless students in areas ranging from training students to use lab equipment to helping with equipment design."

trailer parks and working-class suburbs of Big Sky Country to vast Alaska and the jungles of the Philippines, these characters—and characters they are, most of them women, some of them girls—walk tightropes. They move through shadows and the dimly lit edges of love, family, marriage, and other at-risk relationships. With a sharp eye for irony and the bizarre, the author of these troubling stories lays out a clear, compelling version of the way we live right here and now."

After she earned a forestry degree from Virginia Tech and worked as a fire dispatcher, Appalachian trail ranger, and biological technician, Norris married, moved to Idaho, got an M.A. in English from Idaho State University in 1983, and taught in Idaho and Oregon for 10 years.

Then she and her son moved back East to be closer to extended family, and Norris got an MFA in creative writing at American University in 1992. She has been teaching at Virginia Tech since 1991.

But the West still draws her, and she travels there with her son and "knocks around in Idaho" while he visits his father in Boise. As a result, she is writing a book of essays, tentatively called *Learning the Language*, that deals with recovering from divorce in the landscape that holds all those memories. "I weave my personal loss and recovery narrative with the history and

### LIVING

Continued from 1

business leaders, representatives of non-profit organizations, students, and concerned citizens came from as far away as Hawaii and Alaska.

Rich summed up the lessons of the meeting: "The vision of communities that meet the needs of their current residents far better than our cities and towns do today without robbing from future generations by degrading the environment is within our grasp. The technologies and knowledge needed to make this a reality are already available. We simply need the political will and intellectual courage to adopt them."

Rich will produce a publication summarizing the main presentations at the conference. He hopes that these exciting ideas will inspire a variety of projects in Southwestern Virginia and in other locations.

Speakers included Virginia-based leaders such as John Paul Woodley, the state's secretary of natural resources; Dennis Treacy, the director of the Department of Environmental Quality; Cabell Brand, founder of the Cabell Brand Center for International Poverty and Resource Studies; Richard Collins, founder and director of the Institute for Environmental Negotiation; and John

Clark, developer of the Haymount ecological community.

Clark, developer of the Haymount ecological community. Organizations represented included the International City/County Management Association, the U.S. Department of Transportation, the U.S. Environmental Protection Agency, the Izaak Walton League, the Green Mountain Institute for Environmental Democracy, the National Tree Trust, the Sierra Club, the U.S. Corps of Engineers, and the Chesapeake Bay Foundation.

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### SARIN

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Sarin's teaching is concentrated in the area of operations research. His research in this area and in manufacturing systems has attracted support from a number of sponsors, including the National Science Foundation, Mining and Mineral Resources Institute, Department of the Interior, U.S. Department of Agriculture, Virginia Department of Transportation, and the Virginia Center for Innovative Technology.

## Stephen L. Baehr, 54

Dr. Stephen L. Baehr, professor of Russian and chair of the Russian Studies Program in the Department of Foreign Languages and Literatures, died shortly after midnight June 28.

Dr. Baehr came to Virginia Tech in 1979 after teaching at Harvard University and the University of Virginia. He earned his B.A. in economics *magna cum laude* from Clark University in 1967 and received a Certificate of the Critical Languages Program in Russian Studies from Princeton University that same year. He earned an M.A. from Columbia University's Department of Slavic Languages in 1970 and a Ph.D. with distinction from Columbia in 1972 with a major in Russian literature and a minor in comparative literature. Dr. Baehr has earned great recognition for his work and praise for his mentoring of students and young faculty members. In 1995, he received the Albert E. Sturm Award for Excellence in Faculty Research from Phi Beta Kappa, Mu Chapter of Virginia. In 1993, he received the University Certificate of Teaching Excellence for the College of Arts and Sciences. He also received two Fulbright-Hays Research Fellowships to study in Finland and two International Research and Exchanges Board Research Fellowships in the Soviet Union. One of Dr. Baehr's most significant recent accomplishments was serving as editor-in-chief of the *Slavic and East European Journal*, probably the most widely recognized journal in Russian literature outside Russia.

"Dr. Stephen Baehr was first and foremost a gentle man, kind in his approach to students, supportive in his mentoring of colleagues. His personal warmth drew students to him, and he responded by providing time to talk, by writing many letters of recommendation, and by opening doors of influence for them," department head Judith Shrum said. "His absence will be palpable in his field of scholarship, among his colleagues around the world, and in the Blacksburg university community. His colleagues and friends in the Department of Foreign Languages and Literatures will deeply miss his presence, wit, and wisdom."

### LLOYD

Continued from 1

materials, and the impact of these challenges on teachers' conceptions and early classroom practices, will be investigated using interpretive case-study methods. Through examination of prospective and beginning teachers' learning with and about curriculum, this project will produce vital findings about the role that innovative curriculum materials can play in the educational reform process. Such results have potential to impact the content and processes of teacher preparation and professional-development programs in mathematics education.

An assistant professor at Virginia Tech since 1996, Lloyd has taught mathematics content-and-methods courses for pre-service and in-service teachers, facilitated doctoral seminars, supervised student teachers, and worked collaboratively with middle- and high-school teachers on reform-oriented curriculum development and implementation. In the spring of 1999, Lloyd was a member of a faculty team that received an XCaliber Award from Virginia Tech in recognition of teaching and curriculum development efforts at the Math Emporium.

Her published work has focused on how both pre-service and veteran mathematics teachers interpret, implement, and learn from innovative curriculum materials. The CAREER program recognizes and supports the early career-development activities of those faculty members who are most likely to become the academic leaders of the 21st century. CAREER awardees are selected on the basis of creative, integrative, and effective research and education career-development plans that build a firm foundation for a lifetime of integrated contributions to research and education.

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