

# SPECTRUM



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

<http://www.spectrum.vt.edu>

VOLUME 24 NUMBER 34 FRIDAY, MAY 24, 2002

The Board of  
Visitors will meet  
June 3.

## Niles appointed named interim dean of CHRE

By Jean Elliott

Jerry Niles has been appointed interim dean of the College of Human Resources and Education (CHRE) effective July 1 for approximately one year. The search for a permanent dean will be re-opened in the fall.

"I am delighted that Jerry Niles has been chosen as my successor," said Janet Johnson, who will retire as dean of CHRE the end of June. "No one is more familiar than Jerry with the diverse reaches of the college. He knows the issues and goals of the Human Resources programs. He is a familiar name in the public schools and among teacher educators. He has been a leader in the integration of technology in teaching and outreach, and supported the college efforts for Cooperative

Extension. In addition, he has experience with major international projects."

Niles has served as the associate dean since the college merged with the College of Education in 1995. He has also served two stints as chair of the Department of Teaching and Learning (1993-96, 2001-2002). A professor in the Division of Curriculum and Instruction since 1974, Niles' expertise is in literacy and reading assessment. He worked with the placement and supervision of student teachers, and with several counties' program evaluations. He was also the director of the Center for Educational Diagnostic and Remedial Services.

Named the Outstanding Teacher Educator Leader of the Year by the Virginia Association of Teacher Educators in 1998, Niles has a long

list of Excellence in Teaching Awards, including the Wine Award and induction into the University Academy of Teaching Excellence.

Niles is currently in Malawi, where he is co-investigator in a USAID grant. In what is essentially a human-resource-development project, the goal is to develop a cadre of Malawians who can prepare teacher educators.

In another administrative area, Roger Avery will serve as interim vice provost for Graduate Studies and dean of the Graduate School, effective May 15 until Karen DePauw's arrival in early August.

Joe Merola began his assignment as senior administrative fellow on May 15, working with Provost Mark McNamee on restructuring.

## DOD grant forges interdisciplinary research

By Sally Harris

Although the scientists receiving a recent multi-million-dollar Department of Defense (DOD) grant will be doing fundamental research into novel macromolecular compositions, a focus of their work will result in fundamental knowledge that may lead to improvements in advanced defense technologies.

Timothy Long, associate professor of chemistry, and six other researchers from Virginia Tech, Penn State University, and Cornell University, will use the federal grant to conduct interdisciplinary research that eventually will lead to the development of new technology for the DOD. The grant provides funding of \$3 million over three years, with the possibility of an additional \$2 million for two additional years, for a total of \$5 million. The program focuses on fundamental breakthroughs, Long said. "It takes our research programs to a new level and to the boundaries of science and engineering. The grant will accelerate our discoveries in nanostructured macromolecular materials."

The goal of the multi-disciplinary research is to investigate how branched macromolecules affect physical properties. Many synthetic macromolecules are linear, Long said, but they can be branched into a comb, brush, or star shape. The researchers will study these branched macromolecules in many ways, such as allowing them to reorganize on demand, and studying these structures in hopes of providing information that will lead to the long-range development of high-tech surfaces and structures. One of the

(See DOD on 4)

## Diversity Incentive Grant recipients chosen for 2002-03

The Office of the Provost has announced awards for 12 Diversity Incentive Grant proposals for 2002-03.

The small-grant program is in its thirteenth year of providing seed money for projects in departments and units across campus for a wide array of activities designed to increase awareness and understanding of diversity, to assist in recruiting and retaining a diverse faculty, staff, and student body, and to foster improvements in the campus climate.

The Selection Committee especially valued projects that were well-developed and described, and that would have a broad impact on the university community. Recipients for 2002-03 will work on pipeline programs such as the pre-college initiative for Virginia American Indians in grades 8-12, Richmond-area minority high-school students enrolled in an environmental sciences summer program, and high-school students involved

in a special program in the Martinsville area; programs for faculty and staff members related to dialect discrimination, affirmative action, and general awareness building; a mentoring project for undergraduate women in forestry; a virtual museum project for women in engineering; and several projects focused on minority graduate-student recruitment.

Chair of the Selection Committee, Pat Hyer, expressed appreciation for the "wonderful array of projects proposed by faculty members and departments throughout the university. While these are small grants, our hope is to keep nurturing the efforts of many faculty and staff members who are finding creative and meaningful ways to contribute to reaching our diversity goals. When there is so little discretionary money available to support special initiatives of any kind in the coming year or two, the Diversity Incentive Grants Program takes on even more importance to those who are

involved in this work."

### DIVERSITY INCENTIVE GRANTS PROGRAM PROJECTS FUNDED 2002-03

**Minority Students and Statistics: Improving the Odds.** Christine Anderson-Cook, Jeffrey Birch, John Morgan, Geoffrey Vining, statistics: \$800

Faculty members in statistics will visit regional HBCU's to establish contacts in departments of mathematics and with counselors with a goal of increasing the number of minority applicants to the graduate program in statistics.

**The Virginia Tech Campus Residential Experience for Students Enrolled in Aquatic Ecology/The SMETH Academy.** Jim Berkson, fisheries and wildlife sciences: \$2,500

The project provides partial support for a four-day residential experience in aquatic ecology at Virginia Tech for high-school juniors

(See DIVERSITY on 4)

## Outstanding Engineering faculty members honored

By Karen Gilbert

Twelve Virginia Tech engineering faculty members were recently presented with awards for outstanding contributions in four categories: teaching, research, service, and outstanding new assistant professor.

In the teaching category, the first recipient was Kimberly Forsten Williams of chemical engineering. She has developed two courses that address some of the new strengths in biomedical engineering and in bioinformatics.

Ahmad Safaai-Jazi of electrical and computer engineering was the second recipient in the teaching category. Since joining the department in 1986, Safaai-Jazi has taught 15 courses from sophomore to graduate level in diverse areas of electrical engineering.

The final teaching award went to Clinton Dancy of mechanical engineering. Dancy assumed a leadership role in ME's capstone

design projects courses, which require ME students to work on a product-design problem from concept to realization.

In the research category, the first award went to Tom Dingus of CEE. Dingus holds the Newport News Shipbuilding/Tenneco professorship and serves as the director of the Virginia Tech Transportation Institute.

The second research award went to Don Baird of chemical engineering. During Baird's 23 years at Virginia Tech, he has been the principal investigator or co-principal investigator on grants totaling \$30.9 million with about \$20 million of this amount from the National Science Foundation.

The last research award went to David Dillard of engineering science and mechanics. Dillard has achieved a superlative record in research and scholarship and has made numerous advances in adhesion science.

In the service category, the first award went to Wayne Neu of aerospace and ocean

engineering. Neu is credited by his department head with orchestrating an effort that has successfully put Virginia Tech on the map in the ocean engineering and naval architecture community.

The second service award went to electrical and computer engineering professor Charles Nunnally. Through his efforts, the FIRST Lego League program, previously active only in eastern Virginia, has expanded to include teams from elementary and middle schools in southwestern Virginia.

The third recipient for her work in service was Elaine Scott of ME, director of Virginia Tech's Center for Biomedical Engineering. In 2001, she and Wally Grant of ESM began working to form the current partnership with Wake Forest University's medical school.

The last set of awards went to the college's outstanding new assistant professors. The first of these honors went to Scott Case of ESM. During the 1999-2000 academic year, he

(See ENGINEERING on 3)

## Graduate housing survey shows most satisfied

By Julie Kane

At the beginning of the 2001-2002 academic school year, the Graduate School and the Division of Student Affairs commissioned the Center for Survey Research to survey first-year graduate students regarding their recent search for housing. The survey was conducted to determine their level of satisfaction as to available housing and to elicit their suggestions for determining the type of housing needed for future graduate students.

Out of a pool of 788 eligible students, telephone surveys were completed with 602 individuals. A majority of first-year graduate students (80.1 percent) had positive experiences with finding suitable housing for the school year. Eight in 10 said finding housing

(See GRADUATE on 3)

# ACTIVITIES

## EVENTS

### Friday, 24

**Summer Arts Festival Concert**, 6 p.m., Henderson Lawn: "No Strings Attached."

### Monday, 27

**Memorial Day Holiday for Faculty and Staff Members. (No Classes).**

### Tuesday, 28

**CommonHealth Program**, 12:10 to 12:55 p.m., DBHCC conference room G.

### Wednesday, 29

**CommonHealth Program**, 12:10 to 12:55 p.m., DBHCC conference room G.  
**"With Good Reason,"** 7 p.m., WVTF.

### Friday, 31

**Pay Date for Faculty and Staff Members.**  
**"With Good Reason,"** 7 p.m., WVTF.

### Monday, 3

**Economics beyond Neoclassical Limits**, 9 a.m. to 5:30

p.m., 1045 Pamplin (through 6-7).

**Last Day to Drop.**  
**Board of Visitors Meets.**

### Wednesday, 5

**"With Good Reason,"** 7 p.m., WVTF.

### Thursday, 6

**Family, Work/Life Resources Program**, 12:15 to 12:45 p.m., DBHCC conference room A.

## BULLETINS

### AM1260 adds NPR talk program

AM1260, also known as WWVT, which serves the New River Valley, has added another talk program from National Public Radio (NPR) to its broadcast schedule. AM1260 is now broadcasting "The Connection," in addition to NPR's "Talk of the Nation," "The Diane Rehm Show," and "The Todd Mundt Show"; BBC news programs; and "The World," from Public Radio International (PRI).

AM1260's weekday broadcast schedule is as follows: "BBC World News Briefing," 6 to 8 a.m.; "News Hour" from BBC, 8 to 10 a.m.; Diane Rehm Show, 10 a.m. to noon; "The Connection," noon to 2 p.m.; "Talk of the Nation," 2 to 4 p.m.; Todd Mundt Show, 4 to 5 p.m.; "The World," 5 to 6 p.m.; and "News from BBC," 6 to 7 p.m.

"The Connection," hosted by news correspondent Dick Gordon, handles a variety of topics, such as politics, literature,

religion, science, music and medicine.

Complete program listings are available at AM1260's web site, [www.am1260.org](http://www.am1260.org).

In addition to AM 1260, WVTF Public Radio, a National Public Radio (NPR) member station, broadcasts news, classical and jazz music, public information and affairs, and other cultural programming.

### Parking lot behind Owens closed

The parking lot behind Owens Dining Facility is closed until mid-August for roof repairs. There will be access to the loading dock and limited parking only for service vehicles and HC vehicles.

The area on the northern side of Owens (adjacent to Hokie Passport Office) will have restricted service-vehicle access during the initial month of work due to stationing of heavy equipment. For more information, contact Parking Services at 1-3200

or [parking@vt.edu](mailto:parking@vt.edu).

### Campus e-mail alert issued

Recently several staff and faculty members have received e-mails soliciting funds for help in alleviating their particular financial needs. The sender(s) of the e-mail will usually ask for account information stating that they will forward money at a future date in return for assistance.

Any e-mail such as these have been identified as scams and are attempts to access your bank-account information. The Secret Service is aware of these scams and does investigate them. However, usually this type of scam originates out of this country, making identification of the senders very difficult.

Do not respond to these e-mails. Forward them to Lieutenant Vince Houston with the Virginia Tech Police Department ([houstonv@vt.edu](mailto:houstonv@vt.edu)) or delete the e-mail.

## Flood victims still need clean-up supplies

The people of Hurley and Buchanan County have sent their thanks to everyone in Blacksburg for the clean-up supplies that arrived over the weekend. The supplies were delivered by Bobby Swain, coordinator for field services support at the Extension Distribution Center.

Swain said cleaning supplies are still needed, especially paper goods and rubber boots and gloves. He asks that people not donate chlorine bleach or other cleaning supplies that are classified as hazardous materials and cannot be shipped.

Members of the Virginia Tech community can take their donated items to the Extension Distribution Center at 112 Landsdowne St., Blacksburg. (From campus: take South Main Street to the second street past the Gables Shopping Center traffic signal and turn left. The center is the large building on the right with a loading dock and outdoor stairs.) The drop-off box will be available from 7:45 a.m. to 4:30 p.m. week days, except Memorial Day, May 27, through Thursday, May 30, at 1 p.m. The items will be delivered to Buchanan County the next day.

Those who wish to help monetarily can make tax-deductible donations to Clinch Independent Living Services with Hurley flood relief written on the memo line. Checks should be mailed to the Buchanan County Extension Office, P.O. Box 1049, Grundy, VA 24614-1049.

For information on volunteering, call the Buchanan County Extension Office at (276) 935-6254 or contact Unit Coordinator Flo Stewart at [fstewart@vt.edu](mailto:fstewart@vt.edu) or Unit Administrative Assistant Rhonda Combs at [rhcombs@vt.edu](mailto:rhcombs@vt.edu).

## Governor authorizes additional July 5 holiday

Governor Mark Warner has authorized additional holiday time for all state employees in celebration of Independence Day. State offices will be closed on Thursday, July 4, and Friday, July 5.

President Charles Steger has confirmed that classes will be held on July 5, but that it will be a holiday for all university employees who

are not required to support classes or other essential university services.

Employees who are eligible to earn compensatory leave for holidays worked will be granted leave time on request at a later date. Offices that do not provide class support or essential services may be closed. Department

heads and directors are asked to determine which employees are essential, and to communicate their plan for closing with their employees as soon as possible. Personnel Services will send instructions to department HRIS users and leave representatives as the holiday approaches.

## University receives international e-learning award

By Cate Mowrey

Virginia Tech has been named winner of the 2002 e-Learning Success Stories Higher Education Virtual Learning/Collaboration Award.

The Institute for Distance and Distributed Learning (IDDL) prepared and submitted, on behalf of the university, the nomination: "Utilizing Virtual Classrooms and New E-Learning Models to Broaden Reach." The nomination used as a case study the cross-university, collaborative efforts of placing the masters-of-information-technology (MIT) degree and certificate program on line. Over 100 nominations were evaluated by a panel of judges made up of professionals from Fortune 100 companies, government, and higher education.

Virginia Tech was one of only 10 organizations to be recognized in April at the international E-learning 2002 Conference and Exposi-

tion held in Washington D.C. Other award recipients include Intel Ireland, Department of Defense, Nebraska National Guard, EMC Corporation and PPG Industries.

"Virginia Tech is pleased to be recognized for its e-learning efforts. E-learning is an integral part of the university's mission and strategic plan to offer new knowledge for the world community through research, scholarship and outreach," said President Charles Steger.

Created in response to the need for education and training in information technology in northern Virginia, the MIT program is offered collaboratively by the College of Arts and Sciences, the College of Engineering, and the Pamplin College of Business. Faculty members from all three colleges instruct in the program while located in Blacksburg, Virginia Tech's Northern Virginia Center, and the Alexandria

Research Institute. Working with the colleges and faculty members, the Institute for Distance and Distributed Learning led the program's transformation into an asynchronous e-learning format that not only serves the northern Virginia IT market, but also reaches national and international audiences. Miriam Guthrie, coordinator for special initiatives, outreach and marketing for IDDL, served as project manager to electrify the 16 courses and associated information and support systems.

"This is a wonderful honor and opportunity for Virginia Tech," said Tom Wilkinson, director of distance and distributed learning for the university. "It highlights the hard work, expertise and outstanding collaboration by faculty members and the many individuals and organizations that contributed to the success of this effort." Among the contributors to the

(See UNIVERSITY on 3)

## Tech database user group holds first meeting

The first Virginia Tech Database User Group Database Users Group (VTDEBUG) meeting was held at Virginia Bioinformatics Institute (VBI) April 17.

Olga Brazhnik (VBI) facilitated the meeting, which focused on the needs and capabilities of database users at Virginia Tech. According to Brazhnik, the group's mission parallels Virginia Tech's goal to lead in research at a

time when nearly every scientific activity relies on data bases. With integrated resources, the group will contribute to knowledge sharing, software acquisition and database education on campus.

The meeting featured presentations by Russell Kruzlock (VBI), Brazhnik, Morgan Allen (CNS), Dwayne Marlowe (IS&C DBMS), Thomas Dunbar (IWA), Paul Toffenetti (VBI)

and others. VTDEBUG will start a listserv ([vtdebug@listserv.vt.edu](mailto:vtdebug@listserv.vt.edu)), create a web site, and conduct its first technical workshop—featuring several data-base design tools—in May. The group will identify topics for discussion during an informal luncheon in June, and hold its next group meeting in July. Interested parties are welcomed to attend any VTDEBUG activity.

# EMPLOYMENT

## CLASSIFIED POSITIONS

The following classified positions are currently available. Position details, specific application procedures/position-closing dates may be found on Personnel Services web site <http://www.ps.vt.edu>. Positions are also listed on the Job Line, a 24-hour recorded message service. For information on all job listings, call 1-5300. Some positions include state benefits. Positions with numbers beginning with "W" are hourly and 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

**Three full-time food-service positions available.**

**Administrative Assistant**, 002459Y, PB 3, DBHCC.

**Assistant Manager**, 000561H, PB 3, RDP.

**Assistant Ticket Office Manager**, 007154J, PB 3, UUSA.

**Banquet Manager**, 001118Y, PB 3, DBHCC.

**Boiler Operator Assistant**, 000338F, PB 2, Power Plant.

**Business Manager A**, 004560B, PB 4, VALME.

**Data Entry Operator**, 002527C, PB 2, University Controller.

**Development Associate**, 007914S, PB 3, University Development.

**Electrician Supervisor**, 002038F, PB 4, Facilities, Electric Services.

**Executive Secretary Sr**, 001445J, PB 3, Teaching/Learning.

**Housekeeping Leader Senior**, 000945H, PB 1, RDP.

**Large Animal Veterinary Technician**, 001996M, PB 4, VTH.

**Pharmacy Assistant**, 002617M, PB 2, VTH.

**Project Leader, Middleware Services**, 006813Y, PB 6, IAD.

**Radiologic Technologist**, 002394M, PB 3, VTH.

**Windows NT Systems Administrator**, 002143G, PB 4, LSD.

### PART TIME

**Animal Care Technician**, W022190M, PB 2, VTH.

**Assistant Men's Soccer Coach**, W023415J, PB 3, Athletics.

**Fiscal Assistant**, W023137J, PB 2, Teaching/Learning.

**Food Operations Assistant A (Dishwasher)**, W023252Y, PB 1, DBHCC.

**Front Desk Technician**, W023256M, PB 2, VTH.

**Lab Specialist**, W023416B, PB 3, Chem E.

**Laboratory Specialist**, W023413M, PB 3, CVM.

**Large Animal Husbandry**, W022155M, PB 1, VTH.

**Postal Assistant/Mail Sorter**, W023181A, PB 2, UMS.

**Program Support Technician**, 004570M, PB 3, CSES.

**Radiologic Technologist**, W022412M, PB 3, VTH.

**Veterinary Technician**, W023340M, PB 4, VTH.

### UNIVERSITY ONLY

**Application Processor, New Student Processing**, U000970S, PB 3, Undergraduate Admissions.

**Powerline Lead Worker**, U000342F, PB

4, VTES.

### OFF CAMPUS

**Federal Reimbursement Unit Analyst**, 007859J, PB 5, IPO.

## FACULTY POSITIONS

### NON-INSTRUCTIONAL

**University Relations. Director of News and Information.** Contact: Randall R. Stith, 201 Media Building, Virginia Tech (0133). Deadline: Applications considered beginning June 3; accepted until position is filled.

**Office of Residential and Dining Programs. Area Coordinator of Residence Education—Drillfield Community.** Contact: Area Coordinator Search Committee, 109 East Eggleston Hall (0428), Blacksburg, Virginia 24061. Deadline: Applications considered through May 31.

**Office of Residential and Dining Programs. Residence Director.** Contact: Area Coordinator Search Committee, 109 East Eggleston Hall (0428), Blacksburg, Virginia 24061. Deadline: Applications review begins May 31.

## President's Award for Excellence nominees to be recognized

The President's Award for Excellence Selection Committee is reviewing nominations of individuals submitted from throughout the university community. Thirty-five employees were nominated this year to receive one of five President's Awards, which are presented during the Fall Convocation.

Virginia Tech annually recognizes selected employees for their contributions to the university. All salaried classified staff or administrative or professional faculty members with at least two years of service are eligible for consideration. Awards are given to those who have shown consistent excellence in the performance of their job, or for a single incident or extraordinary contribution including heroic actions.

Only five recipients are chosen, but all of the nominees are being recognized at a reception on May 31 that is held solely to recognize their accomplishments. The final recipients will not be chosen until the selection committee meets again in June.

The individuals recognized for their extraordinary contributions to the university are listed below in alphabetical order.

Rene P. Armstrong, Provost's Office; Catherine L. Barker, College of Natural Resources; Bonita S. Beasley, Office of Sponsored Programs; Sharon P. Box, University Relations/Publications; Charlotte R. Breeding, Virginia Tech Police Department; Patricia C. Bryant, educational leadership and policy studies; Billie R. Cline, Virginia Cooperative Extension-4-H; Eric R. Day, entomology; Patricia F. Donovan, crop and soil environmental sciences; Ellen S. Douglas, Risk Management; Glen Duncan, University Relations/Publications; Linda B. Fountaine, history; Carolyn L. Furrow, College of Arts and Sciences; James M. Hall, chemistry; Amelia G. Hill, materials science and engineering; Mary D. Hunter, civil

and environmental engineering; Shelley R. Johnson, Center for Wireless Telecommunications; Barbara M. Kellison, teaching and learning; Leon A. Law, Physical Plant; Peggy H. Lawson, international research and development; Delores B. Lee, biology; Betty Lou Mayton, Southern Piedmont Agricultural Research and Extension Center; Martha M. Moretz, human development; Phyllis I. Neece, accounting and information systems; Wanda W. Nolley, marketing; Rhonda M. Owen, dairy science; Mark S. Raby, Institute for Distance and Distributed Learning; Terry T. Rakestraw, food science and technology; Charles E. Randel, Veterinary Medicine Teaching Hospital; Janet Sanders, physics; Mary A. Schaeffer, biology; Rachel K. Shanklin, animal and poultry sciences; S. Llyn Sharp, Natural History Museum; Melinda P. Shaver, University Relations/Publications; Nancy W. Shields, crop and soil environmental sciences;

## UNIVERSITY

*Continued from 2*

development and delivery of the on-line MIT are the colleges of Arts and Sciences, Engineering and Pamplin College of Business, Provost's Office, International Institute for Information Technology, Center for Innovation in Learning, Information Systems, Graduate School and University Outreach.

IDDL piloted a number of e-learning innovations as part of the on-line MIT program. To offer a quality program that was both scalable and cost-effective, the distance-learning-instructor (DLI) model and the distance-learning-proctoring model were implemented. In addition, a number of administrative and course-development-and-delivery processes were automated. These efforts increased efficiencies and economies of scale that are transferable to other university e-learning efforts. Program assessment results have been positive and indicate that this university-wide collaborative effort to create a high-quality and accessible virtual-learning environment has succeeded.

## GRADUATE

*Continued from 1*

was either "very easy" or "somewhat easy," and most (96 percent) were satisfied with the housing they found. More than half (67.3 percent) had the opportunity to visit Blacksburg to look for housing before their first semester.

Most first-year graduate students (94.4 percent) live off-campus. The strongest reasons cited for not living on campus include the perceived lower cost of off-campus housing, and the fact that they were tired of residence-hall living.

The survey found a small percentage (5.5 percent) of first-year graduate students living on-campus. Half of these said they preferred the convenience of living near classroom buildings.

About three-fourths, (70.4 percent) of those polled, were not living alone. Most roommates were not related to the respondent. Only 5.3 percent reported having a child at home, and 14.1 percent were living with their spouse.

Approximately half (54 percent) reported

living expenses of \$500 or less per month. Beyond cost, the second most important factor in selecting housing was its proximity to campus. To get to and from campus, most students rely on the Blacksburg Transit (41.4 percent). Others (37.5 percent) drive cars or car pool. Eleven percent walk and 3.5 percent bike to Virginia Tech from off-campus residences.

Those individuals who expressed problems in finding specific housing cited the following reasons: they started looking too late; many international and out-of-state students had no opportunity to visit the area beforehand to look for housing; others had problems finding one-bedroom, one-bath units.

As suggestions for meeting future housing needs, graduate students expressed interest in a single-room efficiency or a studio apartment and an apartment complex for graduate students. There was little interest in residential hall living, based on a need for quiet and privacy and feeling too old to be living in a dormitory.



VIRGINIA POLYTECHNIC INSTITUTE  
AND STATE UNIVERSITY

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## ENGINEERING

*Continued from 1*

submitted as principal investigator or co-principal investigator four successful research proposals, with his share at \$103,000.

The second award went to Stefan Duma of ME, who has also published 17 journal articles with another 10 currently under review. His success rate at establishing a research program includes bringing to campus some \$400,000 in his first 18 months.

The last award went to Hesham Rakha of CEE. As an assistant professor, Rakha is responsible for \$3.5 million in research funding and has served as the leader of the Transportation Systems and Operations Group of the Virginia Tech Transportation Institute for the past four years.

## Outreach, CPAP conduct study

A class of graduate students in the Center for Public Administration and Policy recently finished conducting a performance-measurement and benchmarking study for Pulaski County. The course, "Performance Measurement and Benchmarking for Local Government," was taught by University Outreach faculty members J. Douglas McAlister, John Aughenbaugh, and Chad Miller.

The basic purpose of the course, according to Aughenbaugh, is to further a central tenet of the university's mission statement: advance social and community development. In particular, the course and project are designed to emphasize service-learning opportunities for students and expand the university's technical assistance and community-development efforts, which are key components of the University's 2001-2006 Strategic Plan.

The course is split into two parts; in the first third of the semester, the students are taught the basics of performance measurement and benchmarking, the pros and cons attached to the same, and the contextual issues surrounding the movement to measure what government does. In the second third of the course, the

students studied three Pulaski County departments: general administration, Building and Zoning, and Refuse Collection. The result of this examination was a report that measured the inputs, outputs, and outcomes of these departments, pinpointed areas in which the departments were doing well, and suggested recommendations for improvement.

The Pulaski County project was the second time for this kind of Outreach and CPAP collaboration, as last spring the units did a similar study for Smyth County. According to McAlister, the course and project tap into the growing movement at all levels of government to develop more professional management. "This need for performance measurement and benchmarking assistance for local government seemed like a great opportunity to apply the knowledge of Virginia Tech to the state."

Aughenbaugh and Miller modeled the course upon the International Market Planning Program, a course/project offered in the Pamplin College of Business. Instead of an export plan for a business, the student teams in the performance-measurement course provide a thorough examination of local government.



**SCHOLARSHIP SUPPORT** Staff Senate President James Martin (right) and Faculty Senate President Leon Geyer (center) show support for the Staff and Faculty Annual Fund by presenting their gift to President Charles Steger for the Presidential Dependent Scholarship Endowment. Steger, former presidents T. Marshall Hahn, William Lavery, Paul Torgersen, and Adele McComas-White, widow of James McComas, provided the initial \$25,000 funding for the scholarship, which will be used to fund scholarships for employees' children or spouses who attend Virginia Tech. Employees can support the scholarship through the Staff and Faculty Annual Fund effort currently under way or by visiting [www.givingto.vt.edu](http://www.givingto.vt.edu). (J. McCormick)

## DIVERSITY

*Continued from 1*

and seniors from the metropolitan Richmond area who are enrolled in a summer environmental studies course. Students will be involved in hands-on field studies.

**Building a Digital Diversity Resource Database: Toward a University-wide Multicultural Resource Center.** Megan Boler, Kathleen Carico, Peter Doolittle, David Hicks, teaching and learning: \$1,200

The Diversity Resource Database offers a searchable data base with annotated references to books, articles, web sites, videos, and other materials that have been carefully screened and selected to meet standards of curricular integrity. The database provides access to a rich array of print, media, and web-based resources for pre-service and practicing teachers and faculty members who are developing "diversity-inclusive" curricula and pedagogy.

**Virginia Tech/Virginia American Indian Nations Pre-College Initiative.** Samuel R. Cook, Center for Interdisciplinary Studies: \$2,500

The purpose of this project is to build upon the network established in 2001-02 between Virginia American Indians in grades 8-12 and Virginia Tech; to mentor these students through to graduation from high school to recruitment to Virginia Tech; and to visit the eight tribal councils in Virginia to promote the Pre College Initiative and enhance participation in the program.

**Development of an E. Lucy Braun Scholars Program.** Carolyn A. Copenheaver, forestry: \$2,500

This project provides a scholarly mentor-group for 10 female students within a traditionally male field of forestry; creates the opportunity for female forestry students to interact professionally with successful women in the discipline and related professions; provides opportunities for a field experience and discussion of texts; and increases the representation of female presenters in the department's seminar series.

**Towards an Understanding of Dialect Diversity.** Clare J. Dannenberg, English: \$2,500

The dialect-awareness project intends to serve students and faculty members by debunking myths about language use, structure and history through hands-on experimentation with a number of different varieties of English, including but not limited to African American Vernacular English, Appalachian English, and Native American English.

**Diversity and Conflict Resolution Leadership Program.** Susan T. Gooden, Race and Social Policy Research Center, Center for

Public Administration and Policy: \$1,500

Twenty high-school students in the Martinsville area will be selected to participate in this program designed to develop greater self awareness, appreciation of social and cultural differences, leadership and conflict-resolution skills. Students will meet twice a month over a ten-month period and will participate in one or more visits to the Tech campus to provide exposure to university life and Tech programs. The Race and Social Policy Center will provide a qualitative evaluation of the project and its impact.

**Building a Diverse Community of Learners.** Joan Hirt, David Alexander, educational leadership and policy studies; Lanny Cross, Student Affairs; and Brian Johnson, Residential and Dining Programs: \$1,000

The graduate-preparation program in Higher Education and Student Affairs (HESA) has a proven track record of recruiting, retaining, graduating and placing graduate students from under-represented groups. Faculty members and current graduate students are involved in extensive recruitment efforts through visits to HBCU's and contacts with other minority-serving institutions.

**Theatre for Community Dialogue.** Ann Kilkelly, theatre arts and women's studies; and Charlotte Waggoner, environmental health and safety: \$2,500

The project will provide training in Image Theater to members of the university community who are willing to be facilitators for other groups. The technique provides a powerful and creative approach to building awareness and understanding of diversity and multicultural issues.

**Recruitment and Educational Development: The Annual Conference of**

**the Society for Advancement of Chicanos and Native Americans in Science (SACNAS).** Reinhard Laubenbacher, Virginia Bioinformatics Institute: \$1,000

Funds will provide partial travel support for students and the faculty sponsor to attend the National Conference of the Society for Advancement of Chicanos and Native Americans in Science, an ideal venue for the professional development of students from those ethnic/racial groups and recruitment of new graduate students in the sciences.

**Virginia Tech Virtual Museum for Women in Power Engineering.** Yiu (Ellen) Liu, electrical and computer engineering: \$1,000

This project will create a virtual museum on the web of women in engineering, with a focus on power engineering. The museum will document the lives and careers of successful women of the past, not only those who have received much notoriety but those who have received little or no recognition. It would be the only virtual museum in the world dedicated exclusively to recognizing the contributions of women engineers.

**Supporting Affirmative Action: Learning from Experience.** Ann Potts, teaching and learning; Patrick Council, near environments; April Few and Fred Piercy, human development: \$1,000

A panel of representatives from both on and off campus will be invited to discuss how university administrators, faculty and staff members can effectively negotiate changes in affirmative-action legislation. The event is designed to create important campus dialogue about the national debate on affirmative action and to explore implications of the changing legal and political climate for affirmative action for Virginia Tech.

## DOD

*Continued from 1*

long-range uses of such materials might include military uniforms that are smart enough to cool soldiers in extreme heat and automatically provide a barrier to chemical and biological reagents, Long said. Other applications might include the manufacture of miniaturized machines, displays, sensors, and actuators.

"In *Business Week* in September 2001, we disclosed our initial efforts involving molecular velcro," Long said. "Other possibilities include macromolecules that are bonded reversibly, or polymers that can be processed more easily, smaller, and with less energy, but have sufficient mechanical properties for many high-performance applications. Such approaches would facilitate the manufacture of miniaturized electronic and optical parts."

The grant, called an Army Research Office Multidisciplinary University Research Initiative, or MURI, is a collaborative venture that brings together chemistry, mechanical engineering, electrical engineering, chemical engineering, and materials science at the participating universities. The collaboration among four departments and two colleges within Virginia Tech, as well as among the various universities, brings a variety of expertise to the project and allows scientists to accomplish more through the synergy of their research.

Some of the projects to be conducted under the MURI program are the following: Don Leo of mechanical engineering will look at making new materials, called piezo-electric or electro-restrictive materials, that will convert electrical voltage to motion; on the biomedical forefront, Garth Wilkes of chemical engineering will research ways to process sub-micron fibers, which are about one-hundredth the diameter of a human hair, based on branched macromolecules for possible use adhesives, filters, and biomaterials.

One rapidly emerging application is scaffolding for cell impregnation and tissue growth, Long said. "They also have inherently high surface areas that could scavenge chemical and biological reagents in a very efficient manner," he said.

Another collaboration with Tom Ward in chemistry will attempt to develop smart surfaces or adhesives using branched polymers that are responsive to the environment, Long said.

Such future advancements require a multidisciplinary approach to research and education, Long said, and demand a fundamental understanding of branched macromolecules.

The DOD MURI center will support about 15 graduate students per year and an equal number of undergraduates working together on the research objectives, Long said.

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