

SPECTRUM



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

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TODAY'S EDITION
See page 4 for
information on campus
activities

University names new Graduate School dean

By Clara B. Cox

Karen P. DePauw, dean of the Graduate School at Washington State University, will become vice provost for graduate studies and dean of the Graduate School at Virginia Tech on August 1, Tech Provost Mark McNamee announced Monday.

Joseph S. Merola, acting dean of the Graduate School for the past 15 months, will become a senior fellow, a term appointment in which he will lead the implementation of college restructuring efforts.

Virginia Tech split administration of research and graduate studies in January 2001 to focus more extensively on each area as it pushes to become a top-30 institution.

The university opened its search for a permanent dean in August, 2001.

"With this search, we had an unusual opportunity to attract Dr. DePauw, whose vision for the future of graduate education at Virginia Tech impressed all of those she met with and clearly will help move us in the directions we outlined in the university's strategic plan. I have every confidence in her ability to build on Dr. Merola's successful efforts to reshape the mission and operations of the Graduate School for where we need to go in the future," McNamee said.

DePauw, a tenured full professor at Washington State, has over 25 years experience as a faculty member in higher education and

over 10 years experience in university administration. During her years as an administrator, she continued to teach at the graduate level, chair and serve on master's and doctoral-students' committees, mentor graduate students and faculty members, and pursue her scholarship and professional activities.

Before she was named permanent dean at Washington State in 1999, she served two years as interim dean and a year as interim vice provost for academic affairs. She began her administrative work at the university in 1989 as associate dean of the Graduate School and was named associate vice provost for academic affairs in 1995.

(See UNIVERSITY on 5)

Tech gets high ratings in *U.S. News*

By Liz Crumbley

Several of Virginia Tech's graduate programs achieved high national rankings in *U.S. News & World Report's* "America's Best Graduate Schools for 2003" survey released April 5.

The College of Engineering's graduate program moved up to 23rd in this year's survey from 25th last year. According to the survey, the college was ranked fifteenth in the nation by corporate recruiters and eighteenth by engineering school deans. In addition, the college's industrial-engineering graduate program was ranked eighth in its field by a survey of engineering deans.

"The rise of the College of Engineering in the graduate rankings is a sign of our continued success in attracting research funding as well as first-rate graduate students and faculty members," said Malcolm McPherson, interim dean of the college.

The career and technical education pro-

(See TECH on 6)

Murray elected to national academy

By Liz Crumbley

Engineering Professor Thomas M. Murray has been elected to the National Academy of Engineering (NAE), one of the highest honors that can be accorded an engineer. Academy membership recognizes those who have made important contributions to engineering theory and practice and have demonstrated unusual accomplishment in the pioneering of new and developing fields of technology.

Murray, the Montague-Betts professor of structural steel design in the Via Department of Civil and Environmental Engineering, was elected for his leadership in developing criteria for floor serviceability and his major contributions to structural-steel-design engineering.

Among Murray's numerous accomplishments is the development of techniques for building lightweight, affordable floor systems that reduce vibrations in large steel and concrete structures, such as airports and shopping malls. He is co-author of a design guide that is used extensively by structural engineers in the U.S. and Canada, and he has made more than 100 presentations on floor serviceability to engineering groups worldwide.

In addition, Murray has worked for many years with the metal-building industry to develop more economical roof systems and connections. Working in Virginia Tech's Structures and Materials Laboratory, which he founded, Murray and his graduate students have developed alternate methods for connecting beams and columns in buildings in areas that experience high levels of seismic activity. This work was conducted in response to structural problems that were brought to light by the 1994 Northridge, California earthquake.

"We are very proud of Tom and his selection to the National Academy," said

(See MURRAY on 5)

An Invitation to Founders Day

An Open Letter to the University Community
from President Charles W. Steger

Much has been written about the global economy and the challenges facing American industry as the world, not the nation, becomes our marketplace. This year, during our Founders Day observance, our keynote speaker, Dr. Charles W. Pryor Jr., class of 1966, will address these issues. As president and CEO of Westinghouse Electric Corporation, he will speak to the ways American universities can help corporate America maintain its edge. We know that the nation's economic might undergirds our democratic system and national security.

Founders Day 2002 will celebrate the 130th anniversary of Virginia Tech's founding. This convocation on Friday, April 26, at 3 p.m. in Burruss Hall auditorium will also provide us the opportunity to present three of the university's highest awards—two Alumni Distinguished Service Awards and the Ruffner Medal.

Immediately after the convocation, there will be a Corps of Cadets Review Ceremony on the Drillfield, followed by a reception under a tent in front of the War Memorial Chapel (rain site: Owens Banquet Room).

Many of you will have already received an invitation to participate in the Founders Day Convocation by participating in the academic procession that day. If you are unable to join the procession, I invite you to make plans to attend as a member of the audience.

In addition, I personally invite each member of the university community to attend the Virginia Tech Founders Day Convocation 2002 and join in the celebration as a member of the audience.

I look forward to seeing you on April 26.

Sincerely,

Charles W. Steger, president

Alumni volunteers lift Tech to Peace Corps' top-25' ranking

By Jeanne M. Garon

Virginia Tech has made the United States Peace Corps' "top-25" list of American colleges and universities with the highest number of alumni currently serving in the corps. Compiled annually, the ranking gained increased significance recently following President George Bush's State of the Union address, which called for the corps to double its volunteers over the next five years.

The university also ranks in the top 10 in the Mid-Atlantic Region.

"We're quite pleased about the Peace Corps top-25 ranking," said C. Clark Jones, vice provost for outreach. "Since its founding,

Virginia Tech has held outreach to its various communities, including the world, as a central theme of its mission. Our contributions to the outstanding work of the Peace Corps is representative of this commitment."

Christopher Doherty, campus recruiter for the Peace Corps, said Virginia Tech has "a very special relationship with the corps." Doherty said there are currently 35 Virginia Tech alumni serving in 21 countries around the world. From 1961 to 2000, more than 400 Virginia Tech alumni entered the corps; Tech has been on the "top-10" list for the Mid-Atlantic Region since the 1990s, and many former corps volunteers

(See ALUMNI on 6)

ASPIRES launches 41 new projects

By Susan Trulove

The Research Division awarded the sixth round of ASPIRES recipients in January. ASPIRES stands for A Support Program for Innovative REsearch Strategies. Support from the Research Division, Provost's Office, and central capital account provided \$1.1 million to support faculty members' programs. Winning proposals also included funding from departments, colleges, and other sources.

"By providing funds for research infrastructure enhancement, the intent is to increase a faculty member's success rate in competing for external support," said Len Peters, vice provost for research.

An example is Craig Woolsey, an aerospace and ocean engineering (AOE) faculty

(See ASPIRES on 5)

BOV Special Committee on Research will meet

By Larry Hincker

The Board of Visitors Special Committee on Research will meet from 10 a.m. to noon on Wednesday, April 17, in the Torgersen Hall Board Room.

The Virginia Bioinformatics (VBI) Policy Advisory Board will meet from 1 to 3 p.m. on Wednesday, April 17, in the same location.

ACHEIVERS

R. Michael Akers, the Horace E. and Elizabeth F. Alphin professor of dairy science, has a new book appearing this spring, *Lactation and the Mammary Gland*. Iowa State Press has scheduled publication of the book for May. Akers, an international authority on mammary development and function, has been a member of the Virginia Tech faculty since 1981. He teaches undergraduate anatomy and physiology. His research focus is on understanding the role of local mammary tissue growth factors in control of mammary growth and development.

Steven C. Leist, assistant director of student activities for Greek life and student-support programs, was awarded the Dr. Karlem Riess Award by the Southeastern Interfraternity Conference at their Annual Leadership Academy in February.

The award is given to an individual who has shown exceptional service and dedication to the Southeastern Interfraternity Conference. The Southeastern Interfraternity Conference is a regional educational association that has more than 75 colleges and universities from 11 states in the southeastern geographic region as members. The conference holds an annual Leadership Academy for more than 600 interfraternity council leaders from those institutions. The award has been given to only four other people in the 37-year history of the conference.

MBA students **Megan Meconi** and **Ameez Nanjee** won the Best Student Paper Award at a conference of the South East Decision Sciences Institute in Hilton Head, S.C. recently. Meconi and Nanjee co-authored the paper, "A 'Wealth' of Information: Systems Modeling as a Decision Science Tool."

The University of Kentucky College of Human Environmental Sciences recently inducted **Peggy S. Meszaros** into its Hall of Fame as part of its HES Week celebration.

Meszaros is the director of the Center for Information Technology Impacts on Children, Youth and Families at Virginia Tech and former dean of the UK College of Human Environmental

Sciences.

Meszaros also presented the 2002 Distinguished Lecture in the UK College of Law courtroom. Meszaros, the William E. Lavery professor of human development, presented "Information Technology and Human Development: What Do We Know and Where Are the Gaps?"

Howard Protinsky won the national training award of the American Association for Marriage and Family Therapy, the highest award for MFT education and training given by this association. He received this award at the national conference of the AAMFT in October.

Mary B. Whitlock, administrative and program specialist for the College of Human Resources and Education, recently passed the international exam for certified administrative professional (CAP). Whitlock, who has been with the university 29 years, is also a certified professional secretary (CPS).

Sharon Brusic and **James LaPorte** of the Technology Education Program (Department of Teaching and Learning) recently received the Outstanding Research Manuscript Award from the *Journal of Industrial and Technical Education*. The award is presented annually by the journal, which is sponsored by the National Association of Industrial and Technical Teacher Educators. The award-winning manuscript is titled "The Status of Modular Technology Education in Virginia."

Konrad W. Kubin, professor of accounting and information systems, was appointed to the 2001-02 AICPA Committee for International Uniform CPA Qualification Examination. AICPA is the American Institute of Certified Public Accountants.

Ray Dessy, professor emeritus of chemistry, has received from the Camille and Henry Dreyfus Foundation one of the 10 Camille and Henry Dreyfus Senior Scientist Mentor Initiative

Grants for 2002-2004.

The Dreyfus award, which is intended for emeritus faculty members maintaining research programs in the chemical sciences, is given primarily for support of undergraduate research assistants in chemistry, chemical engineering, and biochemistry. Dessy's current research efforts are directed at an X-Y addressable SPR biosensor array for use in high-throughput screening and high-threat infectious-disease situations. The award will primarily provide funds for support of undergraduates learning to do research in these areas.

Jud Flynn, CEC, executive chef for Residential and Dining Programs, is competing for a spot on the American Culinary Federation's USA Culinary Team that will compete at the 2004 International Culinary Olympics. Flynn was one of the 14 chefs to move beyond preliminary tryouts and earned the right to compete in the final tryout May 19-21 hosted by the National Restaurant Association (NRA) at the NRA Show at McCormick Place in Chicago.

Seventy chefs from across the country submitted applications to compete for one of 10 spots on the team and only 40 were invited to tryout.

Flynn has received 30 culinary medals, 11 of which are gold, including a gold medal at the 2001 National Association of College and University Food Services (NACUFS) Culinary Challenge, gold medals at the last two North American Association of Food Equipment Manufacturers (NAFEM) culinary competitions, and a silver medal from the 2000 International Culinary Olympics.

Michael von Spakovsky, professor of mechanical engineering and director of the Energy Management Institute, has been elected a fellow of the American Society of Mechanical Engineers (ASME). Before joining the Virginia Tech faculty in 1996, von Spakovsky worked at the Swiss Federal Institute of

(See *ACHIEVERS* on 7)

2002 SERVICE-RECOGNITION RECIPIENTS

Service-award recipients honored at Wednesday's program included, front row, from left, Ella Mae Vaught, Helen Williams, Peggy Lawson, Connie Smith, and Harlan Miller. Back row, from left, John Dickey, Joseph P. Fontenot (President Charles Steger on hand to honor the recipients), Palmer Price, Frederick Lutze, Warren Kark, Chester Foy, and James Shockley.

(R. Griffiths)



45-YEAR RECIPIENTS

Joseph P. Fontenot.

40-YEAR RECIPIENTS

Joseph J. Collins, Bonnie C. Lucas.

35-YEAR RECIPIENTS

Fred C. Davis, Nancy W. Davis, John W. Dickey, Mae L. Dowdy, Chester L. Foy, Ethel D. Hart, Mukhtar A. Isani, James W. Jones, Warren R. Kark, Donna L. Lafon, Peggy H. Lawson, Frederick H. Lutze, Harlan B. Miller, Walter F. O'Brien, Palmer L. Price, James E. Shockley, Connie T. Smith, Sford H. Snead, Sherry D. Terry, Sue A. Tolin, Paul E. Torgersen, Frans M. Van Damme, Ella Mae Vaught, James Washenberger, Helen B. Williams, Suella R. Wolfe.

30-YEAR RECIPIENTS

Linda P. Akers, Llewellyn S. Allison, Bonita S. Beasley, Joan L. Boyd, Arthur L.

Buikema, Ross E. Byers, James W. Cardwell, Eugene M. Cliff, Richard C. Cole, Elizabeth L. Coleman, Eldridge R. Collins Jr., Barbara A. Corbett, Calvin L. Duncan, Vicki N. Duncan, Theodore L. Ellmore, S. Joe Fariss, Marshall W. Fisher, Thomas E. Glass, Charles M. Good, Richard T. Graham, Festus Gail Gray, Barbara T. Griffith, Barbara A. Hamblin, James L. Hammons, Edmund G. Henneke II, William G. Herbert, Betty F. Higginbotham, Alan H. Holland, Charlotte R. Hungate, David E. Hutchins, Thomas A. Jenssen, C. Clark Jones, James L. Jones, David G. I. Kingston, Loke T. Kok, Victoria T. Kok, Anna W. Leche, Wayne E. Leininger, Howard E. Linkous, Steven E. Lowe, James H. Malone, Ernest L. Martin, Charles P. May, Betsy M. McCoy, Larry L. McPeters, Hilda M. Montgomery, John F. Moore, Roy H. Nester, Ronald J. Nurse, Joseph D. O'Donnell, Marie Overstreet,

Edward T. Overton Jr., Dianne B. Perfater, Joseph C. Pitt, Linda S. Price, John R. Pulliam, James A. Ramsey, Jean L. Ratliff, Raymond B. Reneau Jr., Peter R. Rony, Gerald N. Scheeler, Johnny T. Shaver, Shirley M. Shaver, Peggy V. Shealor, Philip B. Sheldon, Joyce R. Shelton, Thomas M. Sherman, Richard D. Shingles, George M. Simmons, Akhaury K. Sinha, Sandra W. Smith, Raymond D. Smoot Jr., Eleanor F. Stephens, Charles L. Taylor, James A. Thomas, Jimmy W. Viers, Barbara J. Waller, Walter W. Wierwille, Tracy D. Wilkins, Jackie L. Williams, Faye W. Winters, Young-Tsu Wong, Shelby Wood, Allan A. Yousten, Lucian W. Zelazny.

25-YEAR RECIPIENTS

Samuel A. Alexander, Terry L. Allen, Marcus M. Alley, Judy H. Alls, Ronald S. Alls, Robin M. Andrews, Deborah A. Atkins, Moorman S.

Baker, Linda C. Ball, Patricia J. Barnes, Ruby C. Bass, Frederic J. Baumgartner, David R. Beagle, Stephen L. Beatty, James Norman Belote III, Jeffrey B. Birch, Gregory D. Boardman, Joyce D. Bohr Massie, Phillip E. Bowden, David D. Britt, Linda M. Brotherton, Robert M. Brown, Judith B. Caldwell, James B. Campbell, Diane S. Cannaday, Joseph M. Cassell, Renee R. Chandler, Jiann-Shin Chen, Ben E. Cline, Kathleen B. Cromer, Carolyn H. Crowder, Gary M. Crowder, Charles K. Curry, Alsie B. Dickerson, Roger J. Dowdy, Eugenia H. Eaton, David E. Egan, Marion F. Ehrich, Roger W. Ehrich, Robert J. Fields, Richard L. Fleet, Patricia B. Foutz, David L. Gardner, James R. Gardner, Debra E. Garnand, Eleanor G. Garrison, Rosemary C. Goss, Shirley A. Hale, John R. Hall, Clarence L. Hardy, H. Rex

(See *SERVICE RECOGNITION* on 7)

PROMOTION, TENURE, CONTINUED APPOINTMENT, AND ADMINISTRATIVE PROMOTION LISTING, 2001-2002

Provost Mark McNamee, the University Promotion and Tenure Committee, and the University Promotion and Continued Appointment Committee have recommended the following candidates for promotion, tenure, continued appointment, or administrative appointment. President Charles Steger concurs and will present these recommendations to the Board of Visitors for action at their June meeting.

Promotion with Tenure to Associate Professor, Collegiate Faculty

Reza Barkhi, accounting and information systems; France Belanger, accounting and information systems; Douglas A. Borer, political science; Jeffrey Borggaard, mathematics; Virginia Buechner-Maxwell, large animal clinical sciences; Beverly Bunch-Lyons, history; Thomas J. Burbey, geological sciences; Truman Capone, art and art history; Kathleen M. Carico, teaching and learning; Hsiu Jessie Chen-Yu, near environments; Wilma A. Dunaway, sociology; Robert B. Duncan Jr., biomedical sciences and pathobiology; Matthew J. Eick, crop and soil environmental sciences; Susan T. Gooden, public administration and policy; John A. Hole, geological sciences; Barbara J. Hoopes,

business information technology; Rick D. Howard, large animal clinical sciences; Donald J. Leo, mechanical engineering; Julio C. Martinez, civil and environmental engineering; Bradford F. Mills, agricultural and applied economics; Maury A. Nussbaum, industrial and systems engineering; Mark L. Pitt, physics; David Popham, biology; Steven D. Sheetz, accounting and information systems; Wanda J. Smith, management; Linda F. Tegarden, management; Randolph H. Wynne, forestry; Carl E. Zipper, crop and soil environmental sciences.

Promotion with Tenure to Full Professor, Collegiate Faculty

Joyce G. Latimer, horticulture; David S. Lindsay, biomedical sciences and pathobiology.

Tenure, Collegiate Faculty

Slimane Adjerd, mathematics; Foster A. Agblevor, biological systems engineering; Richard V. Broadstone, small animal clinical sciences; Edward A. Dorsa, architecture; Jih S. Lai, electrical and computer engineering; Edward J. Smith, animal and poultry sciences.

Promotion to Professor, Collegiate Faculty

Ralph D. Badinelli, business information technology; Julia O. Beamish, near environments; Robert J. Bush, wood science

and forest products; Nathaniel J. Davis, electrical and computer engineering; S. Dru Forrester, small animal clinical sciences; Carl A. Griffee, crop and soil environmental sciences; Valerie Hardcastle, Center for Interdisciplinary Studies/Philosophy; David Ames Herbert Jr., entomology; Steven D. Holladay, biomedical sciences and pathobiology; Spencer A. Johnston, small animal clinical sciences; Gregory B. Kadlec, finance, insurance, and business law; Belinda King, mathematics; G.V. Loganathan, civil and environmental engineering; Ilja A. Luciak, political science; Eric E. McCollum, human development; Michael J. O'Brien, architecture; Richard G. Oderwald, forestry; Leo E. Piilonen, physics; John Scott Poole, architecture; Cliff T. Ragsdale, business information technology; Ahmad Safaai-Jazi, electrical and computer engineering; Vijay Singal, finance, insurance, and business law; Stephen A. Smith, biomedical sciences and pathobiology; Kenneth E. Sullins, large animal clinical sciences/equine medical center; Shu-Ming Sun, mathematics; Josiah S. Tlou, teaching and learning; Gerard Toal, geography; Brenda Winkel, biology; Eric A. Wong, animal and poultry sciences; Roger R. Youngman,

entomology.

Promotion to Associate Professor with Continued Appointment, Extra-Collegiate Faculty

Jerry D. Gibson, agricultural and Extension education; Jeffrey L. Kirwan, forestry; Larry A. Thompson, collection management and instruction, University Libraries.

Continued Appointment at the Currently Held Rank of Assistant Professor, Extra-Collegiate Faculty

Nicole J. Auer, instruction department, University Libraries.

Promotion to Associate Professor, Extra-Collegiate Faculty

Susan A. Ariew, collection management and instruction; Tamara Kennelly, digital library and archives, University Libraries.

Administrative Promotion to Extension Agent, Extra-Collegiate Faculty

Booker W. Edwards Jr., VCE—Petersburg City Office; James B. Daniel III, VCE—Lunenburg County; Keith R. Dickinson, VCE—Fauquier County; Dianette H. Ferguson, VCE—Suffolk City Office; K. Jason Fisher, VCE—Halifax County; Paula N. Garrett, VCE—

(See PROMOTION on 7)

University pre-retirement programs scheduled for April 23 and May 1

By Doug Martin, human resources manager

All university faculty and staff members and other interested individuals are invited to attend a University Pre-Retirement Program on April 23, or May 1 at the Donaldson Brown Hotel and Conference Center auditorium.

Retirement planning should be an integral part of the overall personal planning process and the program will provide details regarding

CORRECTION

The identification of a faculty member appointed to serve on the ad hoc faculty workgroup to advise the provost on restructuring options was listed inaccurately in last week's issue of *Spectrum*. The correct identification for Bob Jones is associate professor of biology. We apologize for any confusion this error may have caused.

some of the important components of retirement. In many cases, retirement planning is a family decision, so spouses or other family members are welcomed.

Those employees who cannot attend each session should feel free to attend specific programs that may be of interest. Please note the programs vary on each of the two days to help address the different faculty and staff work schedules. Pre-registration for these programs is not necessary.

On May 1, VALIC and Great West representatives will be available in the Board Room at the Donaldson Brown Center from 8 a.m. to 5 p.m.

Those who wish to meet with VALIC, or Great West should call Benefits at 1-7779 or e-mail sucompto@vt.edu to schedule an appointment. Appointments for VALIC and Great West should be scheduled by April 19.

For more information, contact Carolyn Pratt at 1-7776 or e-mail cpratt@vt.edu.

April 23, Auditorium

9 to 9:30 a.m. Welcome: Doug Martin
9:30 to 10:45 a.m. Virginia Retirement System: Valerie Carter
10:45 to 11 a.m. Break
11 a.m. to noon CommonHealth: Robin Conaway
noon to 1:15 p.m. Lunch (on your own)
1:15 to 1:30 p.m. Virginia Tech Retirees Association: Howard Massey
1:30 to 2:45 p.m. Social Security: Allan Barrow

May 1, Auditorium

8:30 to 9 a.m. Welcome: Doug Martin
9 to 10:15 a.m. Estates, Wills, Trusts: Kendall Clay, Attorney
10:15 to 10:30 a.m. Break
10:30 to 11:30 a.m. Home Security, Virginia Tech Police
11:30 a.m. to 1 p.m. Lunch (on your own)
1 to 2:15 p.m. Virginia Retirement System: Valerie Carter
2:15 to 2:30 p.m. Break
2:30 to 3 p.m. Health Care after Retirement: Carolyn Pratt
3 to 4:15 p.m. Financial Planning: Alex White

Sheehan to direct MIT program

By Joan Ziemba

Virginia Tech has appointed Thomas T. Sheehan, a former official of the Department of the Interior, as director of its master's-degree program in information technology (MIT). The program is offered at campuses in Northern Virginia and Blacksburg as well as on line.

"Tom's experience in working with information-technology companies and his many years of service in the government are key factors to making the MIT program serve broader groups of students locally and nationally," said Parviz Ghandforoush, executive director of the MIT program and director of Virginia Tech's MBA program in Northern Virginia.

Sheehan was a career member of the Fed-

eral Senior Executive Service (SES) and retired as the assistant inspector general for investigations at the Department of Interior. During his tenure there, he received the SES Secretarial Sabbatical, which funded a year of study and research in the design, implementation, and testing of complex systems.

After retiring from federal service, Sheehan became a software engineer at Lockheed Martin and received the its President's Award for his design of the core security component on the Army's Global Command and Control System. While working with Sybase, Inc., he received the Sybase Excellence Award for the design of a joint logistics system.

(See SHEEHAN on 7)

TO THE EDITOR

On February 8, I was issued a citation from Parking Services for parking in a "Carpool Parking Only" area in the large lot behind Litton Reaves Hall. I have a Faculty/Staff permit and have always been under the impression that we were allowed to park anywhere on campus with the exception of "yellow" areas and areas reserved for handicapped, visitors, and service-vehicle areas. I didn't know there was such a thing as "carpool" areas on campus. I appealed the citation and along with the appeal requested that regardless of the decision, that Parking Services please send a campus-wide e-mail clarifying the "carpool" designation to the rest of the campus to spare my co-workers the cost of a \$30 ticket. On February 12, I received notice that the citation was upheld and that I would not have my \$30 refunded. I responded and again asked that they send a campus-wide notice out clarifying the "carpool" designation.

Today is March 8 and I'm writing this letter to alert fellow VT employees of the "carpool" designation. Within the last couple of weeks a co-worker received a citation for the same violation. If Parking Services had sent out the clarification as I requested, it might have saved this person the expense of the ticket.

I'll leave it up to the readers of this letter to form their own opinion as to why Parking Services never bothered to send out the clarification notice.

Sincerely,
Brenda J. French

(Editor's note: The following is Director of Transportation Steve Mouras' response to Brenda French's letter.)

I regret any confusion surrounding carpool spaces on campus. The Carpool Parking program, designed to promote student carpooling, has been in place since last fall. We instituted the program to encourage student behavior that would reduce the demand for more parking spaces and reduce traffic on campus. We announced the new program in our annual newsletter, which was sent to all faculty and staff in September 2001. The carpool spaces are all located in three commuter/graduate lots and not in faculty/staff areas and are clearly marked "Carpool Parking Only" so that folks know that *only* carpool parking permits can use the space.

Finally, the assertion that we haven't sent a clarification out in order to make money is not true. We have 13,140 parking spaces on campus...only 26 are designated for student carpool permits. As suggested by Ms. French, we will remind folks again about these spaces in our April issue of *Transportation Update*.



VIRGINIA POLYTECHNIC INSTITUTE
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ACTIVITIES

EVENTS

Friday, 12
SOTA Event, Virginia Tech Cave, Torgersen Hall.

Saturday, 13
Museum of Natural History Event, 11 a.m. to 1:30 p.m., Water gardens and backyard natural history.

Sunday, 14
YMCA Hike, 11 a.m., YMCA Parking Lot.

Monday, 15
Hort Garden Class, 6 to 8:30 p.m., Greenhouse classroom: Landscape Establishment.
VTU Event, 7:30 p.m., Burruss auditorium: “Big River: The Adventures of Huckleberry Finn.”
University Council, 3 to 5 p.m., 1045 Pamplin.

Tuesday, 16
Pay Date for Faculty and Staff Members.
Family, Work/Life Resources Program, noon to 1 p.m., TBA.
TA Play, 8 p.m., Squires Studio Theatre: *Radon* (Through 4-21).

Wednesday, 17
Lecture, 4 p.m., 216 McBryde: “Polish Paradoxes: On Recent Elections, Memory, and International Context of a

Post-Communist Country.”
Math Event, 7 p.m., DBHCC auditorium: “The Mathematics of Entertainment, the Entertainment of Mathematics.”
TA Play, 8 p.m., Squires Studio Theatre: *Radon*.

Thursday, 18
Staff Senate, noon, 1810 Litton Reaves.
Leadership Development Workshop, 9 a.m. to 4 p.m., DBHCC rooms D, E.
Family, Work/Life Resources Program, noon to 1 p.m., TBA.
TA Play, 8 p.m., Squires Studio Theatre: *Radon*.

SEMINARS

Friday, 12
Highlands in Chemistry, 11:15 a.m., 3 Davidson: Michelle Gee, Mellon University.
Pamplin College of Business, 11:15 a.m., 1045 Pamplin: Giles Bousquet, University of Wisconsin-Madison.
MCBB, 12:20 to 1:10 p.m., Fralin auditorium: John Yoder, UC-Davis.
Geological Sciences, 2:30 p.m., 4069 Derring: Tomasz K. Baumiller, University of Michigan.
STS, 3 p.m., 2150 Torgersen: Steven Yearley, University of York.

Monday, 15
Horticulture, 4 p.m., 409 Saunders Hall: Tony Sturz, Department of Agriculture and Forestry.

Tuesday, 16
ECE, 3:30 to 4:20 p.m., 300 Whittemore: Dan Purdy, ONR.

Wednesday, 17
ESM, 4 p.m., 136 Norris: Jorg Hohe, Universität Siegen, Institut für Mechanik und Regelungstechnik.

Thursday, 18
Human Development, 10 a.m., Fralin auditorium: Linda Burton, Penn State.
STS, 2 p.m., 100 Hancock: Susan Haack, University of Miami.
Statistics, 3:45 p.m., 409 Hutcheson: Bennett Otieno.
CSES, 4 p.m., 246 Smyth: Cheryl Szeles.

Friday, 19
Highlands in Chemistry, 11:15 a.m., 3 Davidson: Jeffrey I. Seeman, Richmond.
Human Development, noon, Hillcrest: Kathleen Walsh Piercy, Utah State.
MCBB, 12:20 to 1:10 p.m., Fralin auditorium: Bill Balch, Scripps Research Institute.
STS, 3 p.m., 209 McBryde: Susan Haack, University of Miami.
ESM, 4 p.m., 136 Norris: Peter Chang, NSF.

BULLETINS

Appalachian storyteller to perform
Appalachian regional storyteller Orville Hicks will perform his blend of family, personal, and folk narratives Tuesday, April 16, at 7:30 p.m. in 3100 Torgersen.
The event is open to the public free of charge.
Hicks, will bring an important tradition of North Carolina narrative, but will add to it a personal creativity that enriches the tradition and enlivens its form and function in present-day contexts. He continues the nationally recognized Beech Mountain Jack Tale tradition through his mother’s telling of traditional lore as a child and through his apprenticeship under Ray Hicks, Smithsonian-recognized master folk artist.
Admission to the program is free. The event is sponsored by the Appalachian Studies Program in the Center for Interdisciplinary Studies and by the Appalachian Way Student Organization at Virginia Tech. It is one of the Organization’s Springtime in Appalachia events. For more information about the program, contact Anita Puckett at 1-9526 or apuckett@vt.edu. For more information about Springtime in Appalachia, contact Puckett or Tonya Bradshaw at tbradsha@vt.edu.

Nanotechnology conference set for CIT
Virginia’s first nanotechnology conference focusing on business-development opportunities will be held April 25 and 26 at the Center for Innovative Technology in Herndon
“Small Scale—Big Business” is being sponsored by the Initiative for Nanotechnology in Virginia (INanoVA), a consortium of researchers and research administrators at Virginia Tech, the University of Virginia, Virginia Commonwealth University, and Old Dominion University who are working with Virginia’s Center for Innovative Technology (CIT) to position Virginia in the forefront of nanotechnology innovation.
“Nanotechnology” refers to the ability to work at the submolecular and molecular level to create materials with new properties, such as films a few atoms thick that can be used in electronics, communications, and medicine. The technology also offers safer, less costly, and more controlled processing of materials.
The conference will feature nationally known researchers, nanotech entrepreneurs, venture capitalists, patent and intellectual property attorneys, and business-development specialists, who will discuss the emergence of nanotechnology products and markets, technology transfer, finding funding for nanotechnology R&D, and surviving the market boom and bust cycles.

The keynote speaker will be Charles Ostman of the Institute for Global Futures Inc., whose address will be “Investment Opportunities in Nanotechnology--Strategic Imperatives, Emergent Trends.” Gregory Olsen, CEO of Sensors Unlimited Inc. will also be a featured speaker, addressing “How to Start Businesses Using SBIR Funding.”
There will be a panel to discuss “Building a Nano-business—Bridging the Gap between Laboratory and Marketplace.”
The CIT is located at 2214 Rock Hill Road in Herndon. For registration and exhibit information, contact Nanette Justus at the CIT, 703-689-3072 or nanette@cit.org. Detailed program information and directions for on-line registration can be found at INanoVA web site <http://www.inanova.org/symposium.htm>.

‘Folding Space’ featured in Wallace Gallery
“Folding Space: Dialogues between fabric and paint” will be featured in the Wallace Hall Gallery until April 19. The exhibit presents a collaboration of work between faculty members in interior and apparel design. The faculty members, Bradley Whitney and Sherry Schofield-Tomschin, will display a conversation that occurs between two-dimensional and three-dimensional arts.

Global accountability topic of talk by international-law expert Pell

By Sarah Newbill
“Accountability After Enron and Beyond” will be the topic of commercial- and international-law expert Owen Pell on Thursday, April 18, at 5 p.m. in 2150 Torgersen Hall. The “Global Accountabilities” faculty group, under the auspices of the School of Public and International Affairs, is sponsoring the free public event.
Pell is a UVA graduate and senior attorney in the firm of White & Case, LLP in New York. For the past two years has presented a series of lectures in New York on the moral and social responsibilities of corporations. His areas of practice include complex commercial litigation, mergers and acquisition litigation, and litigation involving issues of public international law.
Currently he represents Poland in litigation

relating to alleged property expropriations immediately after World War II. In addition, he has represented Poland in litigation involving that nation’s \$15-billion private-debt restructuring, and advised Bulgaria on various issues affecting their \$3-billion private-debt restructuring.
During the last year, Pell organized a report used by U.S. public interest groups in their presentation to the U.N. Commission on Human Rights entitled “*American Dream? American Reality!: A Report on Race, Ethnicity and Law in the United States.*” It was published jointly by the Leadership Conference on Civil Rights and the Lawyers’ Committee for Civil Rights under Law, and can be found at <http://http://www.civilrights.org>.

Biological computation subject of presentation

By Sally Harris
The Role of Computation in Biological Research” will be presented by Bruno W.S. Sobral, director of the Virginia Bioinformatics Institute at Virginia Tech and professor of plant pathology, physiology and weed science, Monday, April 22, at 7:30 p.m. in the Donaldson Brown Hotel and Conference Center auditorium.
There is an increasing technological convergence occurring between biology and computational sciences, Sobral said. That intersection is called bioinformatics. “Much like with businesses, the biological research world is becoming truly inseparable from the information systems needed to support scientific research and technological advancement,” he said. “While these developments are exciting and promising, they also provide the scientific community with serious challenges.”
The challenge of biological data management requires the creative work of

specialists in biology, computer science, mathematics and engineering. However, competent specialists are not sufficient to meet the challenge effectively, Sobral said. “Also needed are individuals on research teams who can put the pieces together meaningfully and institutional structures that reward teamwork and multidisciplinary approaches.”
Sobral has a long-standing interest in reverse engineering living systems, especially in agriculturally or environmentally important organisms. His main research entails comparative genomics, bioinformatics, and the understanding of plant microbe interactions.
“The Role of Computation in Biological Research” is sponsored by the Department of Mathematics in celebration of Math Awareness Month at Virginia Tech. Men and women from high-school age on up who have an interest in math and science are welcome to attend the presentation.

(See BIOLOGICAL on 5)

Tech's Neves works to save endangered freshwater mussels

By Netta Benton

In the past four years, Richard Neves has propagated more than a quarter-million endangered animals and returned them to the wild at a cost of less than \$1 each. Neves, professor of fisheries and wildlife sciences, works with endangered mussels from rivers in Southwest Virginia and adjacent states. Eighteen of Virginia's 20 federally endangered mussel species are found in Southwest Virginia.

Saving endangered mussels is vital, Neves said, because mussels are the natural biological filters in the river system. They remove sediment, contaminants, and particles, ingesting some and releasing the rest into mucus strings. Some water insects feed on these strings, and the mussels themselves serve as a food source

for raccoons, muskrats, river otters, and diving ducks.

Virginia's freshwater mussels live up to 70 years. They are fertile for their entire life span, after beginning reproduction at about age 4 or 5. But many species are endangered because of water pollution and disturbance or destruction of their natural habitats.

"Mussels are excellent water-quality monitors," Neves said. "Because they live so long and move so little, we can take a piece of tissue, analyze for contaminants, and tell what's been going on in the water system for 50 or more years."

He and his colleagues collect gravid females, using a hypodermic syringe to harvest the larvae. They then deposit larvae onto the

gills of the type of fish that particular species of mussel prefers. The larvae, which are parasitic, must attach to fish, from which they extract the nutrients required for them to transform from the larval stage to the free-living juvenile stage.

Biologists can deposit mussel larvae from one female onto hundreds of fish, whereas only about a dozen fish can become hosts for the larvae from each gravid female in the wild. The hosts are likely to be small fish that they live on the shoals, which is also the habitat for the mussel.

"In the wild, each gravid female has from 30,000 to two-million larvae," Neves said. "In the wild, 99 percent of these larvae never attach to a fish and are wasted."

The host fish are kept in holding tanks

after they are "infested" with larvae. The tiny mussels—smaller than the head of a pin when they drop off the fish—are siphoned up and placed into tanks where they feed on algae grown in the lab and tailored to meet their nutritional needs.

In the tanks, the mussels triple or quadruple in size during the first few weeks. After growing for up to a year, they are returned to the wild to begin their work of improving water quality by filtering sediment and other water impurities.

Water quality in the river reaches to which mussels have been referred has improved considerably in the last 10 years. Federal and state water-quality standards have been upgraded,

(See *MUSSELS* on 8)

Magazine names Purcell man of the year

By Stewart MacInnis

Progressive Farmer magazine has named Virginia Tech Agricultural Economist Wayne Purcell as its Man of the Year in Service to Virginia Agriculture.

In its February edition, the major agricultural magazine cited Purcell's leadership in helping transform the nation's beef industry by making it more consumer-oriented than it was previously. The magazine said the industry's recent reversal of a long decline in market share can be traced to Purcell's efforts.

Also on the national scene, Purcell's applied research, especially in the area of pricing, price discovery, and demand shifts in the livestock economies of the mid-1980s led to him establishing the Research Institute on Livestock Pricing. He obtained nearly \$2 million in outside grants to fund research efforts and to pass findings on to those who could use it—producers, trade groups, and Congress. Purcell has become a much sought-after speaker in the United States and abroad. His weekly column on markets is distributed widely.

Purcell is an alumni distinguished professor in the Department of Agricultural and Applied Economics.

BIOLOGICAL

Continued from 4

For more information, contact Susan Anderson at 1-8041 or anderson@math.vt.edu. Persons with a disability who desire any assistive devices, services, or other accommodations to participate in this activity should contact Anderson at least one week before the event to discuss accommodations.

ASPIRES

Continued from 1

member who just received a \$375,000 National Science Foundation Faculty Early Career Development Program Award and a \$300,000 Office of Naval Research Young Investigator Award to study the design of advanced controls and control mechanisms for unmanned vehicles used under water and in space.

ASPIRES provided funds to build the water tank in his Laboratory for Control of Mechanical Systems, where he will do the experiments with his robotic vehicles.

For a listing of other recipients, in alphabetical order by the principal investigator's department, and the titles of the research projects, see *Electronic Spectrum* at <http://www.unirel.vt.edu/spectrum/>.

Since 1996, the university has invested more than \$8 million through the ASPIRES program.

DOE grant helps ICSRC develop on-line course

By Beth Bottom

The Institute for Connecting Science Research to the Classroom (ICSRC) at Virginia Tech has received a \$72,500 grant from the Virginia Department of Education to create an on-line course for K-12 school administrators. The course, entitled "Technology Standards for School Administrators—How Do I Get There," aims to sharpen school administrators' technology knowledge as it becomes a more integrated part of classroom instruction.

ICSRC Associate Director John Wenrich is developing the course, which will be available on line this fall at <http://www.pen.k12.va.us> to anyone in Virginia and is based on the Technology Standards for School Administrators established by the International

Society for Technology in Education.

"Principals and school administrators are extremely busy, yet they need to be up-to-date on many different areas in the K-12 arena. This is especially true when it comes to technology," Wenrich said. "This on-line course will be available as a self-paced instructional environment where these busy folks can learn on their own time as they need to do so."

The course is part of a new program called the Virginia Initiative for Technology and Administrative Leadership (VITAL), a statewide collaborative effort for improving technology leadership in the Virginia public-school system. As school leaders, administrators must acquire technology skills themselves to

model effective, sustained use of technology in their school systems. The VITAL training program, which is built on principles of adult learning and systems thinking, will prepare principals and superintendents to manage technology in helping students meet the Virginia Standards of Learning (SOL).

VITAL is comprised of representatives from Virginia Tech, the University of Virginia, the College of William and Mary, the Virginia Department of Education, the Office of the Secretary of Education, the Virginia Educational Technology Alliance, the Virginia Association of School Superintendents, the Virginia Association of Elementary School Principals and the Metiri Group.

West Indies student studying at university

By Leigh Ann Allgood,
University Relations intern

Maneuvering through snow and ice is something for which Paul Waldron's life had not prepared him before he came to Blacksburg.

"I am accustomed to sun and beaches, not ice and snow," said Waldron, a Barbados resident whose first taste of Virginia weather was a January snowstorm.

Waldron is an exchange student studying agricultural and applied economics during this semester. His courses will support his agricultural studies at the University of the West Indies (UWI).

Waldron studies at the St. Augustine

campus of UWI in Trinidad and Tobago because it is the only one of the university's campuses to offer a program in agriculture. His interests in agriculture are driven by a desire to contribute to his father's farm as well as to give him a grounding in business issues such as world trade, negotiations, and policies.

Many of the students at UWI study law, medicine, or engineering. Waldron is concerned that the agrarian society he once knew is gone. He hopes that studying agriculture at Virginia Tech will allow him to emphasize the importance of agriculture when he returns home.

"Virginia Tech has a beautiful campus, the people are very polite, and my professors are

very helpful as experts in their field," Waldron said.

The exchange program gives students the opportunity to study agriculture in an environment different from the one they are accustomed to, said John Crunkilton, associate director of academic programs in the College of Agriculture and Life Sciences. Students at Virginia Tech benefit from interaction with exchange students who come from other universities, but the greatest benefit is to the students who participate in the exchange program. "The true way to study another culture is to study and live in that culture," Crunkilton said.

Johnston says Roanoke's K-9 dogs need daily dental care

By April Spain,
University Relations intern

Sharon Johnston, one of Virginia-Maryland Regional College of Veterinary Medicine's licensed veterinary technicians, has been busy sharing with police officers at the Roanoke City Police Academy's K-9 school the message that dogs need dental care.

For the past three years, Johnston has been educating K-9 handlers at the Roanoke Police Academy on the importance of K-9 oral healthcare. Each year she makes two visits to the K-9 school where she conducts a presentation

explaining the anatomy of a dog's teeth and gums relating to the importance of preventative oral care and regular dental check ups.

Johnston said it is critical for the handlers to provide daily dental care for their dogs. If a dog's teeth are severely dirty and plaque-ridden, then their ability to taste and smell hinders their performance as a K-9 police dog. She told the officers, "If you're going to polish your guns every night, then you might as well polish your K-9's teeth, too."

MURRAY

Continued from 1

CEE Department Head William Knocke. "This is a most worthy recognition of the numerous ways in which Tom has made important contributions to the fields of structural engineering and vibrations."

Murray came to Virginia Tech in 1987 after 17 years on the faculty of the University of Oklahoma. He was among 74 U.S. members and seven foreign associates elected from all engineering disciplines to NAE membership in 2002. The NAE, an independent, non-profit institution, was established in 1964 under a congressional charter to provide national leadership and guidance on the application of engineering resources to vital issues. The academy has more than 2,000 members and foreign associates.

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

One full-time food-service position available.
CSS/Surgery Technician, 000480M, PB 2, VTH.
Development Associate, 001441S, PB 3, Engineering Development.
Fiscal Coordinator, 007938R, PB 3, Graduate School.
Housekeeping—Night Crew, 00002743H, PB 1, RDP.
Human-Resources Specialist, 007570D, PB 4, Personnel Services.
Laboratory Specialist, 002198M, PB 3, CVM.
Large-Animal Veterinary Technician, 001996M, PB 4, VTH.
Police Officer, 000285Y, PB 3, Police.
Radiologic Technologist, 002394M, PB 3, VTH.

Tv/Media Systems Engineer, 000196A, PB 4, VBS.
Web Designer, 007510A, PB 4, BEV.
Web Page Designer, 006626M, PB 3, Agriculture—AHNR IT.

PART TIME

Animal-Care Technician, W022563M, PB 1, VTH.
Animal-Care Technician, W022675M, PB 1, VTH.
Large-Animal Husbandry, W022155M, PB 1, VTH.
Office Services Assistant, W022875G, PB 2, Undergraduate Admissions.
Office Services Specialist, W023080G, PB 2, Graduate School.
Postal Assistant, W022844G, PB 2, Alumni Relations.
Program Support Technician, 004570M,

PB 3, CSES.
Radiologic Technologist, W022412M, PB 3, VTH.
Veterinary Technician, W023340M, PB 4, VTH.

OFF CAMPUS

Laboratory Specialist, 003969S, PB 3, CEE/Occoquan Lab.
Radio Announcer, W020800S, PB 3, UR/WVTF Radio.

FACULTY POSITION

NON-INSTRUCTIONAL

Department of Psychology. Postdoctoral Associate. Contact: H. Ollendick, 5088 Derring (0436). Review begins immediately.

Scientists to examine DNA of George Washington's trees

By Stewart MacInnis

The DNA collected from 13 trees at Mount Vernon, planted under George Washington's supervision, will be profiled and catalogued as the first step in the creation of a genetic database for specific ornamental trees.

While the human genome has been detailed in a world-wide effort by thousands of scientists, nothing similar has been done with trees, according to J. Dean Norton, director of horticulture at Mount Vernon. Norton has enlisted the aid of Virginia Tech and the USDA Forest Service's National Forest Genetic Electrophoresis Laboratory in Placerville, Calif., to use the Washington Trees as the beginning of in-depth research into the genetics of a number of important tree species.

The 13 Washington Trees, the only trees now living that are known to have been planted at Washington's direction, are seven American Holly, one Canadian Hemlock, two Tulip Poplar, two White Ash, and one White Mulberry. Samples collected from 17 other trees of the same species at Mount Vernon and the

surrounding area will also be evaluated in the project.

Norton contacted M.A. Saghai Maroof, a plant geneticist at Virginia Tech and an expert in the analysis of the DNA of plants, to help with the project.

"The genetic structure of plants are similar, but there are unique challenges in working with different types of plants," Saghai Maroof said. "My expertise is in discovering genes that provide disease resistance in agricultural crops. For this project, it was important to bring in a laboratory with the capacity and the expertise to deal with the DNA of trees." Saghai Maroof contacted the Forest Service laboratory.

Valerie Hipkins, director of the National Forest Genetic Electrophoresis Laboratory, said she was excited to be involved in the Washington Trees project.

"This facility provides molecular genetic information for the evaluation and protection of the genetic resource represented by our nation's trees," she said. "We will be doing DNA 'profiling,' which will be similar to the type of

work most people are familiar with in criminal cases, or paternity cases, and the like. With people there is a tremendous database of information, so we are able to match DNA to an individual with a great degree of accuracy. There is no similar database for trees. This to a very great extent is new; we'll be breaking new ground."

The 13 historically important trees are nearing the ends of their normal expected life spans. Last summer, cuttings were taken for rooting, and buds gathered for grafting from the trees to produce genetically identical clones. Once those duplicates are established, Mount Vernon will be able to plant them on the estate, preserving them for future use on the grounds and for other horticultural endeavors.

The genetic profiles determined by the Forest Service's laboratory will be used to authenticate clones of these historically important individual trees, ensuring they will be recognized and protected in the future, Norton said.

TECH

Continued from 1

gram in the College of Human Resources and Education moved up to fifth place in the rankings. The program had been ranked sixth among vocational/technical graduate specialties for the last five years, and a top-10 selection for eight straight years. The ranking was determined by surveys of and school superintendents as well as student selectivity, faculty resources and research activity.

"Faculty recognition, leadership, and scholarship helped contribute to this ranking along with graduate students who go out and be successful," said Betty Heath-Camp, program leader of the career and technical education program. "The distance master's program, which we started in 2001, has been a real positive for us as well."

Two graduate programs in the College of Arts and Sciences did well in the survey. Sedimentology/stratigraphy, a program in the Department of Geological Sciences, was ranked ninth. The applied mathematics program was ranked 33rd in a tie with Columbia University, Indiana University—Bloomington, Johns Hopkins University, Pennsylvania State University—University Park, and the University of California—Davis.

"We in the College of Arts and Sciences know from the many awards our science and mathematics programs receive, including multi-million-dollar grants from major funding agencies, that they are among the elite," said Lay Nam Chang, interim dean. "We are pleased to see that *U.S. News and World-Report* has placed our sedimentology/stratigraphy and our applied-mathematics programs in the top ranks."

"This year's rankings affirm what we have known all along—that our core area of engineering is strong and continues to get better," said Joseph Merola, interim dean of Graduate Studies. "We will need to build on that strength to become ranked in other areas. It is thrilling to see that we also ranked high in several specialty areas: sedimentology in geology, applied mathematics, career and technical education and industrial engineering."

U.S. News & World Report's graduate survey, published annually since 1987, uses objective data gathered from the surveyed schools plus ratings based on reputation. The survey is intended to provide prospective students with information about the nation's top graduate programs.

Grossman conducts Uganda workshop

By Sally Harris

Researchers, including Lawrence Grossman, a professor in the Department of Geography, are working on a variety of methods to reduce the use of pesticides in agriculture in developing countries.

"The use of pesticides in developing countries can create a variety of problems," Grossman said. "Improper application can cause harm to both people and the environment. In addition, pesticides are expensive for poor, small-scale farmers."

In pursuit of a remedy to the problem, Grossman obtained a grant to conduct a Geographic Information Systems (GIS) training workshop for agricultural scientists in Uganda in February. Andy Roberts, senior research associate in the Department of Entomology, helped present the workshop.

"The purpose of the workshop was to enhance the analytical and research capabilities of scientists working to reduce the use of pesticides," Grossman said. "In a GIS, researchers can assemble, store, manipulate, and analyze data and display graphically in the form of complex maps the relationships among a wide range of variables. A GIS can incorporate environmental factors, requires consideration of both the technical and socio-economic aspects of agriculture, and thus employment of GIS in such efforts is especially valuable."

Grossman obtained the grant for the workshop from the Integrated Pest Management Collaborative Research Support Program (IPM CRSP), which is managed by the Office of International Research and Development at Virginia Tech. The IPM CRSP is a USAID-supported research, education, and training partnership among U.S. institutions and institutions in developing countries. Its main goal is to improve the well-being of farmers in developing countries through the development and implementation of economically and environmentally sound crop-protection methods. Uganda is one of eight host countries worldwide involved in the IPM CRSP.

Makerere is the largest university in Uganda. The 16 workshop participants came from Makerere University, the National Agricultural Research Organization, the International Food Policy Research Institute, and the International Center for Research in Agroforestry. The GIS workshop was the largest ever held in Uganda, Grossman said.

Grossman's manual is already proving to be popular. The faculty of forestry and the Institute of Environment and Natural Resources at Makerere University and the National Environmental Management Agency in Uganda will use his manual for their future training efforts in GIS.

ALUMNI

Continued from 1

are now faculty members at Tech.

Doherty attributes the top-25 distinction to multiple factors, among them the university's focus on outreach and public service as reflected in the university motto "*Ut Prosim*" ("That I May Serve") and Virginia Tech's increasing emphasis in recent years on its study-abroad programs. "I suspect that, in part, this ranking reflects the impact of the university's Office of International Programs (UOIP), which has encouraged Peace Corps service and made it easier for students and faculty members to go abroad and experience other cultures," Doherty said.

Lyn Gray, interim director of UOIP and herself a former Peace Corps volunteer, said the number of Virginia Tech students studying abroad increased from 225 in 1994-95 to almost 900 in 2000-2001. Gray said the number of foreign universities involved with the university in bilateral student exchanges increased from 13 to 36 during the same period. In addition, UOIP administers an annual study-abroad fair and has won increases in financial aid for study-abroad students.

To reach the Peace Corps recruitment office, call 1-4266.

SERVICE RECOGNITION

Continued from 2

Hartson, Belinda D. Haynie, Louis A. Helfrich, Fred P. Herndon, Bradley R. Hertel, Mary L. Hill, John H. Hillison, Barbara W. Howlett, Vicki F. Hutchison, Steve A. Hypes, Barbara A. Johnson, Eric R. Johnson, Samuel M. Johnson, Ashton B. Jones, Louetta M. Jones, Claude C. Kenley, Sarah M. Kenley, James W. Knight, Robin E. Lafon, Kathy D. Lewis, Paul A. Linkous, Alice M. LoMascolo, Debra K. Lowe, Terry H. Martin, Thomas R. McAnge, Vanessa M. McCoy, Freddie S. McPherson, E. Gay Meredith, Luke W. Mo, Martha M. Moretz, Judith G. Morris, John J. Ney, Betty H. Parker, Mary Ann S. Phillips, William C. Phipps, Everett L. Price, Paula D. Relf, Richard C. Rich, Alfred L. Ritter, Paul L. Ruzsler, Steve J. Salmon, William R. Sevebeck, James D. Sheppard, Brian K. Srygley, Brian Storrie, Doris C. Trant, Bobby R. Vaught, J. Reese Voshell Jr., Sheila F. Walker, Terry M. Wildman, Susan E. Willard, Gail S. Williams, Michael Williams, Robert C. Williges, Carla G. Woods, John W. Worrell, Keith S. Yoder, Royce K.P. Zia, Richard E. Zody.

20-YEAR RECIPIENTS

Estrellitta S. Akers, Robert M. Akers, Larry D. Alexander, Donald C. Allison, Rodney A. Altizer, Patricia L. Angus, Pamela L. Arnold, Richard A. Ashley, Osman Balci, Gene G. Ball, Catherine L. Barker, Michael A. Barnes, Anton Baudoin, Thomas E. Bell, Susie F. Bergsten, Randall S. Billingsley, Sheila W. Blankenship, Rosemary Blieszner, Bruce T. Boling, Stephen J. Britt, Berline B. Brown, Mark O. Brown, Carol Burch-Brown, Norma J. Burke, Bennet G. Cassell, Carol F. Cornish, Linda S. Correll, Paul H. Davis, John E. Dooley, William C. Dougherty, Jeffrey S. Douglas, Ronald J. Dove, Lee H. Drowne, Elizabeth A. Dunnington, Wallace E. Easter, Csaba J. Egyhazy, Arthur R. Ekirch, Joan C. Elledge, Peggy L. Emory, Ludeman A. Eng, Kenneth A. Eriksson, Susan C. Eriksson, Debra A. Falls, Edward F. Fern, Brenda J. French, Laura H. French, Paulette P. Gardner, Thomas E. Gatewood, Parviz Ghandforoush, Janice P. Gibb, Bernard Grossman, Ronald W. Hamblin, Lucy L. Hanks, Brenda M. Harris, Cindy L. Harris, Debbie N. Hash, Sylvia L. Hathaway, Susan L. Herndon, Barry F. Heslep, Janine S. Hiller, Khidir W.

Hilu, Gary Wayne Hornbaker, Elizabeth C. Huffman, Michael W. Hyer, William W. Jennings, Janet M. Johnson, Scottie Avery Johnson, Linda D. Joyner, Dennis G. Kafura, Thomas W. Keenan, Nora J. Kirstein, Teresa M. Lambert, John C. Lee, Gregory S. Linkous, Warren R. Lipes, Y.A. Liu, Joseph R. Loferski, G.V. Loganathan, Timothy W. Luke, Stanley G. Martin, James M. Maxey, Stephen R. McCartney, Jettie E. McCoy, Edith A. McIntire, Gail M. McMillan, David F. Morris, Trevia A. Moses, Margie B. Murray, Joyce A. Nester, Wayne L. Neu, John T. Novak, David R. Orden, Robert A. Parsons, Douglas M. Patterson, Patsy G. Pelland, Julie A. Petruska, Douglas G. Pfeiffer, Arun G. Phadke, Patricia A. Polentz, Charles M. Price, Robert L. Pyle, Alice P. Quesenberry, Roland B. Quesenberry, Teresa O. Quesinberry, Kerry J. Redican, Charlotte A. Reed, William W. Richardson, Layne D. Ricketts, Evelyn M. Riley, Samuel G. Riley, Sandra Q. Ritter, Linda B. Robinson, Geoffrey K. Saunders, Lawrence N. Sewell, Llyn Sharp, Annie B. Shaw, Doris L. Shelor, Ruby J. Sheppard, Craig D. Shoulders, Judith L. Shrum, Timothy D. Shupe, Paul K. Siburt, Linda H. Sites, Mary J. Smart, Deborah B. Smith, Peter L. Smith, Philip L. Spellerberg, D. Phillip Sponenberg, Betty S. Stevers, Erik L. Stromberg, Katherine E. Sturgill, Daniel B. Taylor, Bonnie S. Tazewell, Mary E. Terry, William H. Turman, Katie B. Tyree, Rhonda L. Wagenbrenner, Mark L. Wahlberg, Sandra K. Ward, Elizabeth B. Watson, Fred G. Weaver, Dennis M. Welch, Kelvin O. Wells, Stephen K. White, Gary F. Whitley, William H. Whittle, Thomas F. Wieboldt, Beverly S. Williams, James V. Williams, Katherine T. Williams, Tamim Younos, Shepard M. Zedaker.

15 YEAR RECIPIENTS

Donna S. Abel, Dinah L. Akers, Morgan W. Allen, Laura W. Anderson, L. Jeannie Baker, Arlice K. Banks, Frank M. Beamer, Patricia T. Bennett, Carol Y. Bishop, Steven K. Boone, Richard A. Brock, Elizabeth Robertson Brown, Iris C. Bufka, Carol J. Burger, Randall D. Butt, Thomas Caceci, Deborah A. Carden, Valerie L. Cash, Jean M. Cobb, Mary Ann Cole, Richard W. Connors, David F. Cox, Carole L. Cramer, David L. Cruise, Cynthia D. Davis, Karsten Lars Davis, Cynthia S. Day, Brenda Y. Donaldson, James A. Doss, Ellen S. Douglas,

Shannon C. Dove, David Dugas, Judith L. Dumin, Angela Leigh Duncan, Evelyn L. Duncan, Gretchen S. Dunlop, Kathryn W. Dunn, Debra S. Duty, S. Kelcie Edwards, Galina Epelman, Gloria J. Faulkner, Stephen L. Fischer, Sandra M. Fisher, Annette D. Fluri, Drema B. Foster, Robert E. Foster, R. Mike Gentry, Harry W. Gibson, Pamela D. Gibson, Valerie L. Giddings, Helen P. Gleeson, Linda M. Goad, Richard M. Goff, Dong S. Ha, Johanna F.O. Hahn, Sandra K. Hancock, James M. Harris, Deborah A. Harvey, Leonard L. Hatfield, Conrad D. Heatwole, William R. Helsel, Robert W. Hendricks, Wanda Q. Hensley, Sookhan Ho, Kathryn C. Hollandsworth, Holly A. Hollinger, Patricia B. Hyer, James E. Johnson, Tammi W. Johnston, Timothy J. Kessinger, Christine Kiebuszinska, Terry D. Kingrea, David E. Knachel, C. Patrick Koelling, Paul J. Lancaster, Martha M. Larson, Timothy J. Larson, Karen G. Lautenschlager, Terry A. Lawrence, Jennifer L. Lindsey, Shirlene K. Long, David C. Lotts, Gerald H. Luttrell, Michele E. Marini, Jack J. Masella, Pamela G. McAlexander, James V. McCoy, Daniel W. McGlothlin, Douglas W. McGlothlin, David M. McKee, Almeda H. McKenney, David T. Mercier, Scott F. Midkiff, Minerva K. Miller, Patrick A. Miller, Mark R. Montgomery, Teresa H. Moody, Joan E. Moore, Joyce C. Moser, Amy B. Myers, M. Carole Nickerson, Brenda J. Oliver, Garland F. Oliver, Debra J. Osborne, Betty M. Owens, Ranson J. Pelt, Janette S. Perkins, Phoebe L. Peterson, Suzanne M. Piovano, Benjamin L. Poe, John F. Pollard, John S. Poole, Patricia A. Raun, Michael Renardy, Yuriko Renardy, Vivian W. Rich, Constance J. Roberts, Richard D. Robinson, Karen H. Rosen, Ahmad Safaai-Jazi, William H. Sanders, Carolyn L. Scaff, Alice A. Schneider, Donald L. Shaver, Peter K. Shires, Peggy J. Sifford, Susan E. Sink, Margaret A. Slusser, Brian D. Smith, Carmela H. Smith, Carolyn T. Smith, Timothy J. Smoot, George W. Spradlin, Sandra M. Stith, Matthew L. Swift, James M. Tanko, Donna L. Taylor, Nancy L. Templeman, George R. Terrell, Tony L. Thompson, Karen Torgersen, Robert J. Tracy, Jeffrey J. Trout, William Hugold Velander, Michael C. Vorster, Jefferson L. Waldon, Alfred L. Wicks, Deborah

B. Wiley-Vawter, Dale W. Wimberley, Thomas M. Wynn, David L. Young, Carl E. Zipper.

10-YEAR RECIPIENTS

Jane L. Abraham, Charlotte A. Amenkhienan, Lynnette D. Austin, Lois A. Baumgartner, Jay D. Beams, Mechelle L. Bennett-Stump, Michael J. Bliss, James A. Boley, Arleta L. Boyd, Wendy W. Brooks, Frederick A. Brugger, Stephen P. Butler, Brian J. Daily, Judith T. Davis, Ola E. Davis-Jones, Surajit K. De Datta, Cindy Lin Dillard, Sharon Donohue, Elva M. Douthat, Thomas G. Dunbar, Frederick K. Echols, Kimberly R. Edwards, Timothy B. Fisher-Poff, Laura Worley Fornash, Terry L. Gadd, Robert P. Gilles, Jerry W. Gilley, Cynthia W. Gochenour, Lawrence K. Harmon, Marcia A. Harrington, Steven E. Heckendorn, Elga M. Henley, Michael F. Hochella Jr., Paige W. Hogge, Douglas A. Holladay, Glen A. Holmes, Kevin J. Holshouser, Rebecca H. Howell, Diana W. Hundley, Donald E. Inman, Wendy R. Jacobson, Judith M. Jervis, Scott W. Johnson, Kathleen W. Jones, Mark R. Kidd, Ann G. Kilkelly, Brian M. Kleiner, Sean J. Kotz, Michael W. Lachance, Larry A. Lawrence, Frances C. Lemons, Edward F. Lener, Christine M. Link-Owens, Mary S. Linkous, Johnny R. Long, Amara Loulizi, Mary E. Mainous, Barbara S. Martin, Matthew P. McAllister, Mary L. McMurray, George R. McNeill, Malcolm J. McPherson, Deborah J. Milly, David O. Mitchem, Bryan K. Mosby, Brian R. Murphy, Lisa Norris, Leslie C. O'Brien, Cheryl A. Peed, William J. Phillips, Jr., Susan C. Piedmont-Palladino, Robert S. Pleasant, Aniene A. Porter, Alan L. Raflo, Charles A. Roatenberry, Joyce Rothschild, Korinn E. Saker, Wayne A. Scales, Ann E. Schneider, Heinrich Schnoedt, Teresa S. Sheppard, Gena R. Simmons, Karen S. Sloan, Clarence Adrian Smith, Stephen A. Smith, William E. Songer, L. Douglas Strickland, Lynne C. Swink, Deborah E. Tawney, Beverly P. Taylor, Mary E. Taylor, Nannie E. Taylor, Scot Thomas, Steven R. Thompson, Muzaffer Uysal, Eileen Morton Van Aken, Larry P. Vest, Gyorgyi Voros, Melanie E. Wall, Chun-Chen Wang, Hengjian Wang, You Xiong Wang, Susan M. Weddle, Brian D. Woerner, Irethia V. Wood, Kasella A. Zahn.

UNIVERSITY

Continued from 1

In addition to the regular duties of her administrative positions, she organized and currently coordinates a university-wide fundraising initiative to provide fellowships and endowments to support graduate education, established a mentoring program for faculty members of color and female faculty members, assumed responsibility for establishing partnerships with international universities to develop and implement collaborative programs of graduate education and research, and revived leadership-development efforts.

She also pushed Washington State to make more use of technology, which led to the development of on-line applications, electronic theses and dissertations, web and interactive videoconferencing, and the preparation and use of CD's in recruitment.

DePauw, who holds M.S. and Ph.D. degrees from California State University and Texas Woman's University, respectively, has focused her research and scholarship on the fields of disability sports and disability studies. She is a fellow in the American Academy of Kinesiology and Physical Education and in the North American Society for Health, Physical Education, Recreation, Sports, and Dance Professionals and a recipient of both the Distinguished Scholar Award and the

Distinguished Administrator Award from the National Association for Physical Education in Higher Education.

Merola is working with McNamee to assure a smooth transition. "While I will miss working with the fine people in the Graduate School, I am very excited about the role of senior fellow aiding the provost as we carry forward the plans for the restructuring of the university as well as the implementation of the strategic plan in general. I am proud of what we have been able to accomplish over the past 15 months in the Graduate School. Dr. DePauw brings a wealth of experience that will allow Virginia Tech to continue to show great progress in graduate education," Merola said.

McNamee praised Merola for his "wonderful progress working with the staff of the Graduate School to revitalize it as an organizational unit," and said that "Karen's decision to accept the position allows us to engage Joe's talents in a new role at the university."

McNamee expressed his appreciation to the search committee, which was chaired by Sue Magliaro, associate professor of teaching and learning.

PROMOTION

Continued from 3

Chesapeake City Office; Cynthia L. Gregg, VCE—Brunswick County; John A. Hamrick, VCE—Franklin County; Kevin C. Irvin, VCE—Amherst County; Bruce G. Jones, VCE—Pittsylvania County; Peggy L. Kellam, VCE—Northampton County; Ronald Sanderson, VCE—Campbell County; Thomas A. Stanley, VCE—Augusta County; Peter L. Warren, VCE—Albemarle County.

Administrative Promotion to Senior Extension Agent, Extra-Collegiate Faculty
James N. Belote, VCE—Accomack County; Charles R. Hoysa, VCE—Fauquier County; Flora I. Stewart, VCE—Buchanan County.

SHEEHAN

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Sheehan has also been an adjunct faculty member at the University of Maryland's University College and at the Northern Virginia Community College. He received his master's degree in computer science from George Mason University and his bachelor's degree from Colorado State University.

More than 2,400 graduate students are enrolled in more than 45 graduate degree programs offered at Virginia Tech's Northern Virginia Campus. For more information about the MIT program or other graduate programs offered at Virginia Tech, call 703/538-8300.

ACHIEVERS

Continued from 2

Technology in Lausanne, Switzerland, directing research and teaching efforts in several energy-related areas. He has worked in both the power utility and aerospace industries and is a principal contributor to the development of the fields of thermo-economics and environomics. ASME is non-profit educational and technical organization serving 125,000 members worldwide.

James Marchman, professor of aerospace and ocean engineering, is the editor of the *Encyclopedia of Flight*, published in February by Salem Press. The three-volume encyclopedia contains 332 articles providing information on topics ranging from aerodynamic principles and aircraft design to the use of aircraft in world conflicts and social issues in the contemporary airline industry.

Mario Karfakis, an associate professor of mining and minerals engineering (MinE), has received the President's Award from the International Society of Explosives Engineers (ISEE). Karfakis was recognized for his work in establishing a student chapter of ISEE at Virginia Tech and for his efforts in helping interested students find careers in the explosives industry. The student ISEE chapter is one of three mining-related organizations that comprise Virginia Tech's award-winning Burkhart Mining Society.

Pamplin associate dean selected for Japan management-study tour

By Sookhan Ho

Bob Sumichrast, associate dean for graduate and international programs in the Pamplin College of Business, has been selected to attend a study tour of Japan aimed at promoting understanding of Japanese management.

Sumichrast is among 13 faculty/administrators from U.S. members schools of the AACSB International (the Association to Advance Col-

legiate Schools of Business) who have been selected for the 10-day program in June, organized annually by AACSB and the Keizai Koho Center, a Japanese business organization.

Topics that will be covered in the program include structural changes of the Japanese economy, corporate reforms, technology, and traditions. Participants will meet and interact with Japanese business executives, academi-

cians, and government officials during visits to major corporations, government departments, universities, and cultural sites.

Members of the group are expected to submit a report on their experiences to the Keizai Koho Center. Sumichrast is among eight participants who will receive a scholarship to cover travel expenses.

The organizers note that although "Japan is recognized as a leading participant in the world economy and a major U.S. trading partner," few business schools focus detailed attention on Japan in their curricula and faculty research. "As part of the solution to global business problems, management educators must increase knowledge about Japan."

Novak, Love experiment with wastewater

By Karen Gilbert

A compact unit designed to treat wastewater in remote locations such as the countryside of Afghanistan is currently under its final stages of development. The design of this unit is part of a half-million-dollar Phase II Small Business Innovation Research (SBIR) project awarded to UDT Inc. of Manassas, and Virginia Tech by the U.S. Army. Virginia Tech serves as the academic partner for the project.

Virginia Tech's Environmental Engineering Laboratory has tested the unit's ability to remove sludge from water. Starting in June, the new unit will be given a trial run at the Highland Park pump station for about a month.

The compact unit is being designed so that it can be delivered to a site by helicopter for rapid response and then hooked up to outhouses, kitchens—basically wherever the people are creating wastewater.

If the new compact unit works, UTD will begin distributing it to the Army and then plans to sell it commercially, company President John Hill said.

Historically, biological treatment units and settling basins have needed long detention times to treat wastewater. This method is not feasible for remote locations. So as an alternative, UTD and Virginia Tech environmental-engineering researchers Novak and Nancy Love first experimented with using a fabric filter to remove wastewater solids. The problem was the fabric filter was too thick and it would have required too large a unit and complicated emission controls to burn the filters.

Instead, Virginia Tech and UTD are now developing stainless-steel screens and pressure filters for solids removal. These will be used in conjunction with biological treatment units where bacteria are used to degrade the waste using a fixed media, comprised of clay beads. Bacteria are grown on the beads which allows a high quantity of microbes to get into small spaces. Combining the stainless steel screens and the clay beads results in a very compact treatment unit that can treat 30,000 gallons per day of wastewater.

Using clay beads for wastewater treatment is a new technology that is currently used by the City of Roanoke. Novak and Love have prior experience with the use of the clay beads as they were involved in the testing of this technology in Dublin before it was used by Roanoke.

In war areas such as Afghanistan, wastewater commonly goes untreated. "This new unit is a great idea because right now there is untreated wastewater being discharged in these locations which is unsanitary and harmful to the environment," Novak said.

The unit can easily be operated in an ISO container, a large metal box that looks like a tractor-trailer frame. In addition to the application in war areas, the unit would be relatively economical for use in for emergency situations such as hurricane and earthquake disaster areas.

Management professor finalist for international award

By Sookhan Ho

Laura Poppo, assistant professor of management in the Pamplin College of Business, was one of three finalists for the academic category of the Outsourcing World Achievement Awards.

The awards were sponsored by PricewaterhouseCoopers, a provider of business process outsourcing services, and Michael F. Corbett and Associates, which offers outsourcing training programs and consulting for executives.

An independent panel of business and academic leaders selected three finalists for

each of four categories, which included "corporate providers," "corporate users and government executives," and "advisors, consultants, and analysts."

A release from the sponsors said that Poppo "is highly regarded for her consistent, objective research on outsourcing practices. For over 10 years, her work has tested and challenged theories on the selection and management of outsourced activities, most recently in the area of information technology."

Poppo, who received her Ph.D. from the Wharton School at the University of Pennsylvania, joined the Virginia Tech faculty in 1996.

Her research focuses on the managerial challenges to achieving effective performance from outsourcing, vertical integration, and alliances. She has taught strategic management to undergraduate and graduate students.

The finalists were selected from nearly 100 candidates from around the world who were nominated by their peers for "their achievements in advancing outsourcing as one of the most important business-management tools today." The winners were announced at an awards ceremony at the 2002 Outsourcing World Summit Conference and Exposition.

Four recreational fields under construction

By Ashley Tyler,
University Relations intern

Virginia Tech is constructing four new recreational fields on Tech Center Drive to accommodate the growing demand for field space on campus.

The new fields, located across from the Burrows/Burleson Tennis Center, will have lighting, a storage facility, restrooms, and a parking lot at a cost of \$1.52 million. Slated to be ready for use in the fall of 2002, the fields will be home to men's and women's club soccer, club lacrosse and club rugby as well as intramural soccer and flag football.

Slightly larger than the current South Recreational Fields, the new fields comprise a total of 23 acres. Each field is the size of a regulation soccer field, which will allow teams to play with standard goal and team sizes.

"Building these fields not only allows more intramural teams to participate in play, but will also replace the McComas field lost to the Athletic Department, and the field space lost to new building construction on Washington Street," Director of Recreational Sports Bill Campion said.

Virginia Tech has one of the most active intramural programs in the country, serving

more than 12,000 participants per year, making fields a coveted area on campus, Campion said.

"Two separate platforms were constructed on the area and each platform holds two fields. It is projected that up to five games can be played per platform, depending on usage," said Todd Shelton, project manager.

Since the project's start in July of 2001, the fields have been graded, seeded, and they have a water irrigation system in place. The design for the storage facility, restrooms, lighting and parking area is in progress.

***Staff Appreciation Day
is
May 15,
from 10 a.m. to 3 p.m.
in Rector Field house.***

MUSSELS

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and enforcement of those standards has dramatically reduced chronic water pollution. Elimination of chlorinated wastewater discharges into the Clinch River from sewage treatment plants by the department of Environmental Quality has removed this potentially lethal pollutants to downstream mussel populations in Virginia and Tennessee.

Neves' research is funded in part by grants from the National Fish and Wildlife Foundation, the Tennessee Wildlife Resource Agency, the Virginia Department of Game and Inland Fisheries, and U.S. Fish and Wildlife Service.

He also has received funding from the Virginia Agricultural Experiment Station and an SPIRES Research Grant from Virginia Tech, which are helping to fund a new facility in which he can expand his mussel propagation work.

Once the work is moved into the new building this spring, Neves hopes to produce about 100,000 juvenile mussels each year. Currently, he has only been able to average about 50,000 per year, depending on the availability of the species with which he is working.

"People are always talking about saving endangered species, but we need to start with what's in our own backyard," Neves said. "The Southeastern United States has the world's highest diversity of aquatic invertebrates, including mussels and snails. We need to concentrate on saving our own world-class fauna."

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