

# SPECTRUM

Virginia  
Tech  
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

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

VOLUME 26 NUMBER 8 FRIDAY, DECEMBER 5, 2003

## Commencement set for December 19; Brown, Rugaber to speak

By Mark Owczarski

The university will hold its Fall Commencement for graduate and undergraduate students Friday, Dec. 19 in Cassell Coliseum. The University Ceremony for undergraduate students will begin at 11 a.m. The Graduate School Ceremony will follow at 3 p.m.

President Charles W. Steger will preside over both ceremonies. It is expected that approximately 1,250 undergraduate students and 500 graduate students will participate in the two events.

Mathematics Professor Ezra "Bud" Brown, a member of the Virginia Tech faculty since 1969, will give the Commencement address at the undergraduate ceremony. Walter Rugaber, Virginia Tech presidential fellow and former president and publisher of

the *Roanoke Times*, will deliver the keynote address to graduate students.

At the undergraduate ceremony, Katie McCoy of Newark, Del., a senior majoring in communication in the College of Liberal Arts and Human Sciences and vice president of the

(See *COMMENCEMENT* on 2)

**Commencement Broadcast on Local Cable Channels**  
The University Undergraduate and Graduate Commencement ceremonies will be broadcast Friday, Dec. 19 on VT local cable Channel 2, and to the Blacksburg community on Adelphia Cable Channel 18. The broadcast will start a few minutes before the 11 a.m. and 3 p.m. start times so that processions can also be viewed.

By Mark Owczarski

Mathematics Professor Ezra A. "Bud" Brown and Walter Rugaber, Virginia Tech presidential fellow and former president and publisher of the *Roanoke Times*, will deliver the keynote addresses to graduating students during the university's Commencement ceremonies Friday, Dec. 19.

A native of New Orleans, Brown has a bachelor's degree from Rice University, and a master's degree and Ph.D. from Louisiana State University. A member of the Virginia Tech faculty since 1969, Brown has also been



BROWN



RUGABER

a visiting professor at the University of Munich, and in the last decade has done extensive mathematical work for the Department of Defense in Washington, D.C.

At Virginia Tech, Brown has taught 16 undergraduate and six graduate courses in mathematics, and 10 honors colloquia on such varied subjects as speculative fiction, problem solving, and the music of Duke Ellington. For six years, he was project director of the Emerging Scholars Program in Calculus, a supplemental-

(See *SPEAKERS* on 2)

## Professional Education Unit continues national accreditation status

By Jean Elliott

Following a meticulous review process, the Virginia Tech professional education unit has once again been accredited by the National Council for Teacher Accreditation (NCATE). The unit is defined as all programs that lead to initial or advanced licensure for teachers, administrators and school counselors. The professional education unit is situated within the new College of Liberal Arts and Human Sciences.

Institutions that gain NCATE accreditation meet national standards in areas such as design of curriculum, assessment of candidate performance, faculty qualifications, supervision of classroom experiences, and adequate and up-to-date resources. NCATE accreditation is based on results—results that demonstrate

that teacher candidates know the subject matter and can teach it effectively. It is a mechanism to ensure high-quality teacher preparation.

"The whole emphasis is on program quality," said Jerry Niles, dean of the College of Liberal Arts and Human Sciences. "Accreditation is the result of intense conversation on the national scene. Our education programs have once again passed a rigorous assessment-and-planning process."

Part of the accreditation includes assessment of students by an outside source. Educational Benchmarking (EBI) ranked Virginia Tech first in its peer group in six of 14 categories, including: (1) overall satisfaction; (2) quality of instruction; (3) administration services; (4) satisfaction with faculty and courses; (5) fellow students in program; and (6) research methods, professional development and societal

implications. Virginia Tech also averaged a higher mean than the means of all other institutions in every category.

"Virginia Tech is one of the best professional-education packages going," said Susan G. Magliaro, director of the Center for Teacher Education at Virginia Tech. "Our teacher-education students graduate with an undergraduate degree in a content area plus extensive practical field experience with a degree of readiness and responsibility for the enterprise. Feedback from principals of our graduates rate our program completers as mature and confident with a firm knowledge base with regard to SOL's."

One of the first universities in the nation to present its material electronically, Virginia Tech offered all information to the NCATE Board of Examiners in a totally on-line format,

(See *PROFESSIONAL* on 4)

## Jacobina to head new executive MBA program

By Sookhan Ho

The Pamplin College of Business has appointed Charles Jacobina, of Reston, executive director of its new executive MBA program, scheduled to begin in the Washington, D.C., area on Feb. 6, 2004.

Jacobina was previously at George Washington University's School of Business and Public Management, where he was a faculty member, and director/founder of the e-business program.

He has served the school in other capacities, including as director of external relations, director of the global business-alliance program, and director of the

(See *JACOBINA* on 4)

## Tech has links to first flight and 100th anniversary

By Clara B. Cox

When the world celebrates on December 17 the 100th anniversary of the flight of the first flying machine ever to take off from ground level and land under the control of its pilot, Virginia Tech will have its own reasons to celebrate that 1903 flight—and the three that followed on the same day—of Orville and Wilbur Wright.

Two university alumni, Kevin Kochersberger of Honeoye Falls, N.Y., who received a bachelor's degree, master's degree and a Ph.D. in mechanical engineering from the university in 1983, 1984, and 1994, respectively, and Terry Queijo of Trappe, Md., who earned her undergraduate degree in animal science in 1978, will take the place of Orville and Wilbur Wright, flying a reproduction of the brothers' four-cylinder, 600-pound glider in Kitty Hawk, N.C., where the first flight made history. The two alumni, who will be wearing period costumes, will flip a coin, much as the Wright brothers did,

to see who flies first.

In addition to its alumni playing lead roles in the re-enactment of the first flight, the Special Collections department in University Libraries will exhibit a piece of the actual fabric that covered the first successful airplane. The fabric, just under two square inches certified as original by the Orville Wright Estate, is part of the department's Michael Collins Collection. It was presented to Collins, who circled the moon while Neil Armstrong and Buzz Aldrin made their historic landing on the lunar surface, as a tribute to his achievements in space.

That fabric, sold under the name "Pride of the West" muslin, was purchased by the Wright brothers at Rikes department store in Dayton, Ohio, just a few blocks from their Wright Cycle Company building. Today that building houses, among other things, the office of Virginia Tech alumnus Leonard Simpson IV of Dayton, who received his master of architecture degree from the university in 1990.

Simpson, a preservation architect for the National Park Service, served as preservation specialist and construction manager for the Wright-Dunbar Interpretive Center, a museum that opened as part of the Dayton Aviation Heritage National Historical Park on June 25, 2003, as a precursor to the centennial celebration. Exhibits in the museum focus on the Wright brothers' printing and bicycle businesses, their family history and their association with poet Paul Laurence Dunbar. While Simpson was enrolled at Virginia Tech, he worked for a summer as a seasonal park ranger at the Wright Brothers National Memorial in Kitty Hawk.

Shortly after the December 17 anniversary, the "With Good Reason" public-radio program will examine the 100th anniversary and beyond, which will feature Jim Marchman, professor of aerospace and ocean engineering, discussing the future of aviation.

## International Strategic Directions Team begins work on plan

By Miriam Rich

A new university-wide working group, the International Strategic Directions Team, has begun developing an international programs strategic plan. The group will meet twice monthly through March 2004 to lead the university community through a process that will determine the place of international programs at the university.

The team, comprised of 22 members representing all university colleges, is charged with systematically guiding Virginia Tech to greater international engagement to achieve world-class status, a goal set by President Charles Steger in 2001. It will review the present state of internationalization at Virginia Tech, look at current research in the field, and determine whether it is enough to implement minor changes or time to initiate

(See *INTERNATIONAL* on 4)

# ACTIVITIES

## EVENTS

### Friday, 5

**YMCA International Gift Festival**, 9 a.m. to 7 p.m., Cranwell Center.  
**VTU**, 8 p.m., Burruss auditorium: Lonestar.

### Saturday, 6

**YMCA International Gift Festival**, 9 a.m. to 4 p.m., Cranwell Center.  
**Music Event**, 8 p.m., Squires Recital Salon: Chamber Music.

### Sunday, 7

**Music Event**, 3 p.m., Squires Recital Salon: Chamber Music.  
**Music Event**, 8 p.m., Squires Recital Salon: University Chamber Singers Concert.

### Tuesday, 9

**Faculty Senate**, 7 to 9 p.m., 32 Pamplin.

### Wednesday, 10

**Classes End.**  
**"With Good Reason,"** 7:30 p.m., WVTF.

### Thursday, 11

**Reading Day.**

### Friday, 12

**Exams Begin.**

### Monday, 15

**Music Event**, 7:30 p.m., Squires Recital Salon: Blacksburg Community Strings.

### Tuesday, 16

**Pay Date for Faculty and Staff Members.**

### Wednesday, 17

**"With Good Reason,"** 7:30 p.m., WVTF: Wright brothers' 100th anniversary, with Jim Marchman.

### Thursday, 18

**Exams End.**

**Staff Senate/Commission on Classified Staff Affairs Candidates Open Forum**, 11:30 a.m. to 1:30 p.m., Owens Banquet Room.

### Friday, 19

**International Graduation Reception**, 10 a.m., Cranwell Center.  
**Fall Commencement—University Ceremony**, 11 a.m., Cassell Coliseum.  
**Fall Commencement—Graduate School Ceremony**, 3 p.m., Cassell Coliseum.

## SEMINARS

### Friday, 5

**MCBB**, 12:20 to 1:10 p.m., Fralin auditorium: Debbie Nickerson, University of Washington School of Medicine.  
**MSE**, 3:30 p.m., 100 Hancock: Student presentations (TBA).

### Monday, 8

**Biochemistry**, 4 p.m., 223 Engel: Wayne Otten, NIH.

## BULLETINS

### Community of Science database available

Members of the university community interested in research funding and receiving personalized funding alerts now have access to Community of Science (COS) Inc.

Community of Science, which operates the largest and most-comprehensive research database on the web, is available to faculty members at no charge. Faculty members who enter their information in the Virginia Tech Expertise Database (VTED) at [www.research.vt.edu/vted](http://www.research.vt.edu/vted) can conduct targeted funding searches using the COS database. The COS database is comprehensive, and includes sources that fund research in education, social sciences, humanities and the arts, as well as scientific disciplines.

Additional information and answers to questions about setting up an account, updating a record, or problems with a password are available by contacting Larry Quisenberry, program-assessment coordinator, in the Office of the Vice Provost for Research at 1-5452 or by e-mail at [lquisenb@vt.edu](mailto:lquisenb@vt.edu). Also learn more at [www.cos.com/](http://www.cos.com/).

### Project Success Luncheon is December 10

The Center for Academic Enrichment and Excellence's Project Success Information Luncheon will be held on Wednesday, Dec. 10 from noon to 1 p.m. at the Alumni Hall in the Donaldson Brown Hotel and Conference Center.

The luncheon is aimed at providing current PS students and facilitators an opportunity to share their thoughts about Project Success with others in the hope of encouraging our guests to consider joining the program this spring as co-facilitators. It will also provide a chance for those interested in getting involved to ask questions about the program.

Those planning to attend should RSVP to [elaine@vt.edu](mailto:elaine@vt.edu) by Monday, Dec. 8.

### Library unit sponsoring holiday donation drive

The Circulation/Reserve/Storage unit in Newman Library is sponsoring a holiday donation drive to benefit the Montgomery County Emergency Assistance Program through December 18. Being collecting are non-perishable food items such as boxed dinners (macaroni and cheese, Hamburger Helper, Rice-a-Roni), canned meats (tuna, Treet, Spam), canned fruits and vegetables, dried beans, canned soups, spaghetti sauce and noodles/spaghetti, breakfast items (cereals, oatmeal, pop-tarts, breakfast bars) and food for the homeless (items with pop-top lids, food requiring no cooking, boxed drinks).

Donations are also being collected for personal necessities such as: deodorant, shampoo, toothpaste, toothbrushes, soap, razors, combs and brushes, laundry detergent, diapers, wet-ones, cleaning supplies, toilet paper and paper towels.

Donations may also include new or gently used gloves/mittens, winter hats/toboggans and scarves for adults and children.

Collection bins are in the Newman Library lobby and at the Circulation/Reserve Desk.

### Women's Month call for programs noted

The Women's Month Advisory Committee invites all departments and organizations to participate in Women's Month, March 2004. Departments and organizations may submit a program or event for inclusion in the Women's Month calendar by downloading a program-proposal form or submitting a proposal on line at the Women's Center web site <http://www.womenscenter.vt.edu/NewFiles/womensmonth.html>.

The deadline for submitting a program proposal is Friday, Dec. 19. For more information, e-mail [mcampos@vt.edu](mailto:mcampos@vt.edu) or call 1-7806.

### Offices closed for holidays

Due to the holiday schedule this year, the Office of the Vice Provost for Research and the Office of Sponsored Programs will be closed for business on December 29, 30, and 31. Combined with the holiday closings, the office will be closed at noon, December 24 and will re-open at 8 a.m. on January 5. Persons with proposals due the weeks of December 29 or the January 5 should contact their pre-award administrator as soon as possible.

### English-language refresher courses offered

The English Language Institute will offer two intensive English-language-skills refresher classes during the semester break, from January 5 to January 16. Designed for graduate students, post-doctoral fellows, visiting scholars, and members of the international research community, this two-week program will be held at the English Language Institute, 840 University City Blvd., Suite 2, in Blacksburg.

One class, the "Advanced Writing Laboratory," which will be held from 10 a.m. to noon, will assist students with their professional writing skills. The 1:30 to 3:30 p.m. class, "Pronunciation and Oral Presentation," will help participants increase their confidence in both their formal and informal speaking ability. Students may elect to take either or both courses. Fees are \$150 per class including textbooks and students must register by January 2. Classes with fewer than five students will be canceled. For more information, contact Judy Snoke at [eslsnoke@vt.edu](mailto:eslsnoke@vt.edu) or 1-6963.

### LGBF Caucus to meet

The Lesbian/Gay/Bisexual Faculty and Staff Caucus at Virginia Tech will meet at noon, Friday Dec. 12 at Sharkey's restaurant in downtown Blacksburg. For more information, contact [lgbcaucus@vt.edu](mailto:lgbcaucus@vt.edu) or call Carola Haas at 1-9269.

## SPEAKERS

*Continued from 1*

instruction program that was highly effective in increasing student success in the engineering-calculus sequence.

A devoted teacher, Brown has received the university's Diggs Teaching Scholar Award, the William E. Wine Award, and the G. Burke Johnston Award for Outstanding Teaching, and was inducted into the Academy of Teaching Excellence. He has chaired the Diggs Teaching Scholars and is immediate past chair of the Academy of Teaching Excellence.

Brown has published more than 50 research papers in several areas of mathematics, including number theory and discrete mathematics, and has an intense interest in discovering connections between apparently unrelated areas of mathematics. He enjoys working with students

who are engaged in research, and is a faculty advisor to Virginia Tech's student chapter of the Mathematical Association of America (MAA). He has received three national awards for excellence in expository writing and an award for outstanding teaching from the MAA.

After earning his degree from Northwestern University, Rugaber started his distinguished career in journalism with a stint at the Atlanta Journal in 1961, and then moved on to the *Detroit Free Press* and the *New York Times* in their Detroit, Atlanta and Washington D.C. bureaus.

In 1978 he became the executive editor of the Greensboro *Daily News & Record*, and in 1982 made the move to the *Roanoke Times* where he oversaw a staff of nearly 500, produced three Pulitzer Prize nominees, recorded three of the best financial years in the newspaper's history, and helped establish the

*Roanoke Times* as western Virginia's major newspaper. From 1995 to 1998, Rugaber served as president of the Landmark Publishing Group, parent company of the *Roanoke Times*.

In 2001, the *Roanoker Magazine* selected Rugaber as one of the Roanoke Valley's 50 most influential people. In addition to his professional achievements, he has been an advocate of the arts, serving as president of the Roanoke Symphony Society and supporter of the Mill Mountain Theatre. He served as chair of the Roanoke Valley United Way Campaign, served on the Board of the Center for Innovative Leadership, and was a trustee on the Hollins University Board, most recently serving as Hollins University's interim president from May 2001 to June 2002.

## COMMENCEMENT

*Continued from 1*

Class of 2004, will offer opening reflections to her fellow classmates. Nicole Reynolds of Stephenson, a senior majoring in biology in the College of Science and president of the Class of 2004, will address the class. Katie Weak's of Richmond, a senior majoring in human development in the College of Liberal Arts and Human Sciences, will offer closing reflections.

Neeraj "Jay" Khare, a doctoral student in chemical engineering and former chief justice of the graduate honor systems and Cunningham fellow, will deliver remarks to his classmates during the graduate ceremony.

Tickets are not required for either ceremony. Families and guests should plan to arrive early to be seated for the procession of students and faculty members.

## PERSONNEL SERVICES UPDATE

# Tax-Sheltered Annuity Limits for 2004 Announced

By Doug Martin

The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) changed several rules applicable to tax-sheltered annuities and the state deferred-compensation plan. In general, the following changes are applicable at this time: The contribution limits to the 403(b) tax-sheltered annuities and state 457 deferred-compensation plan will increase from \$12,000 to \$13,000 in 2004. An individual can now use both plans, which would permit an

individual to shelter 100 percent of salary up to at least \$13,000 in the 403(b) program and another \$13,000 into the 457 deferred-compensation plan. Participants who will be age 50 or over by Dec. 31, 2004, may make an additional contribution of \$3,000 in 2004 to their 403(b) tax shelter, thereby sheltering \$16,000 instead of the \$13,000 general limit. Individuals can now use the 457 deferred-compensation plan in addition to the traditional 403(b) tax-shelter program. The 457 deferred-compensation plan is administered by the Virginia Retirement System and the vendor is Great West.

Long-term (over 15 years) employees may be eligible for a catch-up provision that allows for an additional contribution of up to \$3,000 per year. Special calculations provided by employees' tax-shelter company are needed to determine eligibility for the special "catch-up" provision. Individual questions concerning tax-sheltered annuities or the state deferred-compensation plan may be addressed to Gloria Smith at [ggsmith@vt.edu](mailto:ggsmith@vt.edu) or 1-3441.

To make a change, which would be

effective with the first pay period in 2004, employees must submit a completed salary-reduction agreement form to Personnel Services by noon on Dec. 24, 2003. Access the form at [www.ps.vt.edu/forms/](http://www.ps.vt.edu/forms/); look under the alphabetical listing for the salary-reduction agreement for tax-shelter annuity and cash-match agreement. Mail the form to Personnel Services, 0318.

## Applications available for Multicultural Fellows Program

The Multicultural Fellows Program is an initiative designed to provide a formal mechanism for faculty members, administrators and staff members to contribute to the university's mission of fostering a welcoming community for all. There are many individuals throughout the university community who regularly contribute to multicultural and diversity programs. The Multicultural Fellows Program is a way to recognize and encourage these activities.

There are currently 16 individuals who were selected from the faculty, staff, and administration to officially serve the university as multicultural fellows. The fellows have had the opportunity to influence how the university addresses issues surrounding diversity and campus climate. The group meets monthly and is responsible

(See APPLICATION on 4)

## University Style Guide update available electronically

Virginia Tech's *University Style Guide*, which governs style for newsletters, magazines, news releases, and other public relations and recruiting publications, has been updated by University Relations and is now available on line at <http://www.unirel.vt.edu/style/styleguide.html>.

This guide supercedes the *Associated Press Style Guide* and the *Chicago Manual of Style*, which public relations and recruiting publications generally follow. It does not apply to academic writing or publications.

The style guide was developed to give university publications a consistent and professional look.

The choices made in the guide resulted from participation by members of the University Relations staff; consultation with various segments of the university; and consideration of the preferences, needs, and requirements of the university's several audiences.

Questions about style or the guide should be directed to university editor Richard Lovegrove at 231-9468 or [lovegrov@vt.edu](mailto:lovegrov@vt.edu).

## Virginia Tech Foundation granted sales, use-tax exemption status

The Virginia Tech Foundation, Inc. has been granted sales-and-use-tax-exemption status by the state Department of Taxation.

As of October 31, purchases of tangible personal property for use or consumption by university departments are exempt from sales tax. The exemption does not apply to sales, unless such sales are within the occasional-sale exemption defined by state code. Likewise, the exemption is not applicable to the purchases of taxable services, such as meals and lodging.

The foundation was established and continues solely to support the instructional, research and public-service programs of the university.

For more information concerning the exemption and what it means for departments, visit web site [vtf.vt@edu](mailto:vtf.vt@edu), or call Disbursements Staff Manager Deborah McGrady at 1-2853, or Supervisor Jessica Self at 1-2860.

The foundation was established and continues solely to support the instructional, research and public-service programs of the university.

## Equine medical Center gets \$30,000 in grants for labs

By Jeffrey S. Douglas

The Marion duPont Scott Equine Medical Center in Leesburg has been awarded a \$25,000 grant from Thoroughbred Charities of America and a \$5,000 grant from the Maryland Horse Industries Board to help construct and equip new laboratory facilities designed to support its growing equine research program.

The new facilities will encourage greater collaboration among faculty members and graduate students working at the Equine Medical Center, on the Virginia-Maryland Regional College of Veterinary Medicine's College Park, Maryland and Blacksburg, Virginia campuses, and at Virginia Tech's Middleburg Agricultural Research and Extension (MARE) Center on a broad range of equine health topics, according to Nathaniel A. White II, interim director of the Equine Medical Center.

"Virginia Tech President Charles Steger has set a goal for the university to be placed among the top-30 research institutions in the country by 2010," White said. "Equine Medical Center faculty members, working here at the center and in collaboration with colleagues on our other campuses, are a part of the process

(See EQUINE on 4)

## CORRECTION

In the page-one article announcing the death of Al Payne in the November 14 issue of *Spectrum*, the opening line was illegible. The line is re-printed here. We regret any confusion this may have caused.

Alfred C. Payne, former director of religious affairs, pastor, counselor, and friend to the Virginia Tech community for more than half a century, died Saturday, Nov. 8. He was 87.

## EMPLOYMENT

### CLASSIFIED POSITIONS

(Editor's note: Following is information on a new applicant-management system which is now in operation at the university. As a result of the new system being implemented, classified-employee listings will no longer be published in *Spectrum*.)

#### Notice to Applicants for Classified Positions

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

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

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

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

### FACULTY POSITIONS

#### INSTRUCTIONAL

**Human Development, Assistant Professor, Child/Adolescent Development.** Contact: Heather Webster, 0416.  
**Department of Mathematics. Assistant/Associate/Full Professor, Mathematics.** Contact: Jeffrey Borggaard, 0123.

#### NON-INSTRUCTIONAL

**College of Agriculture/Life Sciences. Associate Dean/Director of Virginia Cooperative Extension.** Contact: Sharon Quisenberry, 0402.

**Office of International Research, Education/Development. Office of Associate Provost. Assistant Director for International Support Services.** Contact: S.K. DeDatta, 0334.  
**Department of Wood Science/Forest Products. Research Associate in Non-timber Forest Products.** Contact: Department of Wood Science/Forest Products, 0323.  
**Center for Molecular Medicine and Infectious Diseases, College of Veterinary Medicine. Postdoctoral Cellular Immunology to *Francisella tularensis*.** Contact: Thomas J. Inzana, 0342.  
**VCE. Program Director, Smith Mt. Lake 4-H Educational Center.** Contact: Barry A. Garst, 0419.  
**VCE. Extension Agent, 4-H Development. Northumberland County.** Contact: Robert Ray Meadows, 0437.  
**VCE. Extension Agent (Restricted position), 4-H Development. Rockbridge County.** Contact: Robert Ray Meadows, 0437.  
**VCE. Extension Agent (Restricted position), 4-H Development. Roanoke City/County.** Contact: Robert Ray Meadows, 0437.  
**VCE. Extension Agent (Restricted position), Food, Nutrition/Health. Roanoke City/County.** Contact: Eleanor Schlenker, 0437.  
**VCE. Extension Agent (Restricted position), Food, Nutrition/Health. Albemarle County.** Contact: Eleanor Schlenker, 0437.  
**VCE. Extension Agent (Restricted position), Food, Nutrition/Health Page County.** Contact: Eleanor Schlenker, 0437.  
**VCE. Extension Agent (Restricted position), Food, Nutrition/Health. Stafford County.** Contact: Eleanor Schlenker, 0437.



VIRGINIA POLYTECHNIC INSTITUTE  
AND STATE UNIVERSITY

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## High-school students get Tech leadership

By Stewart MacInnis

Virginia Tech will lead the effort to enlist high-school students across the nation to help scientists unravel the secrets that plant scientists use as a model for genetic research.

The National Institutes of Health is providing \$1.3 million during the next five years as the university mobilizes high-school students to become researchers through the Partnership for Research and Education in Plants, or PREP. The program will be the critical bridge linking the needs of university-based scientists and the until-now latent potential of high-school science labs to provide answers concerning the roles played by the 25,500 genes of the "white mouse" of the plant world, *Arabidopsis thaliana*.

"The students will be doing a first-pass analysis," said Erin Dolan, outreach director for Virginia Tech's Fralin Biotechnology Center and the principal investigator for the project. "Their experiments will be repeated to confirm the results, but there is so much territory to cover that they will help scientists plot the direction of inquiry into the genome."

*Arabidopsis* has the distinction of being the first plant whose entire genome has been mapped. That map reveals the sequence and location of particular genes, but not necessarily what those genes do. Students involved in the PREP program will do the straightforward, though time-consuming, lab work to help generate that information, Dolan said.

What makes the partnership not only exciting but also very important is that scientists use *Arabidopsis* as a model to make predictions about other plants. Therefore, understanding the genetic instructions provided by specific genes in *Arabidopsis* can help scientists working on such projects as producing disease-resistant crops, plant-based pharmaceuticals, and other research involving a variety of plants.

"We think that students will become more involved in science when they see this project's connection to real-life research and the relevance of what they are doing in their school laboratory," Dolan said. "Even if this

doesn't make some students want to become scientists, it will provide them with an understanding of genomics and genetics. These are subjects every citizen has to make decisions about right now, through their choices as consumers and voters."

PREP began in Virginia high schools last year, and is expanding this year to involve as many as 2,000 high-school students. Dolan said efforts during the first year will focus on working out the procedures for experimental design and developing and testing related educational materials for the high schools.

Also in this initial period, the PREP web site will be expanded to provide information to students and scientists interested in the project, including laboratory protocols and discussion boards. It will also provide a mechanism for students to upload their results to a database that will be available to other students and scientists world-wide.

In PREP, scientists will provide wild-type and "knock-out" mutant seeds as well experimental know-how to the students. The "knock-out" seeds will have specific genes removed or inactivated. The students will then develop experiments that they hope will show the difference between the wild-type and mutant plants. Those differences should provide important clues concerning the function of the genes that were knocked out.

## INTERNATIONAL

Continued from 1

transformational change.

The group will seek special input from Virginia Tech stakeholders as it develops international program guidelines, which will be presented to Provost Mark McNamee. These recommendations will then be used to develop the next university-wide strategic plan.

At the kick-off meeting for the team, held October 14, Vice Provost for Outreach and International Affairs John Dooley presented an overview of the strategic-planning process. Dooley challenged the group to consider long-term horizons and large-scale change, to project a compelling vision of internationalization, and to make specific recommendations with measurable indicators for progress.

Committee members include Hassan Aref, dean of the College of Engineering; Diane Bell, visiting American Council on Education fellow; Kim Beisecker, director of the Cranwell International Center; James Blair, interim vice provost for research; Lay Nam Chang, dean of the College of Science; Ron Daniel, associate provost for undergraduate education and academic director of the Center for European Studies and Architecture; De Datta; Karen DePauw, vice provost for graduate studies; Jim Johnson, associate dean of the College of Natural Resources; Paul Knox, dean of the College of Architecture and Urban Studies; Chad Miller, economic-development specialist; George Norton, professor of agriculture and applied economics; Dan O'Brien, assistant program director for education abroad; Sharron Quisenberry, dean of the College of Agriculture and Life Sciences; John Randolph, director of the School of Public and International Affairs; Bob Schubert, associate dean of research and outreach in the College of Architecture and Urban Studies; Gerhardt Schurig, interim dean of the Virginia-Maryland College of Veterinary Medicine; Tarun Sen, associate dean of graduate and international programs in the Pamplin College of Business; Judith Shrum, associate professor of foreign languages and literatures; Dean Sutphin, associate dean of the College of Agriculture and Life Sciences; Josiah Tlou, professor in the Department of Teaching and Learning; and Larry Vaughan, research associate in OIRED.



THE TECH-TAMPA CONNECTION News of the university's new supercomputer has traveled far and wide, including this slightly different take on computer speed from a recent issue of the Tampa Tribune. (Reprinted by permission—Stayskal, Tampa Tribune)

## APPLICATIONS

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for the creation and continued publication of the *Virginia Tech Conductor* newsletter. This year there are 11 positions open for new fellows to join with the current members as seven fellows have moved or plan to move to alumni status.

The criteria for selection are a demonstrated commitment to diversity at Virginia Tech, a willingness to work as a part

of a team, time available to attend two-hour monthly meetings (currently 11 a.m. to 1 p.m. on Fridays; specific dates are determined based on availability of fellows); and an interest in developing projects that contribute to diversity and multiculturalism

Anyone interested in applying should complete an application and return it to Office of Multicultural Affairs, 332 Burruss, mail code 0176, by Monday, Dec. 15. Contact Alicia Cohen, [acohen@vt.edu](mailto:acohen@vt.edu), 1-1820, for an application.

## EQUINE

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that will achieve President Steger's vision. We are grateful to Thoroughbred Charities of America and the Maryland Horse Industry Board for their investment in this emerging area of emphasis for us."

The Equine Medical Center has made significant clinical-research contributions in the areas of colic and other gastrointestinal disorders, equine protozoal myelitis (EPM), surgery, lameness and cardiopulmonary function over the past 20 years, White said.

The centralized Northern Virginia location of the Equine Medical Center's equine-research laboratory will also facilitate collaboration with other private- and public-sector research groups interested in promoting the health and well being of horses in the Mid-Atlantic region and beyond, according to White.

More information is available at [www.equinemedicalcenter.net](http://www.equinemedicalcenter.net).

## JACOBINA

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accelerated MBA program. He has also worked in alumni relations and development.

As an assistant professor of marketing at George Washington, Jacobina received the Professor of the Year award for outstanding teaching. He taught e-marketing and commerce, strategic marketing, and health-care marketing and designed the first e-marketing course. The course was selected by Prometheus as the "Best Practice Course." He also has held adjunct faculty positions at several other business schools.

Jacobina has a doctorate in education and a master of arts in management from George Washington and a bachelor of arts from Findlay College.

As director of Pamplin's executive MBA program, he will promote and administer the program and recruit its students. He will address student needs, coordinate course offerings with faculty members and department heads, maintain relationships with corporations and governmental agencies, and develop strategic plans for the program's future growth. For more information on the program, visit web site [emba.cob.vt.edu](http://emba.cob.vt.edu).

The Pamplin College of Business offers undergraduate and graduate programs in accounting and information systems, business information technology, economics, finance, hospitality and tourism management, management, and marketing. The college emphasizes the development of leadership skills and ethical values and the integration of technology in the academic curriculum, and prepares students for global business challenges through faculty-led study-abroad programs.

## PROFESSIONAL

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data that literally used to fill crates in paper format. Its assessment is also available to the public at <http://www.clahs.vt.edu/NCATE/>.

"Having NCATE accreditation is a selling point for our program," Magliaro said. NCATE is the gold standard for professional-education programs. Virginia Tech has been NCATE-approved since 1973 and the latest accreditation is good for five years, with annual reports required over that time frame. "NCATE accreditation is a clear indicator that we pay close attention to program quality. As part of the accreditation process, the Center for Teacher Education, in close collaboration with faculty members in professional-education programs, our K-12 partners, and our students who collect an enormous amount of data provide evidence of our quality, and indicate areas for constant improvement. The accreditation process as a whole also provides a venue for us to be in conversation about what we do with our partners in the field."

The accreditation process not only prompts dialogue with regional school personnel but also promotes alliances throughout the entire university as the review includes one-on-one meetings with the university president, provost and fiscal agents as well as those members of departments with concentrations in teacher education. "Our university partners are crucial to our success," Magliaro said. "And, we take seriously our contribution to the overall reputation of Virginia Tech by our provision and stewardship of high-quality professional-preparation programs."