

SPECTRUM

Virginia
Tech
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

VOLUME 21 NUMBER 29 THURSDAY, APRIL 22, 1999

TODAY'S EDITION

See page 2 for
information on
campus activities.

Fund raising for scholarships begins

By Terry McGuire

With the university campaign fast approaching, staff and faculty members have the opportunity to back an initiative that will not only support Virginia Tech but the educational goals of their families as well. The opportunity will present itself on the campaign's gift card, which will list the Virginia Tech Staff and Faculty Dependent and Spouse Scholarship Program as a choice for gift designations.

The program had its genesis in the spring and summer of 1996 when the College of Agriculture and Life Sciences Staff Association brought the idea of a tuition-fee waiver for faculty and staff dependents and spouses to the Commission on Classified Staff Affairs. When a tuition-fee waiver was determined to be unfeasible, a task force formed by the commission turned to other faculty and

staff members and the alternative of a scholarship program.

A nine-member scholarship program committee, co-chaired by John Hess, department head of biochemistry and Tom McAvoy, senior laboratory specialist in entomology, was established. McAvoy and Hess were joined on the committee by Cindy Harrison, president of the Commission on Classified Staff Affairs and office manager in Risk Management; Betty Green, business manager in the College of Agriculture and Life Sciences; Jim Claus, associate professor of food science and technology; Terry Lawrence, graphic designer in the College of Veterinary Medicine; Tom Kaloupek, director of materials management in Purchasing; Dennis Eavey, human resources manager in Personnel; and Joe Boling, programmer in food science and technology.

The committee has fashioned a scholar-

ship program that will assist families of Virginia Tech full-time employees who face financial challenges enrolling their dependents and spouses full time at Virginia Tech. The program will also recognize and reward dependents and spouses who have demonstrated meritorious academic achievement. Scholarship funds will be equally divided between need- and merit-based awards for freshmen or entering transfer students.

"Over the next 12 months, we hope gifts from donors will allow us to begin awarding scholarships at the beginning of the 2000-2001 academic year," McAvoy said. "And we anticipate the university campaign will provide us with a great jump-start toward reaching that goal."

The committee hopes to award scholarships that will cover 25 percent of the

(See FUND RAISING on 4)

Board meeting scheduled for April 25, 26

By David Nutter

The Virginia Tech Board of Visitors will meet on campus Monday, April 26, beginning at 1 p.m. in Squires Brush Mountain Room.

The board will consider, among other business, the inclusion of an American-history requirement in the core curriculum, a proposed name change for the College of Forestry and Wildlife Resources, and the 2000-2006 Capital Outlay Budget. The board will also vote to appoint non-voting undergraduate and graduate-student representatives to the governing body for the coming academic year.

The committees of the board will meet at the following times and locations:

Academic Affairs will meet at 8:30 a.m. in the Donaldson Brown Hotel and Conference Center (DBHCC) Committee Room. Buildings and Grounds will meet in executive session at 8:30 a.m. in the DBHCC Boardroom. The open session will begin at 9 a.m. in DBHCC room A.

Finance and Audit will meet in executive session at 7:30 a.m. in the DBHCC Private Dining Room. The open session will follow at 8:30 a.m. in the Executive Conference Room.

Student Affairs will meet at 8:30 a.m. in DBHCC conference room C.

The board will meet for an information session on Sunday, April 25, beginning at 3 p.m.

Grad students receive VSGC support

By Susan Trulove

Ten Virginia Tech graduate students have received Virginia Space Grant Consortium (VSGC) research fellowships and seven undergraduates have received VSGC research scholarships totaling \$96,495 for 1999-2000. The VSGC also awarded three \$1,000 Teacher Education Scholarships for 1999-2000 to Virginia Tech students.

VSGC is a coalition of five Virginia colleges and universities, NASA, state educational agencies, Virginia's Center for Innovative Technology, and other institutions representing diverse aerospace-education and research interests. VSGC member institutions work together to ensure that the benefits of space research and technology are available to all in Virginia.

Each year, the VSGC awards scholarships and fellowships that provide students a mentored research experience with university faculty members or NASA personnel. Research awards are made to students pursuing any field with aerospace relevance, such as science, math, engineering, technology, and other less traditional disciplines where an aerospace connection can be made. More than \$225,000 is awarded annually with research award amounts ranging from \$4,000 to \$8,500.

"This is real research that broadens understanding and discovery in a number of fields," said Charles Bostian, director of the Center for Wireless Telecommunication, who is one of Virginia Tech's two representatives on the VSGC advisory council.

Graduate students who received fellowships are:

Bradley A. Banks, a master-of-science
(See GRAD STUDENTS on 4)

1999 STAFF APRECIATION DAY

Thursday, May 20

10 a.m.-3 p.m.

Rector Field House

Complete details provided in the April 29

Spectrum

Tech researcher investigates important fossil tree

By Susan Trulove

Consider the architecture of modern trees—the woody strength that builds in rings to support greater and greater height and weight, the protective bark that shields the cells that conduct water and nutrients from the earth to the farthest leaves, and the collars of extra wood that surround the bases of each branch and the way internal layers of wood dovetail at branch junctions to prevent breakage. It must have taken millions of years to evolve such a successful structure.

If it did, it happened about 360 million years ago.

Archaeopteris, an extinct tree that made up most of the forests across the earth in the Late Devonian period, had the same structure as modern trees, according to three scientists in the April 22 issue of *Nature* ("Archaeopteris is the earliest known modern tree," by Stephen E. Scheckler, associate professor of biology and geological sciences at Virginia Tech, Brigitte Meyer-Berthaud, and Jobst Wendt.).

After decades of operating with a model of what the tree looked like based on imprints of the leaves in fossil rocks and bits of fossilized wood, last year Meyer-Berthaud of the

Laboratoire de Paléobotanique Université Montpellier in France and Scheckler were able to examine hundreds of pieces of *Archaeopteris*



and study the evidence that the plant was the first modern tree.

Nearly a decade ago, Wendt, a paleontologist with the *Geologisch-Paläontologisches Institut* in Tübingen, Germany, was studying marine deposits in the Morocco Sahara desert, where he has been mapping marine rock forma-

tions for many years. While looking for connecting formations at a depth that would be from the Devonian period, he found logs that had been buried in ancient marine sediment that would have been hundreds of miles off the ancient coastline but were now exposed.

In 1991, Wendt reported his findings in a paper published in the *Journal Facies* and included photos of a 16-foot-long, four-to five-inch-diameter tree and a cross section of that tree.

The Paleozoic team of the *Institut de l'Evolution de Montpellier*, convinced Wendt of the importance of this finding, according to Meyer-Berthaud. In 1996, Wendt collected the trunk and a number of other specimens and took them to Germany. Meyer-Berthaud, who has studied *Archaeopteris* and other ancient plants for 20 years, was allowed to borrow these fossils from the Museum of Geology and Paleontology of the University of Tübingen.

"In a preliminary analysis, I recognized at least three different species in this assemblage," Meyer-Berthaud said. She presented her results in 1997, in a paper co-authored

(See TECH on 4)

ACTIVITIES

EVENTS

Thursday, 22

STS Thursday Discussion, 2 p.m., 132 Lane: Topic: TBA. Jean Miller.

Earth Day Speaker, 8:30 p.m., Squires Colonial Hall: "Environment, Population, Sustainable Growth: Where Do We Go from Here?" by Gaylord Nelson.

Friday, 23

International Club Coffee Hour, 5 p.m., Cranwell Center: "Human Pesticide Poisoning in Three Jamaican Farming Communities," by Tina Schlosser.

Student Recital, 8 p.m., Squires Recital Salon: Ian Lane.

Saturday, 24

YMCA Native American Program, 7 p.m., Squires Colonial Hall: Evening concert by Native American musicians Steve and Brooke Schiavi.

NRVS Concert, 8 p.m., Burruss auditorium: Spring Concert.

Sunday, 25

YMCA Hike, 1:30 p.m., meet in parking lot 403 Washington. St.: Laurel Creek.

Student Recital, 8 p.m., Squires Recital Salon: Brian Nozny.

Monday, 26

Math Awareness Month Speaker, 7:30 p.m., DBHCC: "Mathematics in the Life Sciences: Coping With Complexity," by John Tyson.

TAUT Workshop Production, 8 p.m., 204 Performing Arts Building: 21A.

Tuesday, 27

Faculty Senate Meeting, 7 p.m., 32 Pamplin.

TAUT Workshop Production, 8 p.m., 204 PAB: 21A.

Wednesday, 28

History Program, 4:30-6 p.m., 302 McBryde: "Survivors of the Middle Passage: Autobiographical Accounts of Enslaved

Africans in British America," by Jerome Handler, Virginia Foundation for the Humanities.

"With Good Reason," 7 p.m., WVTF: "Medicine for the Millennium."

Student Recital, 8 p.m., Squires Recital Salon: Amanda Meseke.

TAUT Workshop Production, 8 p.m., 204 PAB: 21A.

Thursday, 29

Presidential Forum, 8:30-11:30 a.m., Owens Banquet Hall: Presidential Forum on Campus Climate for Diversity.

Faculty Recital, 8 p.m., Blacksburg Presbyterian Church, Doris Lederer

SEMINARS

Thursday, 22

Physics, 3:30 p.m., 2030 Pamplin: "The Nature of Organic Molecules in the Interstellar Medium," by G.C. Sloan.

Statistics, 3:45 p.m., 409 Hutchison: "Robust and Nonparametric Methods for Topology Error Identification and Voltage Calibration in Power Systems Engineering," by Greg Steeno.

Entomology, 4 p.m., 220 Price: Graduate-student presentations, by Jessica Metzger and Sean Malone.

Geological Sciences, 4 p.m., 2044 Derring: "Physical Reasons for the Inherent Instability of the West Antarctic Ice Sheet," by Slawek Tulaczky, Kentucky.

Friday, 23

Highlands in Chemistry, 11 a.m., 3 Davidson: "Group Transfer Reactions Mediated by Rhenium and Imido Complexes," by Robert Toreki, Kentucky.

MCBB, noon, 102 Fralin: "Identification of Sperm Specific Marker Proteins for Use in Sperm Detection and Quantification," by John Herr, UVA.

Communication Studies, 3:30 p.m., Hillcrest honors conference room: "Banking and Bricolage: Hollywood and Nativism as Neocolonial Forces in Jean-Pierre Bekolo's *Aristotle's Plot*," by Elizabeth McMahon.

Publisher of Roanoke Times to speak on ethics

Walter Rugaber, president and publisher of the *Roanoke Times*, will give a talk, "Ethical Leadership in a Newly Competitive Media Environment," on Wednesday April 28, at 4 p.m., in 113 McBryde. Rugaber is the featured speaker in the annual Ethics Symposium organized by the Department of Management's Business Leadership Center. The talk is free and open to the public. A reception will follow in the atrium of Pamplin.

Rugaber, a native of Macon, Ga., graduated from Northwestern University in 1960. He was a reporter for the *Atlanta Journal* and the *Detroit Free Press* before joining the *New York Times* in 1965. He worked in the paper's bureaus in Detroit, Atlanta, and Washington D.C. He covered the civil-rights movement in the South, urban unrest in the North, major prison scandals, automobile safety and other consumer issues, various national campaigns, and Watergate. In Washington, Rugaber was also assistant news editor and deputy news editor.

He became executive editor of the Greensboro *Daily News and Record* in 1978 and was named president and publisher of the *Roanoke Times* in 1982. He served as president of the Landmark Publishing Group from 1995 to 1998.

Rugaber is a member of the Pulitzer Prize Board, which makes the annual awards in journalism and letters. He is also a trustee of Hollins University.

Forum to address Standards of Learning

A panel forum consisting of four of the top state and local education authorities will address Virginia's Standards of Learning (SoL) at WBRA-TV studios in Roanoke on Wednesday, April 28, from 6:30-8:30 p.m.

The hot topic will be evaluated Cheri Pierson Yecke, deputy secretary of education and former Allen appointee to

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the Virginia State Board of Education; Fred Morton, superintendent, Montgomery County Schools; Linda Fore, director of instruction, Bristol City Schools, and Lannie Cross, Virginia Tech Department of Educational Leadership and Policy Studies. Janet Johnson, dean of the College of Human Resources and Education at Tech, will be the panel moderator.

The format will consist of a five to six minute introductory statement by each panelist followed by questions and answers from the audience. The question-and-answer period will continue for another 30 minutes after the hour of taping, with a reception following.

The forum is part of a study by a faculty group in the Department of Teaching and Learning, which received a seed grant of \$5,000 to determine the SoL's impact on Virginia public schools. Michael Bentley, associate professor, is chair of the SoL Research Group.

The SoL Forum will be broadcast by WBRA Blue Ridge Public Television on May 2.

President's Forum addresses diversity

The Office of Multicultural Affairs will sponsor the President's Forum on Campus Climate for Diversity in the Owens Banquet hall on Thursday, April 29, from 8:30-11:30 a.m.

The program for faculty members will be a technology-based interactive discussion of issues related to improving the climate for teaching and learning at Virginia Tech. Space is limited, so an RSVP is requested to the OMA at 1-1820, or e-mail multicultural@vt.edu.

Diggs Awards announced

Ron Kander of materials science and engineering, Mark Schneider of architecture, and Brenda Winkel Shirley of

biology were selected to receive the 1999 Diggs Teaching Scholar award. They will be recognized for exceptional and continuing contributions at the Eighth Annual Diggs award ceremony in the Hillcrest Dining Room April 28, 4:30-6:30 p.m.

Each scholar will receive a plaque, and they and their departments will each receive a \$500 cash award.

The Diggs Program is dedicated to promoting excellence, imagination, and commitment in teaching and student learning. This fall the newest Diggs Teaching Scholars will lead a roundtable discussion relating to their recent work.

Twenty-eight teachers from seven different colleges were nominated, and the newest Diggs Teaching Scholars hail from three different colleges—a first for this award.

Mountaintop removal problems studied

Samuel R. Cook, an adjunct faculty member in the Center for Interdisciplinary Studies, will conduct a multimedia presentation on the social and environmental problems caused by the mountaintop-removal method of strip mining in Appalachia.

The program will be Wednesday, April 28, 7-9 p.m., in the Black Cultural Center in Squires.

Cook works with several concerned citizens groups, including the West Virginia Highlands Conservancy, the West Virginia Organizing Project, and the Ohio Valley Environmental Coalition.

This event is sponsored by the Appalachian Studies program.

Native American concert collects canned food

On Saturday, April 24, the YMCA Native American Program will feature a concert by Native American musicians Steve and Brooke Schiavi. The event will be at 7 p.m. in

Condensed Matter, 4 p.m., 304 Robeson: "Photovoltaic Cells Made From Organic Matter," by Raoul Schroeder, TU Graz, Austria.

Electrical/Computer Engineering, 4 p.m., 457 Whittemore: "Optimization of Aircraft Power Systems," by D. Lindner.

STS, 4-5:30 p.m., 132 Lane: "Forms of Knowing: Why Epistemology Needs Science," by Peter Machamer, Pitt.

Electrical/Computer Engineering, noon, 654 Whittemore: Topic and speaker TBA.

Economics, 3:30-5 p.m., 3001 Pamplin: "Hazards of Expropriation: Tenure Insecurity and Investment in Rural China," by Hanan Jacoby, World Bank.

CSES, 4 p.m., 232 Smyth: "Cropping Systems Research," by Mark Alley.

Horticulture, 4 p.m., 409 Saunders: "Nutrient Release Patterns of Three Controlled-Release Fertilizers," by Chad Husby.

STS, 4 p.m., 110 Randolph: "Climate Prospects for the 21st Century," by Bob Kandel, *Ecole Polytechnique*, Paris.

Wednesday, 28

Electrical/Computer Engineering, 4 p.m., 654 Whittemore: "Energy Analysis of Piezoelectric Structures Driven by Linear Amplifiers," by D. Leo.

STS, 4-5:30 p.m., 132 Lane: "Research Enabling Technologies: A History of Liquid Scintillation Counting, 1950-1970," by Hans-Jorg Rheinberger, Max Planck Institute.

Thursday, 29

Electrical/Computer Engineering, 4 p.m., 654 Whittemore: "FDTD Code Development and Experiences," by C. Buxton.

Entomology, 4 p.m., 220 Price: Grayson Award Winners.

Geological Sciences, 4 p.m., 2044 Derring: "Model Structures and Properties of the Electron Density Distributions of the Silica Polymorphs at Pressure," by G.V. Gibbs.

Squires Colonial Hall. Admission is free and canned food donations are welcome.

Center announces temporary closing

The Statistical Consulting Center will be closed from Friday, April 30 through Friday, May 21. Current clients who have been assigned to consultants should check with their consultant as to their availability during this time. The center will re-open on Monday, May 24.

Speaker looks at history as told by slaves

On Wednesday, April 28, from 4:30-6 p.m. Jerome

Handler of the Virginia Foundation for the Humanities will present a talk "Survivors of the Middle Passage: Autobiographical Accounts by Enslaved Africans in British America." The presentation will be held in 302 McBryde. The event is sponsored by the History Department, History Graduate Student Association, and Black Studies. The event is free and open to the public.

Third-graders to learn on campus

The Classical Studies program in Humanities in the Center for Interdisciplinary Studies will host the first annual Virginia Tech/Kipps Classics Day on April 27, from 9:30 a.m. to 2 p.m. in Squires.

The Classical Studies Program will bring to campus 80 third-graders from Kipps Elementary for a day-long event, focusing on ancient Greece and Rome. This day is one part of a three-pronged effort by Classical Studies to assist both teachers and students in their studies of ancient Greece and Rome, which is now part of the new Virginia Standards of Learning. The day will include sessions on the Latin and Greek languages, Greek and Roman mythology, an architectural scavenger hunt, and "Stories and Stuff," a display of Roman and Greek artifacts. Funding for the event comes from Humanities, Center for Interdisciplinary Studies, the Classical Studies Fund, and the Classical Association for the Middle West and South and its Committee for the Promotion of Latin.

EMPLOYMENT
CLASSIFIED POSITIONS

The following classified positions are currently available. More details of these positions, specific application procedures and position-closing dates may be found on the Personnel Services web site at <http://www.ps.vt.edu>. Available positions are also listed on the Job Line, a 24-hour recorded message service: Office/Clerical: 1-6196; Technical/Research: 1-6160; Service/Trades: 1-6176; Professional and Managerial: 1-4649; Information Technology: 1-2233. Some of the following positions include state benefits. Positions with numbers beginning with a "W" are hourly and do not include state benefits. Comments about this shortened listing should be made to perserv@vt.edu or by calling 1-5301 or 1-6258 for persons with hearing impairments. Individuals with disabilities desiring assistance or accommodation in the application process should call by the application deadline.

To better serve applicants, the closing date for advertised positions has been changed to 1 p.m. Monday unless otherwise stated. An EO/AA employer committed to diversity.

- Full Time**
Computer Systems Engineer, 7438J, Grade 14, Center For Power Electronics.
Computer Systems Engineer, 7440J, Grade 14, Center For Transportation Research.
Control Desk Attendant/Office Services Asst., 7335G, Grade 4, Recreational Sports.
Electrical Engineer, 7130P, Grade 12, Facilities Electrical Service.
Fiscal Assistant, 7437D, Grade 5, University Development.
Food Operations Assistant B (3rd Baker), 2986H, Grade 2, Residential and Dining Programs/Southgate Bakeshop.
Housekeeping Lead Worker/Special Projects Crew, 300H, Grade 2, Residential and Dining Programs.
Housekeeping Worker, 7261G, Grade 1, Recreational Sports.
Housekeeping Worker, 1076H, Grade 1,

- Residential and Dining Programs.
Information Technologies Audit Manager, 1735T, Grade 16, Internal Audit.
Laboratory Instrument Maker, 1196S, Grade 10, Engineering Science and Mechanics.
Licensing and Trademark Director (Business Manager B), LC055D, Grade 12, Trademark and Licensing.
Program Support Technician Senior, 4001S, Grade 7, Electrical Engineering (CPES).
Program Support Technician Senior, 7185T, Grade 7, Scholarships and Financial Aid.
Program Support Technician, 6948M, Grade 6, College of Agriculture and Life Sciences-Extension.
Programmer Analyst, 6990T, Grade 12, Budget and Financial Planning.
Programmer, 7405D, Grade 10, Administrative Information Systems.
Programmer, 7434D, Grade 10, Administrative Information Systems.
Programmer, 2256D, Grade 10, University Libraries.
Programmer/Analyst, 7433D, Grade 12, Administrative Information Systems—User Services.
Secretary Senior, 5674S, Grade 5, Biological

- Systems Engineering.
Senior Programmer Analyst, 6896D, Grade 14, Information Technology Acquisitions.
Senior Programmer/Analyst, 7328D, Grade 14, Administrative Information Systems.
Storekeeper Senior, LC016J, Grade 6, Athletics.
Television Systems Technician, 6920D, Grade 8, Media Services-VBS.
Part Time
Airport Line Service (Vehicle Svc Attendant), W020983T, Grade 3, Airport.
Animal Care Technician A, W022155M, Grade 3, Veterinary Teaching Hospital.
Electronic Technician Senior, W022588J, Grade 10, Engineering Science and Mechanics.
Fiscal Technician, W020810M, Grade 6, Veterinary Teaching Hospital.
Flight Instructor (Pilot), Airport, Grade W020691T.
Food Operations Assistant A, W022314H, Grade 1, Residential and Dining Programs.
Food Operations Assistant B, W022315H, Grade 2, Residential and Dining Programs.

- Human Resources Assistant**, W022652D, Grade 8, Personnel Services.
Office Services Specialist, W022663T, Grade 5, Computer Science.
Office Services Specialist, W022456T, Grade 5, Pamplin College of Business.
Pharmacy Supervisor, W022501M, Grade 15, Veterinary Teaching Hospital.
Program Support Technician, W022648G, Grade 6, Donaldson Brown Hotel and Conference Center.
Program Support Technician, 7413J, Grade 6, Research and Graduate Studies.
Programmer, W022504D, Grade 10, Communications Network Services.
Research Specialist, 4540M, Grade 8, Horticulture.
Trades Helper/Carpenter's Assistant, W020219H, Grade 4, Residential and Dining Programs/Facilities.
Off Campus
Agricultural Technician B, 3162M, Grade 5, College of Agriculture and Life Sciences.
Distance Learning Specialist, 7410D, Grade 12, Office of Distance Education.
Facilities Manager (Student Services Coord), 2097J, Grade 10, Northern Virginia Center.

FACULTY POSITIONS

NON-INSTRUCTIONAL
University Development. Director of Development for the College of Arts and Sciences. The director, working closely with the dean, senior administration, and faculty, will be responsible for planning and implementation of overall fund-raising efforts in support of current operations, endowment, and other capital purposes from all private sources. He/she will fulfill these duties under the direction of and in close cooperation with the university's central Development Office. BA/BS required, advanced degree(s) preferred. Related experience and an appreciation of the range of disciplines represented in a college of arts and sciences (arts, humanities, social sciences, math sciences, and natural and physical sciences) are required. Successful track record in fund raising highly desirable, preferably within a university setting. Willingness to travel regionally and nationally. Strong written, oral, organization, and interpersonal skills, capable of motivating volunteers as well as donors, strong self-motivation, the ability to work as a team member within a complex university, and the ability to choreograph as well as make the ask. Interested candidates should send a cover letter, resume, and names of five references to Nevin E. Kessler, Associate Vice President, University Development, 201 Pack Building (0336), Virginia Tech, Blacksburg VA 24061. Review of applications will begin immediately and continue until the position is filled.
Office of Judicial Affairs. Assistant Director. The assistant director reports to the director and works closely with other units of the division to maintain a developmentally appropriate and accountable system for managing student conduct issues. Assists the institution's chief judicial-affairs officer as directed to accomplish the following job functions: 1) Responsible for the administration of the University Policies for Student Life (UPSL) and the adjudication of alleged infractions of the Code of Student Conduct found therein.

Adjudicate cases and determine sanctions for students and organizations charged with violations of the Code of Student Conduct (CSC). 2) Select, train, and supervise the work of undergraduate, graduate, and professional student-affairs faculty members as hearing officers or panel members. 3) Counsel individual students (both alleged offenders and victims) regarding their rights and responsibilities. 4) Assist with the development, implementation, and monitoring of developmentally appropriate educational sanctions. 5) Conduct assessment which monitors student learning outcomes as a result of referral to the University Judicial System. Collect and analyze data and prepare reports. 6) Manage creation and maintenance of judicial records in keeping with applicable university policies and state/federal laws. 7) Develop and maintain appropriate manuals, forms, procedures, and reports for the judicial system. 8) Respond to alleged misuse of university computer-information systems. 9) Certify authorized disclosure of students' disciplinary histories to employers and professional schools within the applicable confines of federal privacy laws. Assist with the daily operation of the Office of Judicial Affairs: 1) Provide functional supervision for a full-time office manager, a half-time graduate assistant, and a practicum student. 2) Have thorough knowledge of applicable laws and regulations regarding student discipline, student records, victims' rights, and the adjudication of sexual harassment and sexual assault cases. 3) Foster positive working relationships with the Virginia Tech Police Department, Residential and Dining Programs, the Office of the University General Counsel, Leadership and Student Organization Programs/Greek Life, Counseling and Student Health, the Women's Center, Military Affairs/Corps of Cadets, Virginia Tech Athletics, the offices of the academic deans, and others who are

connected with student disciplinary matters on the campus. 4) Interact with parents, legal counsel, the news media, referral agents, and charged students. 5) Provide on-going outreach training and education for constituencies involved in judicial matters including residence life staff, the Inter Fraternity Council Judicial Board, and the Corps of Cadets Executive and Honor Committees. 6) Service on departmental, divisional, and university-wide committees. 7) Conduct information sessions (While You're Away). 8) Perform other duties as assigned. The assistant director must have a commitment to diversity and fostering social justice. Training or experience in the process of mediation is preferred. The assistant director should have a high degree of personal/professional integrity, respect for privacy and confidentiality, a sense of ethics, and a commitment to educating students. Salary range: \$25,000-\$28,000 with a full state benefits package. This is a twelve-month, full-time, administrative faculty position. Start date: July 10, 1999. Educational experience: Master's degree in higher educational administration, educational leadership, student personnel, or related field. Prior experience in judicial affairs will be required of the successful candidate. Application deadline: Preliminary screening of candidates will take place at ASJA, ACPA, and NASPA. To pre-arrange interviews at these conferences, candidates should submit a letter of application, resume, and names/contact information for three references to: Office of Judicial Affairs, 151E Henderson Hall (0277), Virginia Tech, Blacksburg VA 24061. Phone: 1-3790; fax: 1-3437; e-mail: judicial@vt.edu; <http://www.vt.edu>; <http://www.judicial.vt.edu>. Applications will be accepted until position is filled.



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Alumni tours offer travel opportunities

Virginia Tech faculty members expect students who leave Blacksburg to travel to distant lands and experience new cultures. However, most don't think they will be accompanying the students as they travel.

As interest in global travel grows, tours designed to appeal to Virginia Tech alumni are being hosted by Tech faculty members. In May, F. William Stephenson, dean of the College of Engineering, and his wife Sally will host the Alumni College in Great Britain. More than 50 alumni and friends will join President Paul

Torgersen and his wife Dot as their hosts on the upcoming Scandinavian Capitals and St. Petersburg cruise in June.

"It was a great experience," said Bob Bates, dean of the College of Arts and Sciences, describing an alumni tour last fall to Scotland that he and his wife, Wendy hosted for 37 alumni and friends of Virginia Tech. Bates is one of several deans who have accompanied alumni tours to all parts of the globe.

Andy Swiger, dean of the College of Agriculture and Life Sciences, and his wife

Mary accompanied a group of Virginia Tech alumni to Australia and New Zealand in November. "Being with Tech alumni and friends is a wonderful way to share new traveling experiences," said Bob Bailey, assistant director for the Alumni Association who, with his wife, Lynda, hosted a group to Austria last month.

For more information about alumni travel opportunities, call Laura Wedin at the Virginia Tech Alumni Association at 1-6285.

IN OTHER NEWS

Faculty Senate elects new officers

By John Ashby

The Faculty Senate elected two of its three new officers for the upcoming year at its first April meeting last week.

Elected president was Richard Bambach, professor of geological sciences. Vice president for the 1999-2000 year will be Mitzi Vernon, assistant professor of architecture. Senate officers expect the position of secretary to be filled at the last meeting of the semester on April 27.

Leon Geyer discussed the undergraduate honor system with senators at the meeting last week.

GRAD STUDENTS

Continued from 1

student in electrical and computer engineering, will do his fellowship research on the "Design of a Broadband Wireless Network Linking the International Space Station, High Altitude Long Endurance Aircraft, and Terrestrial Local Multipoint Distribution Service Sites."

Norman S. Broyles, a Ph.D. student in chemical engineering, will do his fellowship research on "Sizings and Their Effects on the Mechanical Performance of Pultruded Continuously Reinforced Carbon Fiber/Vinyl-Ester Composites."

Todd A. Bullions, a doctoral student in materials engineering and science, will do his fellowship research on "Moisture Sorption Effects On Carbon Fiber-Reinforced PhenylEthynyl-Terminated Ulem."

Bradley A. Davis, a Ph.D. student in electrical and computer engineering, will do his VSGC fellowship research on "Airborne Radar Waveform Returns From Foliage Covered Terrain."

Ronald A. DiFelice, a Ph.D. student in chemistry will do his fellowship research on "The Effects of Plasma Pretreatments and Polymerizations on the Titanium-Polyimide Joint."

Christopher A. Fannin, a Ph.D. student in mechanical engineering will do his VSGC fellowship research on "Some Analytical And Practical Considerations For Control of Thermoacoustic Instabilities."

Jennifer Marie McMurray, a Ph.D. student in engineering mechanics, will do her fellowship research on "Internally Pressurized Elliptical Composite Cylinders."

FUND RAISING

Continued from 1

university's tuition fee, or approximately \$1,000. At a minimum, McAvoy said, scholarships of \$500 will be awarded. A standing scholarship committee will decide annually how many scholarships will be granted, while the Office of Scholarships and Financial Aid will select qualifying students.

In the long run, Hess said "the program will be a real plus for the university community and put Virginia Tech on more equal footing with peer institutions."

For more information, access the program's web page at: <http://www.fst.vt.edu/vtsp>

Abaye recognized by CALS for teaching excellence

By Stewart MacInnis

Energy, compassion, and high expectations are among the attributes so successfully combined by Azenegashe Abaye that she has been awarded the 1999 Certificate of Teaching Excellence by the College of Agriculture and Life Sciences.

Abaye, an associate professor of crop and soil environmental sciences, will also become a member of the college's Academy of Teaching Excellence.

"She is obviously an aggressive 'self-starter' who in her lifetime of teaching will have a tremendously favorable impact on hundreds of agriculture students," said John R. Hall III, department head. "Part of her effectiveness with students derives from the characteristics of leadership that she displays to them, such as integrity, courage, loyalty,

endurance, understanding, enthusiasm, and bearing."

Abaye has a reputation among students for setting very high standards, and for doing all she can to help students meet those standards. She strives to build rapport and mutual trust with her students, Hall said.

Abaye said a key aim of her teaching effort is to transform students into active thinkers, problem solvers, and decision makers, as well as to impart knowledge to them.

"I enjoy teaching and feel that undergraduate teaching is the foundation of a great university," she said. "A teacher who has energy, enthusiasm, and dedication brings more than subject-matter to the classroom."

In addition to traditional lecture classes, she involves students in decision-case discussions, field trips, and group collaborations. The result is an environment in which students combine knowledge with practical, hands-on experience. She also brings her research and

Extension expertise in alternative crops to the classroom.

Abaye's teaching efforts have supported the college's two-year agricultural technology program as well as its undergraduate and graduate programs. She focuses on crop production and evaluation, forage-crop ecology, and using plant materials to clean up contaminated sites.

She has earned perfect 4.0 end-of-course student ratings in nearly half of the 27 courses she has taught and very high ratings on the other courses. She has developed two new courses, and she significantly revised three others.

In 1993 she established the Virginia Tech Crops Judging Team, and led it that year to a national first-place award for grain grading.

Abaye received her bachelor's degree from Wilson College in 1984, her master's degree from the Pennsylvania State University in 1986, and her Ph.D. from Virginia Tech in 1992. She joined the Virginia Tech faculty in 1992.

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with Wendt and Jean Galtier of Montpellier University in *Geological Magazine*, and at a conference of the Botanical Society of America held in Montreal. Scheckler was at that conference and proposed a collaboration on an international symposium on *Archaeopteris*.

The ancient tree and its relatives have been central to Scheckler's research for more than 30 years. In 1988, with support from the National Science Foundation, Scheckler went on a research sabbatical to work with Meyer-Berthaud and other scientists at *Université Montpellier* and they went with Wendt to Morocco.

"In three days, we filled a truck," Scheckler said. Looking for tree pieces with points of branching, the researchers gathered more than 150 pieces from three locations in the Mader Basin and Tafilalt Platform.

"It was the first time we had seen trunk branching on *Archaeopteris*, and we found hundreds of examples," he said. "And we found big roots, which had previously been mostly conjecture."

From cell details of slices of trunks, Meyer-Berthaud was able to show that these ancient trees also had lateral buds on their trunks and branches. "This was unique to *Archaeopteris*," Scheckler said. "It was the only plant at that time that could bud and continue growing after the main axis tip died; although seed plants now have that ability."

"The attachment of branches was the same as modern trees, with swelling at the branch base to form a strengthening collar and with internal layers of wood dovetailed to resist breaking," Scheckler said. "We had always thought this was modern—but it turns out that the first woody trees on earth had this exact same design."

Another unique feature of *Archaeopteris* while it dominated ancient forests was its long life. *Archaeopteris* was the first long-lived perennial. "Other plants ran out of ability to grow," Scheckler said. These trees could grow for 10 to 50 years or more. They had no apparent life span."

There are differences between *Archaeopteris* and modern trees, Scheckler said. *Archaeopteris* reproduced by releasing spores rather than by producing seeds. That is one of the reasons why paleobotanists suspect that today's trees come from a sister line of plants, the "progymnosperms." *Archaeopteris* is more like an ancient ant than a direct ancestor, but became extinct within a short period of time at the end of the Devonian age.

Before they left, though, *Archaeopteris* trees changed the world, Scheckler said.

The earth's atmosphere was changing rapidly, going from perhaps 10 percent to 1 percent CO₂ and from about 5 percent to 20 percent oxygen over a 50-million year period in the (late) Devonian period. All plants were responsible for the transformation, but *Archaeopteris* was important because it made up 90 percent of the forests during the last 15 million years when these changes accelerated, Scheckler said.

"Its litter fed the streams and was a major factor in the evolution of freshwater fishes, whose numbers and varieties exploded in that time, and influenced the evolution of other marine ecosystems. It was the first plant to produce an extensive root system, so it had a profound impact on soil chemistry. And once these ecosystem changes happened, they were changed for all time. It was a one-time thing. *Archaeopteris* made the world almost a modern world in terms of ecosystems that surround us now," Scheckler said.

Meyer-Berthaud and Scheckler are organizing a symposium on *Archaeopteris* for the International Botanical Congress in 1999.

