

SPECTRUM



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

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VOLUME 23 NUMBER 35 FRIDAY, JUNE 22, 2001

TODAY'S EDITION
See page 2 for new
Humanities Program
research award.

Blair named associate provost for research

By Susan Trulove

James Blair, head of biochemistry and molecular biology at Oklahoma State University, has been named associate provost for research and interdisciplinary programs at Virginia Tech, according to Len Peters, vice provost for research.

"Dr. Blair brings a wealth of administrative experience and a successful track record as a grant writer and researcher," Peters said. "Jim's chemistry and life-science background also enhances the expertise of the research administrative team."

Blair will begin his responsibilities at Virginia Tech August 1. He will oversee program development to help faculty members fund research, such as the ASPIRES program, which provides seed money for equipment and new research, the funding-opportunities web site, and collaboration resources, such as the expertise database, as well as interdisciplinary research centers.

For the past five years, Ken Reifsnider

has been associate provost for interdisciplinary programs and Gene Brown has been associate provost for program development, each working half time with the research division and within their academic departments.

"Ken and Gene have performed Herculean tasks to establish and nurture the many programs offered by the division to serve the university's research community, and also provide resources for students," Peters said. "Of course they weren't working 'half time.' They established a tremendous foundation of service, which I am confident will be continued and enhanced under the direction of a single skilled and imaginative administrator."

Blair said, "I am extremely honored and pleased to join the research team at Virginia Tech as associate provost for research. Virginia Tech has an excellent record in research at the national level. Activities over the coming years to further enhance research at the institution should be very exciting and I look forward to assisting in that endeavor."

Blair received his undergraduate degree in chemistry from West Virginia University in 1966, his Ph.D. in biochemistry from the University of Virginia in 1970, where he was a National Science Foundation (NSF) fellow. He was a National Institutes for Health (NIH) post-doctoral fellow at the University of Wisconsin's Institute of Enzyme Research. He joined the biochemistry department faculty at WVU in 1972, became associate chairman of the department in 1983, and then department head at OSU in 1990. He has also been a visiting professor at Meharry Medical College.

While at WVU, Blair earned the NIH Research Career Development Award, the Outstanding Teacher Award, and the WVU Valuable Friend of Minority Students Award.

His research interests are hormonal regulation of mammalian carbohydrate and lipid metabolism, protein structure and function, metabolism and toxic actions of drugs and environmental contaminants, and fish models

(See BLAIR on 2)

Provost's Office awards Student Success Grants

By Clara B. Cox

The Office of the Provost has awarded a total of approximately \$248,600 to 13 projects designed to help undergraduates succeed at Virginia Tech. This fifth round of Student Success grants includes some projects that received continued funding as well as many new initiatives.

"The number of applicants and the assessment data we've collected so far indicate that the Student Success grants are meeting a very critical need at the university," said David Ford, vice provost for academic affairs. "Many students enter Virginia Tech with what appear to be indicators for success such as high SAT scores and excellent high-school GPA's, but once they get here other factors hinder their success."

Ford said these factors include things like motivational and adjustment issues as well as study habits, social activities, and the inability to apply critical-thinking skills.

"This year's grant applicants took some very creative approaches to building programs that will help our students succeed," Ford said. "We will continue to collect and assess data from these projects to see how well they are working or if modifications need to be made."

The 2001-02 Student Success grant winners are Patricia Amateis, chemistry, for the project "Enhancing Student Success: Problem Solving Sessions in General Chemistry"; Susan Angle, Dean of Students Office, for "A Coaching Model for Students with Attention Deficit Disorder (ADD)"; Nicole Auer, University Libraries, "Information

(See PROVOST'S on 3)

University to share \$2.3-million NSF grant

By Sally Harris

Virginia Tech is one of eight universities that will share a \$2.3-million National Science Foundation (NSF) grant to develop infrastructure in social sciences.

This virtual collaboration will link research, software development, and web-based teaching techniques developed by members of the team and by others in related disciplines. Most of the principal investigators for the grant are already working together on related projects of social science and management applications. The research is focused on explaining actual behavior in laboratory and field situations. The grant is based at the University of Virginia's economics department.

Catherine Eckel, professor of economics at Virginia Tech, receives \$220,000 of the grant to develop a portable wireless laboratory for conducting experiments in classrooms and at remote sites. The group of investigators includes

economists, anthropologists, political scientists and others—a tight experimental community. Researchers from seven universities besides Virginia Tech—the University of Virginia, CalTech, Vanderbilt, Rice, William and Mary, Georgia State, and Harvard—will conduct different research projects under the grant.

One part of the grant proposal includes a library of programs for conducting interactive decision-making exercises that people from different disciplines can run on an Internet-based system from a server where all the programs will reside, she said. This will remedy the situation in which researchers at different locations and from different disciplines have to "start from scratch" each time they want to conduct an exercise because the software at each location does not cross platforms.

Several university groups will develop web-based interactive programs to teach a variety of concepts in economics and other disciplines. The programs are called experiments and are interactive situations in which the

participants' incentives depend on their own and others' actions.

Eckel and Rick Wilson of Rice University, for example, are studying a single social signal—facial expressions—to learn more about factors that influence interactions between people in situations such as negotiations or financial transactions.

A related project, undertaken by Eckel and a team of researchers at Virginia Tech, is designed to extend the educational use of these experiments to large classes. A great deal of research about active or participatory learning, Eckel said, shows that students retain more of the lesson if they are active in learning it. Active learning exercises enable students to apply their learning to new situations more easily, Eckel said.

For example, in a market game, students play the roles of buyers and sellers, and they can watch the bids and offers prices converge to the price predicted by supply and demand theory.

(See UNIVERSITY on 4)

Morris receives NSF CAREER Award

By Sally Harris

John R. Morris, assistant professor of chemistry at Virginia Tech, has received a 2001 National Science Foundation CAREER Award for \$502,000 over five years.

CAREER Awards are intended to encourage outstanding young researchers in their work. Morris earned the award with his research project on "Reaction Dynamics of Hydrogen Halides on OH-Functionalized Surfaces and Development of Guided-Inquiry Experiments for Analytical Chemistry."

This is work related to the chemical reactions that occur between acidic gas-phase molecules, such as hydrogen chloride (HCl),

and the surfaces of various water-coated materials. "This work is motivated by the scientific importance of building an understanding of interfacial chemistry and the relevance of these reactions to many areas of environmental importance," Morris said. Interfacial chemistry consists of reactions that occur at the boundary between two phases, such as gas and solid. The research is fundamental, designed to gain a basic understanding of the nature of atmospheric chemical reactions at interfaces, he said.

"The gas-surface reactions we are interested in play an important role in numerous processes such as the dissolution of pollutants

into water droplets to form acid rain, reactions on ice crystals found in the stratosphere that play a role in ozone destruction, and the co-adsorption of corrosive gases and water onto metallic materials," Morris said.

"In less than two years of employment at VT, John has custom designed and completed construction of a state-of-the-art molecular beam-scattering instrument that enables studies into the fundamental nature of gas-surface reactions," said Larry Taylor, head of the Department of Chemistry. "With the addition of John, we have developed a core of five faculty members who are actively pursuing fundamental

(See MORRIS on 4)

Affirmative-action projects address EOAA priorities

By Susan Trulove

Pat Hyer, associate provost for academic administration, has announced that the Office of the Provost has awarded 10 Affirmative Action Incentive Grants for 2001-2002 projects that address the university's EOAA priorities. "There were 35 proposals, which is the most I ever remember receiving," she said.

"The proposals contain many wonderful ideas and we are hopeful that they will lead to productive and interesting programs around campus," Hyer said. "The awards committee selected proposals for funding that were well developed, addressed university priorities, and that promised a wide impact."

Winning projects received between

(See EOAA on 3)

ACTIVITIES

EVENTS

Friday, 22

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

Sunday, 24

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

Monday, 25

Family/Work/Life Resources Program, noon to 1 p.m., DBHCC, conference room C.

Tuesday, 26

Art Gallery Opening, Perspective Gallery: Through 8-9.

Wednesday, 27

Orientation/Advising Preview, 8:30 a.m. to 3 p.m.,

Bowman Room, Jamerson.

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

Thursday, 28

Classes End.

Friday, 29

Exams Begin.

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

Saturday, 30

Exams End.

Sunday, 1

Summer Orientation Program Begins.

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

Monday, 2

Salary and Wage Paydate. Classes Begin.

Wednesday, 4

Independence Day Holiday for Faculty and Staff. "With Good Reason," 7 p.m., WVTF: Topic TBA.

Thursday, 5

Last Day to Add.

Friday, 6

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

JULY

Humanities Program announces new research award

By Sally Harris

The Humanities Program in the Center for Interdisciplinary Studies has announced a new award to be offered in addition to the already-existing Humanities Summer Stipend awards that it administers.

The new competition, called the Humanities Symposium Award, is designed to stimulate research in the humanities. The \$7,000 award is to be used by a faculty member to organize a major interdisciplinary symposium on an important humanistic issue. The first half of the award can be spent to buy release time for

one faculty member spring semester of 2002 to conduct a series of local seminars on the symposium topic with interested faculty members and students and to begin planning for the symposium to be held in the fall of 2002.

The second half of the award is to be spent to bring to Virginia Tech scholars from around the country who can address the issue from an interdisciplinary perspective during the symposium. The symposium should generate new research of publishable quality.

All faculty members in the College of Arts

and Sciences, including instructors, are eligible to apply for the award.

The already existing Humanities Summer Stipend competition offers a Virginia Tech-funded summer-stipend program with six Provost's Summer Stipend Scholar in the Humanities 2002 awards and four College of Arts and Sciences Summer Stipend Scholar in the Humanities 2002 awards. It also offers a federally funded summer stipend program administered by the National Endowment for the Humanities. The summer stipends are

available to those on campus who are pursuing humanities-oriented projects. All faculty members in the College of Arts and Sciences, including instructors, are eligible to apply.

All proposals for any of the awards mentioned above must be submitted to the main office of the Center for Interdisciplinary Studies in 122 Lane Hall by 5 p.m. Friday, Aug. 3.

For guidelines and proposal coversheets, contact Elizabeth Fine, director of the Humanities Program, by e-mail at bfine@vt.edu or by phone at 1-9593.

Tech's Zia receives Humboldt Research Award

By Sally Harris

Royce Zia uses a checkerboard to illustrate his physics research.

Zia, a professor of physics, recently won an Alexander von Humboldt Research Award for his work in the area of theoretical condensed-matter physics, a discipline devoted to the understanding of the cooperative behavior in systems with large numbers of constituent particles. The Alexander von Humboldt Foundation, located in Germany, grants up to 150 Research Awards annually to foreign scholars with internationally recognized academic qualifications. The award is a life-long tribute to the past academic accomplishments of award winners, who are invited to carry out research projects of their own choice in Germany in cooperation with German specialist colleagues for six months to one year.

Zia's main research topic is the study of the statistical mechanics of driven diffusive systems, a special class of physical systems far from thermal equilibrium. Typical systems consist of too many constituents to be described in detail, such as air molecules in a room. Nevertheless, thanks to statistical mechanics, many overall properties can be predicted. The goal is to understand how a variety of macroscopic states emerges from an ensemble of simple microscopic constituents.

"As we know," Zia said, "though ice, water, and steam have very different properties, all are results of just H₂O molecules subjected to very simple interactions. Another good instance is a collection of carbon atoms, which can form ash, graphite, diamond, and, more recently, Buckyballs and nanotubes." The impact of

cooperative behavior can be appreciated from examples far from physics.

Zia likes to use the analogy of a collection of children. "Even if the interaction between two children leads to well-behaved play, we can imagine the result of having 30 of them in a living room instead. On the other hand, a dramatically different state will ensue if we put the same set of kids in a football field."

The examples of H₂O molecules and carbon atoms noted above represent cooperative behavior in thermal equilibrium. By contrast, under conditions far from equilibrium, the same collection of particles can produce an even greater variety of states. The key difference lies in the presence of some form of energy flowing through non-equilibrium states. Examples range from physical patterns like snowflakes to the full biological gamut. Zia's research focuses on the question common in all these cases: How do complex macroscopic patterns emerge from a few simple dynamical rules governing the evolution of microscopic constituents? In search of an answer, he looks for the bare essentials needed to produce complex behavior, through the study of simple model systems that display rich and surprising phenomena.

Zia uses a checkerboard to illustrate one such model. Given a few of the red and black checkers arranged on the board and trying to move against each other, Zia imposes a few simple rules: A piece moves randomly forwards or sideways by single steps (provided the target square is empty), and, when pushed off the board, they can "wrap around" to come back up on the other side. If only a few checkers are present, they can manipulate their way around their opponents, he demonstrates, but when

more and more pieces are added, a new pattern emerges. They lose options for movement, forming clusters that grow to resemble clouds and, finally, crashing into a giant stalemate.

In addition to publishing in a wide range of professional journals, Zia is co-author of a book entitled *Statistical Mechanics of Driven Diffusive Systems*, published by Academic Press in 1995. He has been invited to give presentations and lectures at numerous conferences, workshops, and summer schools.

Zia has earned a number of other awards, including a Humboldt research fellowship, a research scholarship awarded by the Committee for Scholarly Communications with the People's Republic of China and U.S. National Academy of Sciences, and a Fulbright Travel Award. He has received Virginia Tech's certificate of teaching excellence twice.

Last year, Zia was invited to spend five months at the University of Essen in Germany as a scientist in residence and was able to devote all his time to research.

Zia collaborates closely with Beate Schmittmann and Uwe Täuber, both professors of the Virginia Tech physics department. This year, their projects involve four postdoctoral associates, six Ph.D. students one M.S. student, as well as two undergraduates. Their research is funded by grants from the Division of Material Research of the National Science Foundation, NATO, and the Jefferson Foundation. Two of the postdoctoral associates are supported by the German Research Council (DFG) and the Swiss National Science Foundation.

BLAIR

Continued from 1

for chemical carcinogenesis and tumor promotion. He has numerous publications, and has given many invited scientific presentations, has served on national research review panels, including many NIH site visits and done peer review and consulting.

Four recent research projects are two Howard Hughes Medical Institute-funded projects—the \$1-million "Oklahoma Partners for Biological Sciences" project and the \$1.5-million "Retention of Students in Biological Sciences at OSU," both of which Blair is program director; the \$2.5-million "Oklahoma Biotechnology Network," funded by the NSF Experimental Program to Stimulate Competitive Research (EPSCoR), on which he is co-principal investigator and program director; and the \$1-million NIH "Opportunities for Minorities in Biomedical Research at Oklahoma State University," for which Blair was the principal investigator.

He also has been teaching two undergraduate courses in biochemistry.

Administrative service at WVU included the executive councils of the medical school and the dental school, and the Institutional Animal Care and Use Committee. At OSU, he was on the administrative executive committee of the Division of Agricultural Sciences and Natural Resources, the university-wide academic review committee, and the human institutional review board. He was network program leader of Oklahoma NSF EPSCoR biotechnology and on the Health Research Committee of the Oklahoma Center for the Advancement of Science and Technology.

EMPLOYMENT

CLASSIFIED POSITIONS

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

FULL TIME

Three full-time food-service positions available.

Accountant, 004526F, Pay Band 4, Controller's Office.

Assistant Manager, 000514H, Pay Band 3, RDP/Owens Food Court.

Bakers Assistant, 000704H, Pay Band 1, RDP/Deet's Place.

Chapel Manager, 000482J, Pay Band 3, UUSA.

Dishroom Supervisor, 002988H, Pay Band 1, RDP/West End Market.

Equipment Room Storekeeper, 007333J, Pay Band 2, Recreational Sports.

Housekeeping Assistant Supervisor, 000552H, Pay Band 1, RDP/Owens Dining Center.

Housekeeping Worker, 000268H, Pay Band 1, RDP.

Instructional Technology Systems Integrator, 007766S, Pay Band 6, Educational Technologies.

Internet Application Administrator, 001385S, Pay Band 5, WARD.

Laboratory Mechanical Assistant, 000467M, Pay Band 4, BSE.

Laboratory Specialist, 007707B, Pay Band 3, CE.

Laboratory Specialist, 007245M, Pay Band 3, Biochemistry.

Laboratory Specialist Advanced,

007735M, Pay Band 4, BSE.
Office Services Specialist, 001286F, Pay Band 2, Purchasing.

Office Services Specialist, 002084M, Pay Band 2, Veterinary Medicine.

Office Specialist, 000242H, Pay Band 2, RDP/Culinary Services Administration.

Office Specialist, 002712H, Pay Band 2, RDP/Dietrick Dining Center.

Photography Manager, 002415S, Pay Band 5, University Relations/Visual/Broadcast Communications.

Program Support Technician, 002718R, Pay Band 3, Personnel Services.

Program Support Technician, 007143J, Pay Band 3, Hospitality/Tourism Management.

Programmer Analyst, 001643F, Pay Band 5, Budget/Financial Planning.

Roofer, 007563Y, Pay Band 3, Physical Plant.

Shopleader, 007125H, Pay Band 1, RDP/Cochrane Dining Center.

Sous Chef, 000940H, Pay Band 3, RDP/Southgate Bake Shop.

PART TIME

Animal Care Technician, W020066M, Pay Band 2, Veterinary Teaching Hospital.

Development Research Information Assistant, W023260S, Pay Band 2, University Development.

Fiscal Assistant, W020810M, Pay Band 2, Veterinary Teaching Hospital.

Large Animal Imaging Restraint Technician, W023213M, Pay Band 1, Veterinary Teaching Hospital.

Night Auditor/Conference Tech, W023257Y, Pay Band 2, DBHCC.

Office Services Assistant, W022346Y, Pay Band 2, Public Service Programs.

Office Services Assistant, W022499S, Pay Band 2, Test Scoring.

Office Services Assistant, W022459C, Pay Band 2, Personnel Services.

Office Services Specialist, W023259S, Pay Band 2, Mathematics.

Pharmacist (Relief), W022501M, Pay Band 6, Veterinary Teaching Hospital.

Vehicle Services Attendant, W023000Y, Pay Band 1, Motor Pool.

Visual Resources Curator, W022616S, Pay Band 3, Art/Art History.

OFF CAMPUS

Computer Help Desk Analyst, 007725R, Pay Band 4, Northern Virginia Center.

Food Service Manager, 006367M, Pay Band 3, Northern Virginia 4-H Center.

Operating Room Technician, 000542M, Pay Band 2, Veterinary Medicine/Equine Medical Center.

Radio Announcer, W020800L, Pay Band 3, University Relations/WVTF Radio.
Secretary Senior, 002089R, Pay Band 2, Northern Virginia Center.

FACULTY POSITIONS

INSTRUCTIONAL

Foreign Languages/Literatures. Instructors. Contact: Judith Shrum, 331 Major Williams (0225). Review begins immediately.

Large Animal Clinical Sciences. Clinical Instructor, Large Animal Surgery. Contact: Craig Thatcher, College of Veterinary Medicine (0442). Review begins Oct. 1.

NON-INSTRUCTIONAL

Center for High Performance Manufacturing/Industrial/Systems Engineering. Research Assistant/Associate/Full Professor. Contact: Frank Chen, 103 Durham (0118). Open until filled.

Institute for Distance/Distributed Learning. Instructional Designer/Developer for On-line Learning. Contact: Sherri Williams, 3046 Torgersen (0445). Open until filled.

EOAA

Continued from 1

\$1,000 and \$2,500. The projects, individuals involved, and a brief explanation of each project follow:

"The Effectiveness of Continuous Speech Recognition in Supporting the Written Composition of Postsecondary Students With Learning Disabilities," by Richard C. Snider of educational leadership and policy studies and Bill Holbach and Hal Brackett of EOAA. The study will compare the effectiveness of speech-recognition software to the use of transcribers for students with learning disabilities who need accommodation assistance with composition.

"Building Bridges," by Joan Hirt and David Alexander, educational leadership and policy studies; Landrum L. Cross, vice president for Student Affairs; and Sara Beth Keough, president of the Association for Student Development. The project will establish contact with students at historically black colleges and universities who are interested in pursuing graduate work. The program will also contact staff members on campuses with large numbers of minority students who refer those students to graduate programs.

"An Open House Program for the Recruitment and Retention of High School Seniors Considering the College of Architecture and Urban Studies," by Max Stephenson of the College of Architecture and Urban Studies and Elizabeth Gilbo, director of the Community Design Assistance Center. The college will invite students who have been admitted to Virginia Tech and the college, but who have not yet accepted. Prospective students and their families will be given tours, provided with information about both university and college opportunities.

"Awareness Workshop for Faculty and Staff," by Tom McAvoy of the entomology department and Susan Trulove of University Relations. Awareness committee members are creating a videotape and training materials based on issues and concerns related to the climate for diversity as expressed by members of the Virginia Tech community. These tools will provide a springboard for dialogue to increase understanding of diversity issues. During the coming year, the project will complete the video and training materials and conduct training for faculty and staff facilitators.

"The Experience of International Graduate Students at Virginia Tech and Cross-Cultural Conversations," by Kim V. Beisecker of the Cranwell International Center. Funds will support two projects. The first will gather information that focuses on creating a more welcoming climate for international students and workers as they transition to their new home at Virginia Tech. The second project will provide students, scholars, and researchers regular opportunities to meet and converse in small groups to improve the verbal language skills and cultural understanding.

"Yes! Let's Go to College," by Kay Castagnoli of chemistry and Lay Nam Chang of physics. An eight-day intensive course will expose outstanding high-school sophomores and juniors to a variety of science disciplines in a summer residential program at Virginia Tech. The participants will be students from a college-preparatory school in Houston.

"The Science, Math, and Technology Academy: Virginia Tech Campus Residential Experience," by Lisa Schabenberger of the College of Natural Resources; Barbara Bunn, chemistry; and Laurence D. Moore, Minority Academic Opportunities Program. The project will introduce Virginia Tech academic programs to students from under-represented groups in grades 8-12 in Richmond. The schools are members of the Science, Mathematics, and Technology Academy, which encourages students to master science, mathematics, and technology concepts and skills to pursue undergraduate and graduate degrees in these areas. Students will participate in course work at the University of Richmond and a summer residential experience at Virginia Tech.

"Student Dialogue on Racial and Ethnic Tensions," by Larkin Dudley of the Center for Public Administration and Policy; R. Dave Lamie, Rural Community Economic Development; and Eric G. Williams, educational leadership and policy studies. This project will promote deliberative dialogue on issues of racial and ethnic tensions among Virginia Tech students using materials and a format developed by the Kettering Foundation.

"Women-in-Engineering Learning Community," by Beville Watford and Keri Danna-Lin of the Minority Engineering Programs. Increasing the retention rate of women students in the College of Engineering is the objective of this project, which involves the creation of a residential learning community and special programming.

The Virginia Tech/Virginia Indian Nations Pre-College Initiative, by Sam Cook, coordinator of American Indian Studies, and Myra Gordon, College of Arts and Sciences. The project initiates a long-term effort to recruit American Indian undergraduates. Fifteen students (grades 8-12), their parents, and an elder representative from each of the eight state-recognized Indian nations in Virginia will be invited to participate in a pre-college initiative. Participants will be involved in designing an on-going program to maintain contact with current student mentors, and to visit campus periodically.

Grant applications for the next round will be due in early April. For more information, contact Hyer at hyerp@vt.edu.

PROVOST'S

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Skills Peer Advisory Project: An Instruction Initiative of the University Libraries"; Kim Beisecker, Cranwell International Center, "The International Bridge: Enhancing the Academic Success of Undergraduate International Students"; Jennifer Calhoun, judicial affairs, "Development and Implementation of an Integrity Seminar for Judicial Offenders"; Joe Cowles, biology, "Biological and Life Sciences Learning Community"; Keri Danna-Link, College of Engineering, "Peer Mentoring Programs" and "Women in Engineering Learning Community"; Elaine Humphrey, Center for Academic Enrichment and Excellence, "Project Success: Supporting Virginia Tech's Probationary Students"; Barbara Pendergrass, Dean of Students Office, "Media Mentoring: Countering Stereotypes"; Tonya Smith-Jackson, industrial and systems engineering, "Enhancing Student Success in a Global and Diverse World: Cultural Ergonomics and Participatory Design"; William E. Snizek, sociology, "The Use of Peer Mentors as an Intervention Strategy to Improve the Note-taking and Study Skills of Undergraduates in Large Lecture-based Classes"; Beville Watford, College of Engineering, "Academic Summer Program Introducing Resources for Engineers (AS-PIRE)"; and Sarah A. Wheeler, College of Engineering, "Peer Mentoring for Transfer Students: Transitions."



VIRGINIA POLYTECHNIC INSTITUTE
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Duncan Lyle Kinnear, 96

By Sally Harris

Duncan Lyle Kinnear, 96, an alumnus and professor emeritus of education and psychology at Virginia Tech and the university's official historian, died Wednesday, June 6.

Kinnear was well known as the author of a nearly 500-page comprehensive history of Virginia Tech, *The First 100 Years: A History of Virginia Polytechnic Institute and State University*, published in 1972 for the university's 100th anniversary. He was a student at the university, earning both bachelor's and master's degrees, and taught at the university from 1936 until 1971.

Kinnear came to Blacksburg as a freshman in 1923 when the university was still known as Virginia Agricultural and Mechanical College. He served in the Corps of Cadets, but had to drop out of Virginia Tech when he contracted influenza while participating in an ROTC summer camp at Fort Monroe.

For several years, he "taught school, helped operate the family farm in Rockbridge County, was appointed deputy commissioner of revenue, served as a bank appraiser, became president of the local telephone company, and even found time to commute to Lexington to study at Washington and Lee University," according to Warren Strother, a long-time friend of Kinnear.

Kinnear returned to Virginia Tech in 1932 and, influenced by Professor I.D. Wilson's desire to create an extensive program in science education, began taking biology and education courses.

After earning a bachelor's in biology in 1933, he taught science and served as a principal in Rockbridge County for three years before returning to Virginia Tech in 1936 to continue his studies and teach as an instructor in vocational education. He earned a master's in vocational education in 1938. He was promoted to assistant professor of agricultural education in 1939 and to associate professor in 1944. He was named associate professor of vocational education in 1951 and professor in 1952. In 1961, he became professor of education and psychology in the vocational education department.

During his tenure at Virginia Tech, he also taught mathematics, and his teaching took place both at Virginia Tech and Radford College, then the women's affiliate of Virginia Tech. He earned a Ph.D. from Ohio State University in 1952 where his doctoral dissertation was on *A History of Agricultural Education in Virginia*. He earned Virginia Tech's Wine Award for excellence in teaching in 1959 and was a member of O.D.K.

It was Kinnear's long association and familiarity with Virginia Tech, plus his accumulation of a "mass of information about the early history of VPI" through his hobby as an amateur historian, Strother said, that led to his being asked to write the history of Virginia Tech in time for the university's 100th birthday. He finished the book in 18 months.

For years, Kinnear was asked to give talks about Virginia Tech's history, in which he made "cheerfully irreverent comments on the earlier years of the land-grant college," Strother said.

Department of Chemistry at the University of Wisconsin. Before that, he was a research assistant in the Department of Chemistry at the University of Notre Dame and an analytical chemist with W.W. Engineering of Grand Rapids, Mich.

Morris has earned several other awards. He received the Army Research Office Young Investigator Award for studies into the decomposition of chemical warfare agents on environmental surfaces. The Department of Defense gave him its Defense University Research Instrumentation Program award for the purchase of a reflection-absorption infrared spectrometer. He received Virginia Tech's SPIRES Program grant for the development of a surface science instrumentation laboratory. He received the Thomas F. and Kate Miller Jeffress Foundation award for investigations into the fundamental nature of gas-surface chemical reactions.

MORRIS

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surface-science research."

The CAREER award involves both a research and an educational component. Morris's educational focus will be toward integrating the lecture and laboratory portions of the Freshman Analytical course to provide students with a stimulating learning environment that challenges them to probe interesting scientific problems with modern experimental techniques. "With the implementation of an inquiry-based learning approach, this course will grow into an active, student-centered experience where individuals gain an appreciation for scientific inquiry, further their thought-based and experimental problem-solving skills, and learn to work within research groups toward common objectives," Morris said.

Morris said the chemistry department, located in the College of Arts and Sciences, has two other NSF CAREER Awards. Brian Tissue and Paul Deck are the two previous recipients of the award. Morris considers the number of awards in the department "an indication of the very strong national reputation we are developing."

"This award reflects very positively on the chemistry department and the outstanding group of faculty members that I work with on a daily basis," he said. "Without the support of start-up funds, renovated laboratory facilities, and faculty mentors, these awards would likely not have been possible," he said.

Morris came to Virginia Tech in 1999 after doing post-doctoral research in the

Staff association honors Hunter, Poe

By Liz Crumbley

Mary Hunter of civil and environmental engineering (CEE) and Ben Poe of mechanical engineering (ME) were selected by the College Association for Staff in Engineering (CASE) to receive the 2001 Employee Recognition Awards for outstanding contributions and service to the college.

Hunter's work as fiscal director for CEE since 1997 "has raised the department's financial operations to a new level," said Sam Easterling and William Cox, assistant department heads, in supporting Hunter's nomination for the award. Hunter has developed a variety of financial-management tools and databases for fiscal and budgetary tracking, and she manages a salary and wage system for department faculty and staff members and students that routinely surpasses the College of Engineering's goals for promptness and efficiency.

Hunter also works with CEE faculty members to prepare research proposals and administer contracts, oversees management of department assets, and helps maintain an effective cost-recovery program.

A Virginia Tech veteran of 20 years, Hunter often is called on by administrators outside of CEE. For example, she was a member of the committee that developed the university's policy regarding cost-account standards, and served on the BANNER Finance Team during the early stages of the research accounting program development and implementation. Recently she helped provide fiscal guidance for another engineering department during a staff vacancy.

"Since Mary Hunter stepped in as our fiscal director," said Bill Knocke, CEE department head, "I sleep a lot better at night as I know that we will have an excellent pair of hands on our 'fiscal wheel.'"

"We know Mr. Poe will be there in times of 'Bill Gates-induced adversity,'" said ME Professor Larry Mitchell in nominating Poe for the employee-recognition award. As ME's senior computer systems engineer, Poe serves 40 faculty members, 23 staff members, 20 research associates and 160 graduate students "in the everyday effort to maintain a computer-

literate department," Mitchell noted.

Since joining the ME staff in 1987, Poe has learned to use and maintain a continually changing and more complex array of computer hardware and software. "In turn," Mitchell said, "he has educated and/or held the hands of faculty and staff members through the conversion to such new technologies." Today, Poe supervises the operations, installation and maintenance of ME's more than 400 computers.

Poe helped install ME's wireless computer network, which was one of the first at the university, and he currently is developing plans for a department network based on Windows 2000, said ME department head Walter O'Brien. "With all of his expertise," O'Brien commented, "Ben is also one of the most kind and pleasant employees in our department." Poe's motto when approached with "a vexing service problem," Mitchell said, is "How may we serve you?"

Active in the university community, Poe has served as chairman of the Commission on Classified Staff Affairs, president of the Staff Senate, and chair of CASE. He has been a member of the University Council since 1997, serving on the Strategic Budgeting and Planning Committee, and has served on the university's Personnel Advisory Committee.

Construction closes south Mall entrance

Construction is under way to improve the sidewalks along the Mall and expand the parking lot by Shultz Dining Facility.

For the next two weeks the Mall entrance (southern end) of the Shultz Lot will be closed. Motorists should enter through the northern entrance (closest to McDonald). During this same time, various sections of the parallel parking spaces along the Mall will be closed as they repair/replace the sidewalks.

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UNIVERSITY

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By asking questions that highlight pressures to raise or lower prices, the students can discover for themselves how theoretical concepts such as supply and demand explain behavior.

"We at Virginia Tech are developing a system that will let us run these experiments in large classes and at sites without computer labs," Eckel said. At present, there are not enough laboratories to run the experiments in large classes, and hand-processing such experiments in large classes is too time consuming and does not provide the benefits of immediate feedback and the ability to change an outcome by using different parameters available through the computer. "So we're developing a wireless experiment for learning in large classes," Eckel said.

The team is currently testing a device called a Cybiko, a wireless, hand-held computer for teens that uses wireless technology to "chat." Using a Cybiko, the students can participate in economic games through a wireless server and see the results projected on a screen in the front of the room. The professors can change the parameters of the game to show how results will change.

The system is called Wireless Interactive Teaching System (WITS) and is being developed by Eckel, Sheryl Ball of economics, Kevin Oliver of Educational Technology, and Scott Midkiff of Electrical and Computer Engineering. The funding for this project comes primarily from the Virginia Tech Center for Innovation in Learning (\$57,000) and from the Andrew Mellon Foundation (\$50,000). This project currently supports three undergraduates and one graduate student working on the system. The system will be field tested next spring using one class with Cybikos and one without.

Eckel hopes the portable wireless laboratory will make economics more user-friendly for students. "Experiential exercises can make a difference in their seeing how to use economics in their lives," she said.

Another part of the NSF grant will fund workshops to teach graduate students and assistant professors and others not familiar with the system to use interactive experiments in teaching. The researchers will take the prototype wireless laboratory on the road to disseminate and demonstrate software, research breakthroughs, and teaching techniques.

Eckel hopes next year they can demonstrate the wireless system, or WITS, in the workshops.

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