

# SPECTRUM



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

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**TODAY'S EDITION**  
See page 4 for  
information  
on the Celebration of  
Diversity.

VOLUME 24 NUMBER 2 FRIDAY, SEPTEMBER 7, 2001

## New center focuses on race and ethnic issues

By Sarah Newbill

Virginia Tech is expanding its research agenda with the addition of a new university-wide center focused on race and ethnic issues. Research projects coordinated through the Race and Social Policy Research Center (RSP) will take an 'inclusive view' of race and ethnicity within the realm of public policy for African Americans, American Indians, Asian Americans, European Americans, Latinos, and bi-racial and multi-racial identities.

The center will hold an official kick-off reception during Civil Rights Weekend, September 20 from 3 to 5 p.m. at the 201 Wall Street location adjacent to campus. The keynote speaker during the weekend

events will be Julian Bond, chairman of the National Association for the Advancement of Colored People.

Susan Gooden, RSP director and assistant professor at the Center for Public Administration and Policy says this center will help round out the university's research offerings in this important and under-represented area. "It shows that Virginia Tech does have a solid interest in racial issues, and RSP ties nicely into the university's new strategic plan."

The center offers a graduate-level concentration, allowing students to examine various aspects of public policy dealing with race, ethnicity, and culture, including topics like U.S. policy on secondary and higher education, employment, environment, criminal

justice, health, housing and welfare.

The center is currently involved in its first project examining factors that may affect the ability of low-wage, working parents to access and successfully complete community-college programs. The project's primary objective is to generate promising strategies to improve recruitment and retention of minority students. The study includes a nation-wide cross section of six community colleges located in California, New York, Michigan, Oregon, Ohio, and Florida.

For more information, see the web site at <http://www.cpap.vt.edu/rsp> or contact Gooden, at 1-7305 or [susan.gooden@vt.edu](mailto:susan.gooden@vt.edu). For details about events during the Civil Rights Weekend, contact Basil Gooden at 1-2807 or e-mail [bgooden@vt.edu](mailto:bgooden@vt.edu).



LOVE

## Tech CEE professor first to receive WERF's Busch Award

By Liz Crumbley

Nancy Love, an associate professor of civil and environmental engineering, has been looking inside the "black box" of biological-wastewater treatment processes for several years, and her unique research in this field has led to her selection as the first recipient of the Water Environment Research Foundation's (WERF) Paul L. Busch Award.

The foundation established the Busch Award to recognize superior achievement and creative vision in water-quality and water-environment research. The award is given in honor of the late Paul Busch, a former president and CEO of Malcolm Pirnie, Inc., and a past chairman of the WERF board of directors. Love will use the \$100,000 award to continue her studies of wastewater treatment at the cellular and molecular level.

Industrial waste is typically treated with a combination of physical/chemical and biological processes, Love said. The microor-

(See TECH on 7)

## Kaur named laboratory animal veterinarian

By Jeffrey S. Douglas

Taranjit Kaur has been named Virginia Tech's university veterinarian and director of the Office of Laboratory Animal Resources. She will also serve as an assistant professor in the Virginia-Maryland Regional College of Veterinary Medicine's (VMRCVM) Department of Biomedical Sciences and Pathobiology.

Kaur holds a V.M.D. degree from the University of Pennsylvania's School of Veterinary Medicine and a master's of public health (MPH) with an emphasis on international health from Johns Hopkins University in Baltimore.

She also earned a humanitarian assistance certification from Johns Hopkins via a joint program their School of Hygiene and Public Health operates with the International Committee of the Red Cross.

She is also board certified by the American College of Laboratory Animal Medicine (ACLAM).

"We're delighted to recruit a professional of Dr. Kaur's stature," said Peter Eyre, dean of the VMRCVM. "She is superbly qualified for this job and brings depth and experience in animal resources and public health to a university that is preparing to significantly ramp up its biomedical research activities. We are very pleased to have her with us."

Most recently, Kaur served as an assistant professor in the Department of Environmental and Population Health and an adjunct professor in the Department of Family Medicine and Community Health at Tufts University in Massachusetts.

"Virginia Tech has a commendable record in the animal-resources area, and our efforts to promote laboratory animal well-being will

continue to be held to the highest standard," Kaur said. "We are all very dedicated to bringing compassion and professionalism to this very important area of biomedical research."

She possesses more than a decade of experience in supervising animal-resource units at universities and research centers. She has served as chief of veterinary surgical resources in the Division of Comparative Medicine at the Massachusetts Institute of Technology in Cambridge, director of the Animal Resources Center at the UCLA Medical Center in Torrance, California, and director and staff scientist in the Animal Resources Department of the Salk Institute for Biological Studies in La Jolla, California. She also served as an animal-resources consultant for Ligand Pharmaceuticals, a bio-pharmaceutical company in La Jolla.

## Research-compliance office reports active first year

By Susan Trulove

David Moore, assistant vice provost for research compliance, has praised the university's administration for its "culture of support for human- and animal-subject research compliance", and their willingness to provide the resources necessary for the oversight of research and teaching activities that involve humans and animals.

Institutional Review Board (IRB) activities were re-organized and enhanced last year. In January, 2000, Len Peters, vice provost for research, created the Human Subjects Research Review Committee and named Ernie Stout, retired associate provost for research and former IRB chair, as its leader.

The review at Virginia Tech followed an audit of several institutions across the nation conducted by the U.S. Office of Human Research Protections (OHRP), which culminated in a report containing common

findings of non-compliance at the audited institutions.

"I wanted to prevent disruption of research at Virginia Tech, ensure on-going research regulatory compliance, and make sure we addressed the OHRP findings," Peters said. He charged the review committee with assessing Tech's compliance status, upgrading the procedures followed by the IRB, and rewriting the IRB instructions document.

As a result of the review committee's recommendations, provided to Peters in February, 2000, the university created the position of assistant vice provost for research compliance, with that individual serving as chair of the IRB. The position is also responsible for ensuring human subject protection and compliance, research and teaching animal compliance through oversight of the Animal Care Committee (ACC) and the Office of Animal Resources, chairing the Radiation Safety Committee, and providing oversight of

the Laboratory and Hazardous Materials Safety Committee.

The university administration, at the review committee's and Peters' suggestion, also created a new position, that of research compliance officer, who, along with the university veterinarian and director of the Office of Animal Resources, would report to the assistant vice provost for research compliance. The Office of Research Compliance was provided with an operating budget to support the IRB and ACC functions, for which funding was not previously allocated.

Moore was appointed vice provost for research compliance in May, 2000. He had been university veterinarian and director of the Office of Animal Resources since November, 1985, and also held a joint appointment as associate professor in the Virginia-Maryland Regional College of Veterinary Medicine's (VMRCVM). Before coming to Virginia Tech,

(See RESEARCH on 7)

## AN INVITATION

**All faculty and staff  
members and students are  
invited to attend the second  
annual Faculty/Staff  
Awards Ceremony and  
President's Address. The  
ceremony will be held  
Friday, Sept. 21 at 5 p.m. in  
the Donaldson Brown Hotel  
and Conference Center  
auditorium.**

# ACHIEVERS

**Imad Al-Qadi** of civil and environmental engineering has been selected to serve as a representative to the national Transportation Research Board (TRB) Leadership Summit, September 20-12 in Washington, D.C. The summit will determine strategic and tactical planning for the next five years of TRB operations. In June, Al-Qadi gave an invited presentation on ground-penetrating radar research being conducted at Virginia Tech to the Federal Institute for Materials Research and Testing in Berlin, Germany, and the Technical University of Berlin.

**Linda Harris**, a Ph.D. candidate in the Department of Chemistry, has received the Omnova Solutions Signature Award for Outstanding Research in Polymer Science and Engineering for 2001.

Omnova Solutions is a chemical/polymer materials corporation that awards graduate students in polymer chemistry and engineering for achievement in research. Harris is working on polymeric stabilizers for magnetite nanoparticles designed for magnetic field-directed drug-delivery vehicles. She received a cash award of \$2,500.

**Diana Farkas**, a professor of materials science and engineering, has been elected a fellow of ASM International. The designation of fellow recognizes ASM members for distinguished contributions to the field of materials. Farkas was chosen for her research in modeling of defects, grain boundaries and fracture behavior in intermetallic compounds. ASM is one of the world's leading society for materials science and engineering professionals, with more than 40,000 members in 100 nations.

**Howard Feiertag** was this year's winner of the Arthur Landstreet Award, presented by the Educational Institute of the American Hotel & Lodging Association. Named after the Tennessee hotelier who founded the Educational Institute, the Arthur Landstreet Award is presented to an individual who has made a lasting impact on the quality of education and training in the hospitality industry. Feiertag was honored at the 21st annual "Stars of the Industry" breakfast, during the recent AHLA Spring Conference in Chicago.

For the past 11 years, Feiertag has served on the faculty in the Department of Hospitality and Tourism Management. He teaches industry professionals the "tools of the trade" through his regular column in *Hotel & Motel Management* magazine which he has been writing since 1980, and his series of Netconferences, as well as his series of hospitality sales workshops and audio-tapes. He speaks at conventions and industry conferences.

Feiertag is an inductee in the Hospitality Sales and Marketing Association International's Hall of Fame. Meeting Professionals International honored him with its President's Award for his efforts in industry training and education. He was named 1998 Educator of the Year by the Professional Convention Management Association, and was recently honored with a lifetime achievement award as an inductee in the Convention Industry Council's Hall of Leaders.

**Irene Leech** became president of the Consumer Federation of America in March. Based in Washington, DC, CFA has 265 member groups, representing over 50 million Americans. A non-profit organization committed to advocating, educating and supporting the consumer perspective, CFA and its foundation have an annual budget of over \$3.7 million and net assets of about \$1.3 million.

Earlier this year, the U.S. Department of Agriculture Secretary Dan Glickman nominated Leech to the National Advisory Committee on Meat and Poultry Inspection NACMPI. Leech was chosen to maintain a balance of representation among industry, state, academia, and consumer interests. Nominees to the committee are selected for a two-year term and no member may serve on NACMPI for more than three consecutive terms. Eight members of the current committee have been nominated to serve again.

NACMPI was established in 1971 to provide advice and recommendations to the secretary of agriculture about the meat and poultry-inspection programs. The committee, which meets twice a year, addresses food-safety concerns and policy issues affecting the USDA.

**James E. LaPorte** received the Wilkinson Meritorious Service Award from the International Technology Education Association. The award recognizes the outstanding service LaPorte

has provided to the technology education profession throughout his career.

**Allen Bame** was selected as a Distinguished School of Technology Alumni award recipient at Kent State University. Bame was chosen by a committee of current and former Kent State faculty and administrators. He was honored at a banquet on May 5.

Four public-relations professionals in Virginia Tech's Office of University Relations have won awards for their work from Virginia Press Women in the organizations annual state-wide communications contest.

**Susan Trulove**, who does public relations for the Research Division, won a first-place award for a feature news release about research by Michal Kowalewski, geological scientist at Virginia Tech. Kowalewski and colleagues pioneered a means to measure life over 1,000 years to determine waterways' ancient productivity and diversity. The study reported the impact of management on the Colorado River: "Seven decades of management virtually wipes out life from the tidal flats of the Colorado River Delta."

**Meg Nugent**, graphic designer, took two first- and two third-place awards. Her first-place awards were for her page layout in the *Virginia Tech Founders Day 2000 Presidential Inauguration* program and (with **Clara B. Cox**) for her work on the Virginia Center for Civil War Studies' Civil War Medical Symposium brochure, which featured photography by **Rick Griffiths**. The third-place awards were for her page layout of *Impact: Fall 2000* and (with Cox) her work on the public policy magazine *Virginia Issues & Answers*, which featured photography by **Bob Veltri**.

**Sally Harris**, public-relations coordinator for the College of Arts and Sciences, won two first-place awards. One was for news reporting in a publication for general or specialized circulation (*Arts & Sciences*) for a story on the work of Neal and Kay Castagnoli and colleagues in the Peters Center for the Study of Parkinson's Disease and Diseases of the Central Nervous System. The other award was for three special articles on one subject (education). They included an article on Virtual Jamestown with Crandall Shifflett of history, one on a conference of the Association of African American Mathematicians with Monte Boisen of mathematics and Myra Gordon of the dean's staff of the College of Arts and Sciences and students, and a third story on student Emily Swenson and her on-line courses taken while doing an internship in Newport News.

**Clara B. Cox**, director of outreach communications won three firsts, three seconds, and two thirds. First-place awards were for editing *The Faces of Change*, the university's diversity strategic plan, which was designed by **Michele Moldenhauer**, and written by Benjamin Dixon, vice president for multicultural affairs, and Alicia Cohen, assistant to the vice president; editing *Virginia Tech Magazine*, which was designed by **Glen Duncan** and featured photography by Veltri; and for her work (with Nugent) on the Virginia Center for Civil War Studies' "Civil War Medical Symposium" brochure, which she co-wrote with James I. Robertson Jr., alumni distinguished professor of history. Second-place awards were for writing the feature article "Virginia Tech's Greatest Generation" for *Virginia Tech Magazine*; writing the text and compiling images for the audiovisual/multi-image slide program "Virginia Tech Alumni Association 125th Anniversary," which was digitally formatted by **Dan Mirolli**; and the speech "Support Growing for Civil War Center," which was delivered by a university administrator. Third-place awards were for editing *Virginia Tech Global Network*, designed by **Craig Berry**, and her work (with Nugent) on *Virginia Issues & Answers*.

All of the first-place award-winning work has been submitted by Virginia Press Women to the National Federation of Press Women Communications Contest.

**Harold W. Stubblefield**, retired faculty member, was inducted into the International Adult and Continuing Education Hall of Fame on June 2.

Stubblefield was a professor of adult education from 1973 until his retirement in 1998. He was the first full-time adult education faculty member at Virginia Tech, heading the program during 1973-1993. Stubblefield developed and established the adult-education doctoral program and also several off-campus master's programs.

In 1985, Stubblefield moved to the Institution's emerging

Northern Virginia Graduate Center and established its adult education graduate program. From 1993 to 1995, he served as program director for all graduate education programs and helped turn the center into a major graduate-education provider in the greater Washington, DC, area.

Stubblefield's publications include *Towards a History of Adult Education in America*, for which he received the American Association of Adult and Continuing Education Imogene Okes Award in 1988 for Outstanding Research in Adult Education. He also wrote *Adult Education in the American Experience: From the Colonial Period to the Present* with Patrick Keane, which won the National University Continuing Education Association's Philip E. Frandson Award for Literature in 1995.

**Craig D. Shoulders**, associate professor of accounting in the Pamplin College of Business, received the Cornelius E. Tierney/Ernst & Young Research Award from the Association of Government Accountants (AGA).

The award was presented at the association's annual conference in Boston on July 5. It recognizes "individuals, who, throughout their careers, have made continuous contributions to government financial management by their direct participation in research activities, and/or through their encouragement and support of others engaged in government financial management research." Shoulders, who specializes in state and local government accounting, was cited for his "instrumental efforts as a researcher and educator in the development of government accounting standards," and "his extensive contributions to the profession over the past 19 years."

Shoulders has focused on enhancing government accountability and financial reporting in his research. His research, the AGA release noted, has been of value to the Governmental Accounting Standards Board, and to government finance and accounting officials throughout the country. His research on determining the circumstances in which entities such as school districts, airports, and utilities, for example, should be considered as part of a city, county, or other government body has influenced the development of GASB guidelines on that topic.

His recent article, reflecting the most significant changes in government financial reporting in 65 years, discusses the appropriate identification of funds to be reported in government financial statements. The article is aimed at helping state and local governments present financial statements that reflect a proper level of accountability to the public and other statement users. The Association of Government Accountants is an 18,500-member professional association that focuses on the continuing education needs of financial managers in government, the private sector, and academe.

**Roe-Hoan Yoon**, endowed professor of mining and minerals engineering and director of the Center for Coal and Minerals Processing, recently received the Distinguished Alumni Award from the College of Engineering of Seoul National University in Korea. Yoon earned his undergraduate degree from the university in 1967. He has become an international leader in the development of clean coal technology and this year his center won a \$7.9-million grant from the U.S. Department of Energy.

Virginia Tech's **Personal Touch Catering** was awarded second place in the Catering and Special Events category in the National Association of College and University Food Services' (NACUFS) 28th annual Loyal E. Horton Dining Awards Contest. The award was presented during the NACUFS national conference held in Cincinnati, Ohio, in July.

Personal Touch Catering's entry, Interviewing Over Dinner: Rare, Medium, or Well Done?, is a program that teaches students the finer points of dining etiquette, as well as providing tips on interviewing during a meal. Each dinner includes a 30-minute presentation and a five-course meal. Participants are provided instruction before each course on how to tackle different dining situations. "This is an excellent way to give students a competitive edge in today's job market," said Anthony Purcell, manager of Personal Touch Catering.

The Horton award, named for a founder and past president of NACUFS, honors the most successful ideas in menus, presentations, special event planning, and new dining innovations. Judges evaluated the entries for menu selection, presentation, merchandising, marketing, and promotional activities. A total of 110 entries from college and universities across the country competed

(See *ACHIEVERS* on 7)

# Black Caucus recognizes university achievers

The Black Caucus of Virginia Tech held its seventh Annual Recognition Luncheon on May 3.

Faculty and staff members and students were recognized for a number of accomplishments in the areas of employment change, professional and scholarly activities, professional career development, service to students, and campus and community outreach. Awardees included Ozzie Abaye for excellence in teaching, James Cox for outstanding new professional and service to the students, Valerie Giddings for promotion to associate dean, Basil Gooden for promotion

to coordinator of outreach and community relations, Susan Gooden for appointment as director of the Race and Social Policy Research Center, Michael Herndon for completion of his doctorate, Terry Kershaw for appointment as director of the Center for Interdisciplinary Studies (CIS), LaToya King, Christopher Medley, Javier Paula, and Cherese Winstead for outstanding student leadership; Beverly Bunch-Lyons and James Martin for receiving the 2000 Diggs Teaching Scholars Award, Quinton Nottingham for promotion with tenure to associate professor, and Stacey Floyd Thomas for receiving the 2001 Diggs Teaching Scholars Award.

President Ronald Giddings welcomed new black faculty and staff members who were present and commented on the importance of recognizing and rewarding the accomplishments of members of the black community. Certificates of appreciation were given to the recipients.

The Recognition Luncheon was established in 1995 under the leadership of former President Barbara Pendergrass. Sidney Crumwell, former director of Tomorrow's Teachers Program, was the chair of the committee, which included Michele Clark Holmes, Barbara Pendergrass, Carol Crawford Smith, and Matthew Winston Jr.

# McCaughay book looks at violent women in film

By Sally Harris

Does it matter to viewers if the violent person in a movie is a woman instead of a man? Martha McCaughey of Virginia Tech and Neal King of Belmont University have edited the first book-length study of violent women in the movies.

McCaughay, associate professor of women's studies in the Center for Interdisciplinary Studies in the College of Arts and Sciences, served as the lead editor of the book *Reel Knockouts: Violent Women in the Movies*. McCaughey had already written and published *Real Knockouts: The Physical Feminism of Women's Self Defense*.

*Reel Knockouts* features essays by several leading scholars of film, gender, and violence, essays with titles ranging from "Caged Heat: The (R)evolution of Women-

in-Prison Movies" to "If Looks Could Kill: Power, Revenge, and Stripper Movies" to "Sometimes Being a Bitch Is All a Woman Has to Hold On to: Memory, Haunting, and Revenge in *Dolores Claiborne*."

"When Thelma and Louise outfought the men who had tormented them, women across America discovered what male fans of action movies have long known—the empowering rush of movie violence," according to the University of Texas Press, which published *Reel Knockouts* under its film studies and women's studies imprints. "Yet the duo's escapades also provoked censure across a wide range of viewers, from conservatives who felt threatened by the up-ending of women's traditional roles to feminists who saw the pair's use of male-style violence as yet another instance of women's co-

(See MCCAUGHEY on 7)



MCCAUGHEY

# Fields to receive Blue Ridge arts-council award

By Sally Harris

Craig Fields, associate professor of voice in the Department of Music and the artistic director of Opera Roanoke, will receive this year's Perry F. Kendig Award, conferred by the Arts Council of the Blue Ridge.

The award will be presented September 19 at a special ceremony at Hollins University. This annual award, regarded as one of the most prestigious regional arts awards, is presented in recognition of Fields's

contributions to the musical arts in Virginia.

"Craig Fields has had a major impact on the arts community from Central Virginia through the New River Valley," according to the arts council news release. "His influence on opera in Roanoke is legendary. He has adapted or created unique productions of classical operas, is a talented baritone in his own right, and has appeared in some of his productions. With the extraordinary success of *Carmen* in the new Shaftman Performance Hall and the upcoming fall production of *Tosca*, Opera Roanoke has attained a new level of artistic achievement under

his guidance."

Fields is a faculty member in the music department, located in the School of the Arts in the College of Arts and Sciences, where he teaches voice, opera workshop, and diction for singing. He founded the Master Chorale in Blacksburg and was director for eight years.

He came to Virginia Tech in 1987 after singing professionally for 10 years. His singing career has taken him to more than 50 opera companies across Europe and America, where he has performed more than 40 leading baritone

(See FIELDS on 8)

# Rosenzweig named natural-history museum director

Mike Rosenzweig, an adjunct assistant professor of biology, has been named director of the Virginia Tech Branch of the Virginia Museum of Natural History, according to Leonard K. Peters, vice provost for research.

The position was effective July 16 and was announced last month by the Virginia Museum of Natural History.

Rosenzweig, received his master's degree in biology from Virginia Tech in 1990, and his Ph.D. in 1994. He was a volunteer at the museum while a student. After post-doctoral study at the University of Arizona, Rosenzweig became an adjunct faculty member, teaching such courses as principles of biology for biology majors, Life on Earth for non-science majors, environmental science—requiring community projects, and phycology, "for students who like all the tiny and slimy things in water."

He is well known in the local community as the co-founder of the SEEDS—Seek Education, Explore, DiScover—program. SEEDS is a non-profit educational organization with a focus on creative and fun learning programs related to environment, culture, and travel. SEEDS develops environmental research and educational outreach programs, supplements and augments existing programs in schools, colleges, and community centers..

Rosenzweig has also been volunteer director of the Salem-based Cabell Brand Center Library for Environmental Studies, and the Cabell Brand Fellowship Program since 1997.

He was coordinator and instructor for the Environmental Sciences Program at the Satori School in Tucson Ariz. from 1993 until 1995, and is still on the school's advisory board. He is also on the steering committee and the environmental committee of the Vital Signs Projects, a regional task force that writes and publishes sustainable indicators.

Rosenzweig received his undergraduate degree with high honors in biology from Clark University in 1985. His interests have taken him to the Southwest and Mexico as a research biologist along the Gulf of California and Gulf coast of Mexico, to regional archeological sites in the Rocky Mountains, Plains, and

(See ROSENZWEIG on 5)

## FORUM

### Faculty Member Questions Support for Research Goals

By Peter Rony, chemical engineering

I have been informed recently that my department's 2001-2002 base operating budget, base GTA budget, and base SCHEV equipment budget have been reduced by 6.1 percent, 8.1 percent, and 22.3 percent., respectively from 2000-2001 levels. I believe that other College of Engineering departments have experienced comparable reductions. I have not been informed about the reasons why such budget cuts are necessary. I suspect that that my department—if not the entire campus—will experience further budget cuts during 2002-2003 and perhaps 2003-2004.

I just received "The Planning Domains of Virginia Tech, 2001 and Beyond" and "Proposed Goals to be achieved by 2010 with Objectives to be achieved by 2005-06." "Planning Domains" states that key factors and action elements are to "increase the number of faculty, staff, research

technicians, etc." and "increase the number, quality, and flexibility of labs and research spaces for natural sciences, engineering, social sciences, education, humanities, arts, business, etc." Goal 2.1 in the Strategic Plan is to "Increase research expenditures by 10 to 12 percent per year to reach top-40 status by 2006". Goal 2.13 states "Provide continued support for research and scholarship, in addition to the special initiatives, for individual faculty members and departments."

From where will the money come to do all this?

My interim conclusion is that Richmond has not bought into the university president's goals of top-40 status by 2006 and top-30 status by 2010. I doubt that the university faculty at large has bought into these two goals. The situation is strange. The top of the Virginia Tech hierarchy seemingly has propounded a lofty research-funding goal without the participation,

advice, and consent of the two groups: 1) faculty members who solicit federal and corporate research grants, and, (2) the governor and state legislature, who control the budget of our state university, and whose actions will determine the success or failure of the goal.

I am particularly concerned about the cutbacks in departmental operating budgets. If the upper administration wants to seriously pursue the top-30 goal, it should double or triple such budgets in all departments, starting immediately. I have the following questions:

(1) Is it timely and appropriate for the faculty members to engage in a comprehensive study of departmental operating budgets between 1980 and 2001?

(2) Why are faculty members not permitted to play a significant role in the allocation of Tech fund-raising sums?

**Virginia Tech**  
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# ACTIVITIES

## EVENTS

### Friday, 7

**Philosophy department conference**, Hotel Roanoke: "Objects and Artifacts: A Topic in the Philosophy of Technology." Through 9-7.

**YMCA Open University Registration**, 9 a.m. to 6 p.m., YMCA Office.

International Club, details TBA.

### Saturday 8

**Football**, noon, Lane Stadium: Western Michigan.

### Monday, 10

**Advising Week Begins (Through 9-14)**.

### Tuesday, 11

**School of the Arts Music Program**, 8 p.m., Lyric Theatre: 1-5200.

### EHSS holds Open House

Environmental, Health and Safety Services Open House will hold an Open House for faculty and staff members on Friday, Sept. 14, from 10 a.m. to 2 p.m. Participants may learn about the services provided, test their knowledge of health and safety practices, meet the staff, and tour the facilities. There will be food, demonstrations of hearing testing, air monitoring, fire extinguishing, ergonomics, and more. Door prizes will also be given out. For more information, see web site <http://www.ehss.vt.edu/index.htm> or contact Charlotte Waggoner at [ren@vt.edu](mailto:ren@vt.edu) or 1-5864.

### New area code in effect

Southwestern Virginia has a new area code. The new 276 area code will be implemented in a portion of the geographic region currently served by the 540 area code. On September 1, permissive dialing began for the new area code. During this time, customers can use either the old 540 or the new 276 area code to place calls within or between area codes. Cities and towns included in this region are Bland, Bluefield, Tazewell, Grundy, Wise, Cumberland Gap, Bristol, Marion, Wytheville, Meadows of Dan, and Martinsville. Mandatory dialing of the 276 area code will begin on March 16, 2002. After that date, callers will need to use the new 276 area code to complete their calls. For more information, see [www.state.va.us/scc/news/276code.htm](http://www.state.va.us/scc/news/276code.htm) or contact Communications Network Services at 1-6460 or <http://www.cns.vt.edu/news/>.

### Faculty Women's Club to host reception

The Virginia Tech Faculty Women's Club will host a Welcome Reception Thursday, Sept. 13, from noon until 1:30 p.m. at The Grove.

A shuttle bus will provide transportation from the parking lot behind Wallace Hall on campus. Balloons will identify the shuttle-bus area. Handicapped parking and accessibility is available at The Grove.

VTFWC membership is open to women and wives of administrative, instructional, research and Extension faculty and staff members. Retirees, or wives or widows of retirees, and mothers and mothers-in-law of faculty and staff members are welcome to join.

The purpose of the VTFWC is to provide social and intellectual activities to its members, to promote Virginia Tech, and to offer scholarship opportunities to deserving students. Members participate in interest groups, day trips, and luncheons

## Groups to participate in celebration of diversity

### Wednesday 12

**Celebration of Diversity**, 7 to 8:30 p.m., Squires Commonwealth Ballroom.

### Thursday, 13

**Faculty Women's Club Reception**, noon to 1:30 p.m., The Grove.

### Friday 14

**Paydate for Faculty and Staff Members**.

**FOCUS Kickoff**, 3:30 p.m., DBHCC auditorium.

**Natural History Museum program**, 5 p.m., 1870 Litton Reaves: Gerry LaRue.

International Club, details TBA.

## SEMINARS

### Friday, 7

**Highlands in Chemistry**, 11 a.m., 3 Davidson: James

## BULLETINS

featuring diverse speakers.

Child care will not be provided for this event. For more information, call Mary Montgomery at 552-6735.

### Wallace Gallery exhibit continues

The Wallace Gallery opens the academic year with an exhibit entitled "Through the Looking Glass: Two-dimensional works of strings, light, and other quantum manifestations." Prepared by Bradley Whitney, an assistant professor in interior design, the body of work is inspired by the "actions of all things atomically small and their constant manipulation of the larger forces that shape the world around us."

The gallery is located off the first floor atrium of Wallace Hall. The exhibit runs through September 14.

### Museum offers two programs

The Museum of Natural History will present "Do You Care About Where and How Your Coffee Is Grown?" Friday, Sept. 14, from 4 to 5 p.m. in 1870 Litton Reeves. The presenter is Gerry LaRue. The presentation is co-sponsored with the biology department's Botany Seminar Series

On Saturday, Sept. 15, from 10 a.m. to 2 p.m., the museum will present Save Our Streams training with Llyn Sharp, SOS regional coordinator. Learn what factors effect streams and streamside habitats.

Call 231-3001 for more information and to pre-register.

### ASPIRES competition announces

The deadline is September 14 to submit proposals for "A Support Program for Innovative Research Strategies."

ASPIRES is an investment program dedicated to enhancing research and scholarship activities at Virginia Tech. Awards are made to Virginia Tech faculty members on a competitive basis in response to proposals that describe strategies for improving sponsored research activities, the distinction of our scholarship, and the quality of graduate education in all academic disciplines.

For details and application forms, see the ASPIRES web page at [www.research.vt.edu/aspires/](http://www.research.vt.edu/aspires/).

### Research funding info available

Researchers interested in funding may visit the Research Division's Opportunity Update site at [www.rgs.vt.edu/funding/ou/update.html](http://www.rgs.vt.edu/funding/ou/update.html), which is available exclusively to faculty and staff members and students.

By Clara B. Cox

Music, dancing, skits, displays of cultural traditions, and personal stories will highlight Virginia Tech's fourth annual Celebration of Diversity, which will be held in Squires Commonwealth Ballroom on Wednesday, Sept. 12, from 7 to 8:30 p.m. The event is open to the public free of charge.

"Those who attend this event will be in for a great evening of entertainment and learning," said Barbara Pendergrass, dean of students.

The Hush Harbor Choir, a community choir created by Nikki Giovanni and directed by Carolyn Dixon, will open the program, which will also include the music of the Enlightened Gospel Choir; traditional dances from the Philippines and India; stepping by the National Pan-Hellenic Council; dancing by the German Club, Latin Link, and Circulo Hispanico and Virginia Tech Dance Company; storytelling by the Caribbean Students Organization; drumming by Sambaktek; poetry

by the Turkish Student Association; and the voices of diverse students.

Additional participating groups include Native American Programs; Womanspace; Lesbian, Gay, Bisexual Alliance; Asian American Student Union; Brothers and Sisters United for Change; Appalachian Community; Council for International Students; Black Graduate Students Organization; Theta Nu Xi Multicultural Sorority; American Society of (See GROUPS on 5)

Landers, UVA..

**MCBB**, time, location TBA: Erich Grotewold, Ohio State.

### Monday, 10

**Biochemistry**, 4 p.m., 223 Engel: Marty Bollinger, Penn State.

### Thursday, 13

**Geological Sciences**, 4 p.m., 4069 Derring: Philip Jardine, Oak Ridge.

**Human Development**, 4 to 5 p.m., Fralin auditorium: Pamela Monroe, LSU.

### Friday, 14

**Highlands in Chemistry**, 11:15 a.m., 3 Davidson: Allan Shultz.

**MCBB**, time, location TBA: Bill Balch, Scripps.

# AIS conference to be hosted by CIS

By Sally Harris

The 23rd Annual Conference of the Association for Integrative Studies (AIS), with the topic "Globalizing Interdisciplinary Pedagogy and Research," will be held at the Hotel Roanoke and Conference Center October 4 through 7.

The Center for Interdisciplinary Studies (CIS) in the College of Arts and Sciences will host the conference. "In higher education, 'globalization' seems to refer to anything from incorporating a 'non-Western' text in a Eurocentric course to ensuring that students have some 'international' experience to teaching the conflicts and issues that produced anti-globalization protests from Seattle to Switzerland," according to Nancy Simmons, chair of the conference planning committee and associate chair of CIS. "This conference will challenge educators—teachers, university faculty members and administrators, and graduate students—to think more deeply about 'globalization.'" The conference goal is to deepen participants' understanding of various issues related to globalization as it relates to education.

Topics to be covered for administrators include institutional structures for encouraging integrative interdisciplinary thinking, teaching, and scholarship; ways to assess interdisciplinary programs and courses; and ways to engage students in social activism. Sessions of interest to graduate students will involve workshops, case studies of individual courses, and sessions interrogating theoretical issues around both "interdisciplinarity" and "globalization." Teaching faculty members will find a wide variety of course ideas offered in case studies and reports of experiments using integrative and innovative approaches to global issues and cultures, from introductory and general education to senior capstone and graduate courses. "Teachers may even discover ways to put the concept of globalization at the center of some courses," Simmons said.

Registration, due by September 20, for members of the Association for Integrative Studies is \$300 and for non-members \$340. Graduate students' registration is \$150, and the fee for a pre-conference workshop Thursday, Oct. 4, is \$20.

The conference web site, which includes the full preliminary conference program and more information about the conference site, can be seen at <http://www.coated.vt.edu/ais.htm>. For more information, call Simmons at 1-8100 or send an e-mail to [nsimmons@vt.edu](mailto:nsimmons@vt.edu).

## GROUPS

*Continued from 4*

Safety Engineers; Newman Campus Ministry; Association of Students for the Adoption of Pets, American Society of Safety Engineers, MAAD, Residence Hall Federation, and Amnesty International.

For the second year, the Student Advisory Board on Diversity and Multicultural Affairs, an advisory group to the Office of Multicultural Affairs, will present a diversity award to a student organization that has contributed to the university's goal of fostering an inclusive and welcoming community.

The event is sponsored by MAPs (Multicultural Awareness Programs), an organization that assists the Dean of Students Office with its mission of fostering a welcoming community for all.

Anyone needing special accommodations to attend the event should contact the Dean of Students Office at 1-3787 or TDD 540-231-8718.

# Speaker series features gender, faith, culture

By Sally Harris

"Crossing Boundaries of Gender, Faith, and Culture in the Pre-Modern World," a speaker series featuring current scholarship, will be held at Virginia Tech this fall and spring.

The fall schedule (subject to change) of talks to be held in 434 Major Williams Hall includes the following speakers:

Adam Knobler (College of New Jersey), "Prester John, the Ten Tribes and the Raja Rum: Searching for the Other in Three Pre-modern Cultures," September 11, 3:30 p.m.;

Amy Hollywood (Dartmouth College), "Ventriloquizing Hysteria: Reading the Lives of Thirteenth-Century Holy Women," September 24, 4 p.m.;

Irven Resnick (University of Tennessee), "Male, Female, Jew: 'En-gendering' the Jew as 'Other' in the Middle Ages," October 12, 3:30 p.m.;

Mark Cohen (Princeton University), "Jewish Women and Debt in Medieval Cairo," October 29, 4 p.m.

The spring schedule is incomplete and also subject to change, but will include the following:

Alexandra Cuffel (Virginia Tech), "Marian piety in medieval Islam," January 23;

Sahar Amer (UNC, Chapel Hill), "Crossing Cultures: Cross-Dressing in the Middle Ages" (February);

Allison Blakely (Howard University),

"Africans in Holland and Russia in the Early modern era," or James Muldoon (James Carter Brown Library), February;

Susan Kahn (Brandeis University), "Judaism and reproductive technology," March.

Receptions will be held after the talks in the Major Williams atrium. The talks are sponsored by the Dean's Office of the College of Arts and Sciences, departments of History and English, the Religious Studies Program, the Women's Studies Program, the Women's Center, and other programs in the Center for Interdisciplinary Studies.

For more information, call Brian Britt at 1-5118 or e-mail him at [bbrtt@vt.edu](mailto:bbrtt@vt.edu) or call Cuffel at 1-8378 or e-mail her at [acuffel@vt.edu](mailto:acuffel@vt.edu).

# Business College notes department, degree name change

By Sookhan Ho

The Department of Management Science and Information Technology has changed its name to the Department of Business Information Technology. The name of the major and degree has also changed to business information technology, effective from the end of the first summer session. Course designations will change from MSCI to BIT.

"We sought this change because 'management science' has become a less familiar term. Many prospective students and their parents, and current students and employers are not certain what it means," said Department Head Bernard W. Taylor III. "Further, our

departmental curriculum has evolved to a point where we teach mostly information-technology topics and relatively little traditional management science."

Students in this major have consistently been the most sought-after by employers recruiting at Virginia Tech. "Of the top-10 undergraduate majors among recruiters, management science and information technology was again the major with the most interviews last year," said Jim Malone, Virginia Tech Career Services director. Of the total of 12,605 interviews conducted by recruiters on campus last year, management-science majors obtained 1,428 interviews, or 11 per cent.

The major comprises three programs of study: decision support systems (designing and applying computerized systems that support managers in the decision-making process); production and operations management (managing processes by which organizations convert raw materials, labor, and capital into final products or services); and e-business technology (applying information-technology tools to electronic business functions).

It will take time for the change to be complete, said Taylor, who expects that both names will be used interchangeably during the next year or so.

# Tech physicists find asymmetry in matter behavior

By Sally Harris

As sometimes happens in the world of scientific research, two groups working independently come up with the same findings at the same time, such as last June when a National Institutes of Health-funded group and a private firm called Celera both announced their completion of the genome sequence.

This summer, Virginia Tech physicists, in collaboration with others on the Belle Experiment at the Japanese National Laboratory for High Energy Physics (KEK) have obtained a measurement that shows that, to a very high degree, there is an asymmetry in the behavior of matter and anti-matter and that the difference is consistent with the prediction of the Standard Model Theory of Particle Physics first formulated in the 1970s. Researchers at the Stanford Linear Accelerator Center in California obtained a similar measurement at the same time the KEK research team did. Stanford announced its results at a July 5 news conference and KEK in a conference in Rome July 23.

The Standard Model predicts an asymmetry, or difference, in the decay rates of certain esoteric subatomic particles called beauty or B mesons (matter) and anti-beauty mesons (anti-matter). A beauty meson is an unstable particle that has almost six times the mass of the common proton. The matter-antimatter asymmetry in the Standard Model also predicts the left-over matter from the Big Bang, matter that forms humans, the stars, galaxies, and everything else.

The new KEK measurement was obtained from data recorded by the Belle detector over the past two years and was announced at the meeting of the Lepton-Photon Symposium in Rome July 23 by co-spokesman Stephen Olsen of the University of Hawaii. The Belle measurement will be published in the same issue of *Physical Review Letters* as the Stanford results, according to Leo Piilonen, associate professor of physics at Virginia Tech.

The Belle measurement shows a higher variance from zero than the Stanford measurement and is therefore of more interest to theoretical physicists, Piilonen said, because it indicates a higher degree of asymmetry. Laynam Chang, head of the Virginia Tech Department of Physics and a theoretical physicist, said the larger number is of more interest because it shows why the universe has more matter than antimatter.

The Standard Model predicted both the left-over matter in the universe and the asymmetry in the B-meson decays. The Virginia Tech studies corroborate the asymmetry and provide one way of explaining why the universe seems to be made entirely of matter when you would expect from the Big Bang theory that there should be equal amounts of matter and anti-matter. The presence of more matter explains why we are here, Piilonen said. "Because of this asymmetry, all but one part in a billion of the matter and anti-matter particles from the Big Bang combined into light. The rest was left over as the matter of which we are made."

Virginia Tech's involvement in the experiment began with discussions in 1992 and continued with research and development work by professors Al Abashian, now professor emeritus, whose work was critical in the design and initial work of the detector; Kazuo Gotow, who still takes shifts on the project; and Piilonen, along with senior scientist Norman Morgan, in 1993. In December 1993, KEK called for proposals for experiments to be built at its new colliding beam accelerator called KEKB—a factory of B mesons. Virginia Tech and other interested parties submitted a proposal called the Belle Experiment in April 1994. The proposal was approved almost immediately.

Through 1996, Virginia Tech continued research and development of resistive plate counters to be used for muon detection in this

experiment and, from 1996 through 1998, constructed these counters; they were then shipped to Japan and tested at the accelerator through mid-1999. The researchers took the first data in June 1999 and reported the first results in July 2000. They reported their latest results this summer, as did Stanford.

"The two competing measurements are still consistent within statistical uncertainty with each other and with the Standard Model prediction," Piilonen said. Additional data from the coming years will reduce this uncertainty and make possible a more precise comparison with the Standard Model prediction.

A new faculty member, Caren Hagner, recently joined the experiment, Piilonen said. The group will continue to accumulate data for another five to 10 years and try to reduce the size of the statistical error. They also will use other final states that require more sophisticated reconstruction techniques.

## ROSENZWEIG

*Continued from 3*

Pacific Northwest, and as a coastal research biologist throughout the U.S. East Coast. He has presented his research at regional and national meetings, and at two international gatherings. He has also published research reports, lab manuals, and a video on the history of phycolgy (the study of algae).

"Dr. Rosenzweig's commitment to the community and the environment, as well as his educational credentials, creativity, and energy will be of critical importance in his new position," Peters said.

In the last nine years, under the direction of Susan Eriksson, Virginia Tech professor of geological sciences, the museum served the surrounding communities through admission, tours, special courses, collections use, kits and resources, programs, and off-site exhibits—registering 650,000 contacts.

# EMPLOYMENT

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

#### FULL TIME

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

**Assistant Front Office Manager**, 001136Y, PB 3, DBHCC.  
**Asst Director UUSA (Building Operations/Facilities)**, 000292J, PB 5, UUSA.

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

**Cashier**, 007189F, PB 3, Parking Services.

**Continuations Receiving/Periodicals Receiving Supervisor**, 007822G, PB 3, Technical Services, Library.

**Director of Information Services**, 007831B, PB 4, MPRG/ECE.

**Dishroom Assistant Supervisor**, 000705H, PB 1, RDP/Dietrick.

**Executive Secretary**, 007826Y, PB 3, University Outreach.

**Financial Planning Manager**, 007567F, PB 5, Budget/Financial Planning.

**Grounds Worker**, 000842F, PB 1, Physical Plant/Grounds.

**Housekeeping - Night Crew**, 002742H, PB 1, RDP/Facilities/Services.

**Housekeeping Manager**, 006926H, PB 3, RDP/Facilities/Services.

**Housekeeping Worker**, 0000721H, PB 1, RDP/Facilities/Services.

**Housekeeping Worker**, W022490H, PB 1, RDP/Facilities/Services.

**Housekeeping Worker**, W023295H, PB 1, RDP/Owens

Dining Center.

**HVAC Technician Senior**, 001597H, PB 4, RDP/Culinary Services Maintenance.

**Instructional Technology Systems Integrator**, 007766S, PB 6, Educational Technologies.

**Laboratory Specialist**, 007707B, PB 3, CE.

**Laboratory Specialist**, 007245M, PB 3, Biochemistry.

**Office Services Specialist**, 002023M, PB 2, CVM.

**Payroll Manager**, 002501F, PB 5, Controller's Office.

**Program Support Specialist Sr.**, 007828B, PB 3, CHPM.

**Program Support Technician**, W023304R, PB 3, Graduate School.

**Programmer/Database Support**, 001864G, PB 4, Library Systems.

**Shopleader**, 000404H, PB 1, RDP/West End Market'.

**Smart Road All-weather Testing Technician**, 007655R, PB 3, VTTI.

**Sous Chef**, 000940H, PB 3, RDP/Southgate Bake Shop.

**Trades Utilities Senior Worker**, 007112F, PB 3, Physical Plant.

#### PART TIME

**Animal Care Technician**, W020066M, PB 2, Veterinary Teaching Hospital.

**Animal Care Technician**, W022565M, PB 2, CVM.

**Animal Care Technician/Small Animal**, W022675M, PB 1, Veterinary Teaching Hospital.

**Department Administrative Support**, 007832B, PB 3, CEE.

**Distance Learning Technician**, W020967A, PB 3, VBS.

**Laboratory Specialist**, W023305M, PB 3, APS.

**Large Animal Husbandry**, W022155M, PB 1, Veterinary Teaching Hospital.

**Library Courier Driver**, W023301G, PB 2, Library.

**Library Storage Assistant**, W023300G, PB 2, Library.

**Office Services Specialist**, W023088R, PB 2, Women's Center.

**Office Services Specialist**, W020548G, PB 2, University Registrar.

**Operations Specialist**, W022862S, PB 2, AIS—IRM.

**Parking Enforcement Officer**, W020891F, PB 1, Parking

Services.

**Program Support Technician**, W023306R, PB 3, Graduate School.

**Research Assistant**, W023303M, PB 3, CVM.

#### OFF CAMPUS

**Efnep Adult Program Assistant**, 006101M, PB 2, VCE—Arlington County.

**Efnep Program Assistant**, 007811M, PB 2, VCE—Fairfax County.

**Fiscal Technician**, 007411B, PB 3, Engineering.

**Office Manager**, 007796Y, PB 4, IALR.

**Program Administrator**, 006436Y, PB 3, Continuing Education.

**Program Assistant**, 006605J, PB 2, HNFE.

**Program Assistant**, 006606J, PB 3, HNFE.

**Program Assistant**, 007827J, PB 2, HNFE.

**Program Support Technician**, 002209R, PB 3, Graduate School.

**Radio Announcer**, W020800L, PB 3, University Relations/WVTF Radio.

**Scnep Adult Program Assistant**, 006800M, PB 2, Albemarle County.

**Scnep Youth Program Assistant**, 006609M, PB 2, VCE—City of Alexandria.

**Scnep/Youth Program Assistant**, 007330M, PB 2, VCE—Culpeper County.

**Scnep/Youth Program Coordinator**, 007233M, PB 2, VCE—Arlington County.

**Secretary Senior**, 006792M, PB 2, VCE—Washington County.

## **FACULTY POSITIONS**

#### INSTRUCTIONAL

**Civil/Environmental Engineering/Virginia Tech Transportation Institute. Faculty Member/Associate Director of VTTI.** Contact: Antonio Trani, 200 Patton (0105). Review begins immediately.

**Business Information Technology. Assistant Professor.** Contact: Bernard Taylor III, 1007 Pamplin (0235). Review begins Dec. 1.

## **University enters long-term beverage contract with coke**

By Larry Hincker

Following a university trend around the country, Virginia Tech has consolidated various beverage contracts on campus. The university has entered into an agreement with the Coca-Cola Company that effectively makes Tech a Coke-product campus.

Consistent with long-standing university practice for the use of revenue created by such agreements, the university plans to direct a substantial amount of the income to supporting student-life and academic-enrichment programs.

The university has traditionally used revenue from such contracts to support academic or student-life projects. Funds have been directed to the European Studies Center, an endowment to support scholarships, expansion of the south recreation fields, expansion and renovations of the Squires Student Center, the university reading room connecting Torgersen Hall and the library, and safety lighting in student parking lots.

"I'm very pleased that we are able to generate significant monies—in the millions of dollars over the life of the contract—to support important university priorities such as recreation and the arts. Most importantly, we've been able to hold down the comprehensive student fee," said Minnis Ridenour, chief operating officer. Virginia Tech has the lowest comprehensive student fee of any public college or university in Virginia.

Coca-Cola products, including Coke, diet Coke, Sprite, PowerADE, Fruitopia fruit drinks, Minute Maid juices, Dasani water and others will be primary beverage in the dining centers, campus convenience stores, vending machines, and sold at athletic events. A limited amount of non-Coke products will be carried in the dining centers and convenience stores. Some locations will change to Coke products immediately and others will phase in the changes over the fall semester.

Coke officials were also pleased with the partnership. "We couldn't be prouder than to have Coca-Cola in partnership with Virginia Tech," said Coca-Cola Consolidated Virginias Division Vice President Chris Dominik. "Not only are we pleased to have our products available for thirsty students and faculty members, but we are looking forward to exciting marketing opportunities to help promote Virginia Tech."

Coca-Cola's marketing plans include customized Virginia Tech vending-machine fronts, athletic-program promotions including opportunities to win trips for away games and Bowl games, and other student-oriented retail and vending promotions. He said the company will hire a student each year to be its on-campus-marketing representative, which will give the student hands-on business and marketing experience.

## **Academy for Leadership Excellence names Johnson Leader of the Year**

The Academy for Leadership Excellence presented this year's leadership award to Rick Johnson, director of Culinary Services at its annual awards luncheon in July.

The award, presented by Linda Woodard, assistant vice president for Personnel Services and Dick Harshberger, director of university leadership development, recognizes university employees who have exhibited outstanding leadership qualities through superior job performance, job-related extracurricular activities, committee work, and other areas of service to the university.

recognize and welcome this year's new Fellows to the Academy..

Laura Fornash, director of Information Technology Programs and the Extended Campus, Richmond, nominated Johnson for the award, saying "Rick looked outside of the university paradigm to find a new model for dining services. He provides a vision and direction for the organization, but works through staff involvement and collaboration. He believes in and promotes the concept of a customer-driven organization."

Bill Elvey, director of Physical Plant and a member of the Selection Committee said, "We had an excellent field of candidates this year for this award, but Rick Johnson's superior job performance, his extraordinary effort and his outstanding accomplishments made it clear to the committee that he was the most deserving of this award and recognition."

In addition to the Leader Awards, members of the 00-01 ALE class were recognized as new fellows in the academy with oak-framed and matted certificates. Each year the academy initiates a class of nominated leaders from across the university to participate in a series of workshops and developmental programs focused on various leadership topics. The academy seeks to facilitate the development and application of leadership skills within the university by providing developmental opportunities for individuals in leadership positions.

Those being inducted into the academy included Greg Adams, Alvin Alexander, Larry Bechtel, Jeannie Bonner, Allen W. Campbell, Darlene Conrad, Barbara K. Harris, Lee Anne Hoppe, Cathy Jacobs, Josh Knust, Marlene Kuhtmann, Richard McCoy, Deborah Miller, Michele Moldenhauer, David Richardson, Patricia Rodgers, Lisa Schabenberger, Lois Stephens, Cynthia P. Strader and Connie Wilkinson.

New delegates who will begin their year-long program in September are John Aughenbaugh, Amanda Campbell, Suan Caruvana, Melinda V. Crowder, Debra Duncan, Mary Dunker, Donna F. Ferrandino, Monika Gibson, Kathy Haden, Angela L. Hayes, Mary D. Hunter, Gail M. Kirby, Stephen J. Kleiber, Janet Linkous, Kimberly K. Medley, John F. Pollard, Tracey Schroeder, Roy Smith, Terri Thompson, Michael Westfall, Cindy Wilkinson, Chris Wise, Lynn Young and Joan K. Ziembra.

# Research shows hot-pepper oil may prevent salmonella in poultry

By Netta Benton

Adding capsaicin, the spicy component of peppers, to the diet of neo-natal broiler chicks appears to increase their resistance to *Salmonella*, according to Audrey McElroy, assistant professor of poultry science.

As an undergraduate student, McElroy and her graduate advisor got the idea of feeding hot pepper oil to chickens while they and a graduate student from Mexico were eating hamburgers filled with hot sauce and covered with layers of jalapeno peppers. When they wondered aloud why people like spicy foods even though they often cause a runny nose, watery eyes, and other

ill effects, the Mexican student said people in his country believe that hot foods and spices provide protection from disease.

Their laboratory quickly made the jump from humans to poultry, and hypothesized that a diet that included some form of hot peppers might protect broilers and other commercial poultry from intestinal disease.

The research began with purchasing 1,530 commercial meat chicks, dividing them into three groups, and feeding each group a standard corn-and-soybean-meal-based diet for 42 days. McElroy fed the plain feed to the first group, but added five parts per million of pure

capsaicin to the feed of the second group, and 20 parts per million to the third group's feed.

She then administered *Salmonella enteritidis* to the chicks at 21, 28, and 42 days of age. She found that both the low and the high level of capsaicin increased resistance to the *Salmonella* without adversely affecting feed consumption, weight gain, or the taste of the chicken when cooked.

"What we saw from our initial microscopic evaluation is that the capsaicin appears to cause a very mild inflammation in the intestines," McElroy said.

One theory she's investigating is the pos-

sibility that the presence of the capsaicin-induced inflammation might make it more difficult for the *Salmonella* to bind to the intestinal cells and, from there, to branch out to invade the blood, liver, and spleen.

"Or it may be that the capsaicin acts on the intestine to recruit immune cells, which then fight off the *Salmonella*," McElroy said.

Her current research is designed to evaluate any observable effects of capsaicin directly on *Salmonella* in laboratory conditions, the effects of capsaicin on the intestinal environment, and the most economical scheme of

(See HOT-PEPPER on 8)

## MCCAUGHEY

*Continued from 3*

option by the patriarchy."

"The essays in this volume," McCaughey and King wrote in the introduction, "look at films not simply in terms of whether they properly represent women or feminist principles, but also as texts with social contexts and possible uses in the re-construction of masculinity and femininity."

"We can use these images, whether they're lies or not," they said. "This is how *Reel Knock-outs* discusses them. These analyses of violent women in the movies will enable feminists to question assumptions about gender, violence, pleasure, and fantasy. They will allow film theorists to question models of female passivity and narrative closure. They also will help cultural historians and social scientists question assumptions about the development of political community among oppressed peoples."

McCaughey said the essays in the book make "feminist sense of violent women in the movies, both before and after *Thelma and Louise*, in films from Hollywood to Hong Kong, from

top-grossing to direct-to-video, from cop-action movies to X-rated skin flicks."

The book is divided into two sections, *Genre Films*, which looks at film cycles in which violent women have routinely appeared, and *New Bonds and New Communities*, which analyzes such movies to see how the female brutality fosters solidarity among the characters or audiences.

Discussions in the book range from actor Sharon Stone's violent characters to women in Hong Kong *kung fu* films to African-American women's depiction in violent films. It also examines what women have to say about female action heroes.

McCaughey has been conducting anti-sexual-assault education since 1989. She and King developed an alternative method for such education using images of women verbally and physically overpowering men. McCaughey's scholarly work examines the embodied discourses of gender, sexuality, and aggression. *Reel Knockouts* represents the logical extension of McCaughey's and King's work: a focus on popular cultural fantasies of, and reactions to, women's violence.

and students, reports Moore.

In August 2000, Terry McCoy was named research compliance officer. Since her appointment, McCoy has improved and automated the IRB databases and upgraded previous computerized records.

McCoy and Moore have conducted training for faculty members and students and have attended training sessions in IRB management and regulatory-compliance assurance at local, regional, and national meetings.

In May, Moore submitted materials for renewal of the Federalwide Assurance (FWA) for Human Subjects research at Virginia Tech. OHRP accepted the materials and assurances provided, and extended the university's FWA for an additional five years.

In June, Tarunjit Kaur was named university veterinarian and director of the Office of Animal Resources, replacing Moore. She will also serve as an assistant professor in the VMRCVM Department of Biomedical Sciences and Pathobiology.

"The creation of a unified regulatory compliance office at Virginia Tech has enhanced our research capabilities and our ability to provide federal compliance assurance," Moore said. "The creation of the office is a tribute to Len Peters and his foresight."

The office and its units are listed under Research Compliance in the university telephone directory. The IRB guidelines can be found at [www.research.vt.edu/research/IRBguidelines.html#3](http://www.research.vt.edu/research/IRBguidelines.html#3), where IRB submission instructions, protocol-review checklists, copies of IRB review forms, and other related forms can be downloaded.

## TECH

*Continued from 1*

ganisms that are used to break down chemicals and other pollutants in industrial waste are carefully monitored by wastewater-treatment-plant operators.

However, Love said, it is not uncommon for an industry to release a "toxic shock" of compounds that can upset the balance of health among the microorganisms at a treatment plant. When this happens, the treatment process can suffer a breakdown.

Love is studying the molecular makeup of microorganisms used in wastewater treatment in an attempt to develop bio-sensors that can detect stress responses induced by toxic pollutants. Such bio-sensors would enable treatment-plant operators to quickly identify toxins that are causing problems and to determine how to protect the community of microorganisms in the treatment process.

In announcing Love's selection as the first Busch Award recipient, the WERF cited her research as "the first step in creating the 'radar' that operators need, the early-warning system to detect upsets and prevent the nightmare of process breakdown."

Love's research already has produced an understanding of how concentrations of certain

toxins can cause microorganisms in an activated-sludge-treatment system to release high levels of potassium, which can result in a breakdown of the system. Her work in this area provides treatment-plant operators with the means to develop a detection system to prevent this type of breakdown.

Since joining the Virginia Tech faculty in 1994, Love has developed a strong and successful environmental biotechnology research and teaching program. In 1995, her work in the field of biological treatment processes for pollution control and prevention earned a National Science Foundation Faculty Early Career Development Program Award, a four-year grant of \$400,000. During her seven years at Virginia Tech, Love has attracted a total of \$1.8 million in external research funding. Largely through Love's efforts, Virginia Tech is now recognized as one of the few universities with a robust environmental biotechnology program.

Love received her B.S. in civil engineering and M.S. in environmental engineering from the University of Illinois at Urbana-Champaign, and a Ph.D. in environmental systems engineering from Clemson University in 1994.

## ACHIEVERS

*Continued from 2*

in six categories.

**Melinda Crowder**, associate director in University Unions and Student Activities, presented a workshop titled "The Relationship between Student Leadership Skills and Post-graduate Success" with co-presenters, **Ron Daniel**, associate provost for undergraduate programs, and **Maureen Karlovich**, leadership development graduate assistant, at the 2001 American College Personnel Association conference in Boston.

Crowder also co-presented programs about the Common Book Project at Virginia Tech with Daniel and **Dianna Benton**, Provost's Office special-projects coordinator, at the 2001 American Association of Higher Education and International First Year Experience conferences in Washington D.C. and Honolulu.

**Judd Flynn**, executive chef in Owens, won the first annual NACUFS competition yesterday at the NACUFS Convention in Cincinnati for best chef on a college campus.

At the biennial Grand Chapter meeting of the Sigma Chi International Fraternity in New Orleans in June, **Edward F.D. Spencer** of Student Affairs was elected as one of the 15 members of the fraternity's Board of Grand Trustees. At the same meeting Spencer was also inducted into the fraternity's Order of

Constantine which elects a maximum of 14 each year who have given long and distinguished service to Sigma Chi at both the local and international level.

**Randy Stith**, director of Visual and Broadcast Communications, has been recognized by the "Agricultural Communicators in Education" (ACE) for the video "A Home of Our Own." It won a national Gold Award that will be presented at the group's international meeting in July in Toronto. The video was also acclaimed by CASE District III.

Phi Beta Delta, the international honorary society, has presented its faculty award for distinguished international service to **J.J. Owen** (English, retired) in recognition for 27 years of pioneering work in Study Abroad. **Sharon McDonald**, who received her Ph.D. in agricultural economics in May, was honored with the student award for distinguished international service, primarily because of the work she did on behalf of PBD while completing her degree.

**Helen B. Peters**, a graduate student in Human Development at the Virginia Tech Northern Virginia Center, won the essay contest with her paper titled "The 'Rights' Way to Peace in Ghana."

New faculty members inducted were **Ellen Braaten**, **William Brown**, **Terry Clements**, **Leon Geyer**, **John Jelesko**, **Harold McNair** and **Brian Mihalik**.

## Communication association names Riley Educator of the Year

By Tiffany J. Shoop,  
communication studies

Sam Riley, journalism professor in the Department of Communication Studies, has received the 2000-2001 National Educator of the Year award from the Magazine Division of the Association for Education in Journalism and Mass Communication.

The award is given annually to the magazine educator who has uniquely contributed to magazine-journalism education through excellence in teaching, research, and service. Riley introduced magazine writing to the commun-

cation curriculum at Virginia Tech. He accepted the award August 6 in Washington, D.C.

"I am delighted to receive this honor and to know that the nation's teachers of magazine journalism respect the importance of knowing the history of their craft," said Riley, who has written 10 books on the history of magazines and their editors and publishers. Some of his most recent work includes *Dictionary of Literary Biography: American Magazine Journalists, 1900-1960*; *Consumer Magazines of the British Isles*; *Corporate Magazines of the*

*United States; and Regional Interest Magazines of the United States.*

"Sam Riley is a well-rounded scholar and model for all of us to emulate," said David Sumner, former head of the Association for Education in Journalism and Mass Communication Magazine Division and professor of journalism at Ball State University. Sumner chaired the committee that selected Riley for the award.

Riley, who recently received the Virginia Tech Certificate of Teaching Excellence, has taught journalism and other communication-studies classes at Virginia Tech since 1981.

## Hochella receives Humboldt to study acid-mine drainage

By Sally Harris

Michael F. Hochella Jr., professor of geochemistry and mineralogy, has received the Humboldt Research Award to work in Germany on acid-mine drainage.

"Acid-mine drainage is an environmental problem of vast proportion," said Hochella, a professor in the Department of Geological Sciences in the College of Arts and Sciences. In a previous collaboration in 1998, Hochella, then a Fulbright senior scholar, and Andrew Putnis from *Universität Münster* of Germany gained a detailed understanding—the first time this had been done—of the way toxic metals can be transported so far from the mining sites, sometimes hundreds of kilometers. They also studied where acid-mine drainage originates and is most acute.

With the Humboldt award, the two researchers will continue the most critical phase of this work by collecting and interpreting data from drainages coming from two major acid-mine drainage sites, one in Germany and one in the United States.

"Mineral-water interfacial interactions associated with working and abandoned sulfide-bearing mines and mining wastes are among the most complex, dynamic, and environmentally important of all near-surface rock-water systems," according to Hochella. "These mining sites, numbering more than 200,000 in the United States and Germany alone, typically

release large amounts of metals into the environment, ranging up to hundreds of kilometers along hydrologic gradients in a relatively short time. Contamination occurs when high solute concentrations of iron and other more toxic metals form during the weathering of pyrite and associated metal sulfides. These acidic effluent flows, from mine entrances and waste piles, mix with air and oxygenated surface water and precipitate metal oxides, oxyhydroxides, and/or hydroxysulfates."

These phases form mineral/rock coatings and sediments down to the nanometer scale that may contain very high concentrations of contaminating metals—up to percent levels of, for example, copper, zinc, and lead—and can be transported long distances. Hochella and Putnis first described these associated phenomena after finding an effective way to collect and prepare critical samples from natural environments.

For the study using the Humboldt award, the researchers will use two sets, or suites, of samples from acid-mine drainage sites. The first is in the vicinity of Narz-Gebirge on the border of the former East and West Germany, and the second is near Butte-Anaconda in Western Montana. "Both of these sites are world-class acid-mine drainage sites in terms of size and environmental importance," Hochella said. The instruments the scientists will use to ana-

lyze the samples are at the *Institut für Mineralogie* and Interdisciplinary Center for Electron Microscopy and Microanalysis at the *Universität Münster*.

Hochella and Putnis hope their work will enable them to develop better models of metal transport. Subsurface and surface-water reactive transport models that attempt to describe the distribution of toxic metals away from contaminant sources have been generated over the years, Hochella said. "However," he said, "these models cannot describe systems far from equilibrium nor systems where greatly varying micro-environments dominate. In this study, by identifying toxic-metal-bearing phases and determining their distribution in the drainage system using the equipment in Germany, and combining this information with thermodynamic considerations, it will be possible to develop much more robust metal-transportation models than currently exist."

Hochella also leads a project that was recently awarded a \$1-million award from the National Science Foundation's newest initiative, Nanoscale Science and Engineering. The project is entitled "Nanoscale Processes in the Environment: Nanobiogeochemistry of Microbe/Mineral Interactions." University team members include Susan Eriksson, Madeline Schreiber, and Chris Tadanier, all from Virginia Tech's Department of Geological Sciences.

## FIELDS

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roles, including Rossini's Figaro (sung more than 125 times), Germont, Papageno, Escamillo, Don Giovanni, Eugene Onegin, Marcello, Dr. Malatesta, Valentin, Orfeo, and Sweeney Todd. He has sung leading roles with the operas of San Francisco, Geneva, Zürich, Los Angeles, Mannheim, and Berlin.

He has received two separate Rockefeller Grants and a National Opera Institute Grant for advanced opera studies. He received third prize in the San Francisco Opera national auditions and did post-graduate studies at Mannes College of Music in New York, Dartmouth College and the International Opera Studio in Zürich, Switzerland.

Fields is also an active recitalist and concert singer. He has appeared as soloist with the Oregon Bach Festival, the Carmel Bach Festival, the Luzern International Music Festival, the *Collegium Musicum de Genève*, the Oregon Bach Festival, the *Heidelberg Schloss Festspiel*, the *Nürnberg Philharmoniker*, the San Francisco Symphony, the Oregon Symphony, the William Hall Chorale, and the Roanoke Symphony.

As artistic director of Opera Roanoke, Fields has staged more than 25 operas to regional and national critical acclaim since 1989.

## HOT-PEPPER

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feeding capsaicin to commercial poultry.

McElroy said *Salmonella* typically results in little to no observable illness in chickens, but it is a disease of concern to the industry due to its ability to cause human illness. "I think there's probably less *Salmonella* in our poultry today than there was in the past, because the industry has taken preventative measures," she said. "But it would be a real breakthrough if we could find a way to reduce levels even further, without the use of antibiotics."

The poultry that McElroy has worked with seem to have no objections to the taste or sting of the capsaicin. Rodents, on the other

hand, have an aversion to the hot seeds. "Feeding poultry feed to which capsaicin has been added could be very beneficial in poultry houses," she said. "Rodents love to get into poultry house, where they eat the feed, destroy buildings, and spread *Salmonella* and other diseases. If the food was unappetizing to them, it might keep them away."

"If we can prove that feeding capsaicin to birds does reduce *Salmonella* in a commercial poultry-production situation, it would provide a non-antibiotic way of reducing food-borne pathogens," she says. "Consumers want an antibiotic-free product, and this may provide the answer."

McElroy's research is partially funded with a grant from the Virginia Agricultural Council.

## Kilkelly receives NEH grant for research, writing

By Sally Harris

Ann Kilkelly, professor of theater arts and women's studies, is a jazz-tap dancer, poet and short-story writer, choreographer, script writer, stunt person, director, composer, and award-winning teacher who recently received a Collaborative Research Grant of \$130,000 from the National Endowment for the Humanities for a project entitled *Tapping the Margins*.

*Tapping the Margins* will culminate in a scholarly book about women in jazz-tap dancing based on research in the Ernie Smith Jazz Dance film collection in the archives of the National Museum of American History. The book's analysis considers constructions of gender, race, class, and sexuality in historical performances of jazz-tap dancing.

Kilkelly is working with Mary Neth at the University of Missouri, and the NEH grant will allow them to continue their research collaboration and writing of the book. Kilkelly and Neth have given scholarly presentations on women and jazz-tap since 1992 at universities and dance studios and in national festivals. Kilkelly also does master classes, workshops, and performances in the historical forms of tap and vernacular jazz dance. In part, she takes the research for the book into her performances.

"I think it's important to learn and perform the dances and music as a part of the research," Kilkelly said, "so I give classes and conduct master workshops that incorporate the film material that the book is based on. The research also forms the basis for the material I perform on stage."

The researchers also have each received Smithsonian Senior Fellowships twice to pursue this work in residencies at the museum. Kilkelly and Neth's research also involved listening to oral histories of jazz performers in Smithsonian's collection. They also looked at the Shiffman collection, which contains the business records of Frank Shiffman, the business manager of the Apollo Theater from the 30s through the early 60s. The Apollo is the major performance venue in Harlem where top black performers such as Duke Ellington and Billie Holiday played and many great tap dancers performed. They also looked at programs, show bills, films from the Library of Congress, and other historical materials.

At the same time, Kilkelly invited dancers into the archives to view some of the materials. She read Billy Strayhorn's scores for the Copacetics, a group of tap masters formed to remember Bill Bo Jangles Robinson. She brought D.C. dancers and teachers into the Smithsonian archives to look at films. "It's important to me that this research serves the field, the dancers, the art of tap dancing," Kilkelly said, "because the art form is not sufficiently credited or appreciated. The historical and ongoing presence of race, class, and gender distinctions has kept tap a second-class art form."

Kilkelly is a master teacher of jazz-tap dance. Besides teaching courses in women's studies and theater arts at Virginia Tech, she has presented workshops throughout the United States and in Italy.

Kilkelly served as director of the Women's Studies program at Virginia Tech from 1991 until 1997, earning the Virginia Tech Exemplary Program Award for creative and innovative use of faculty resources.

She has received the Virginia Tech College of Arts and Sciences Diversity Award, was named Virginia Tech Woman of the Year by the Women's Center, and earned the Diggs Scholar-Teacher Award for Excellence in Teaching from Virginia Tech.

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