

Tool Of War Helps  
Researcher Track  
Threatened Animals



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Invigorating The  
Teaching Of Math And  
Science



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Young Investigator  
Examines Geological  
Mysteries



Page 6

# WILLIAM & MARY NEWS

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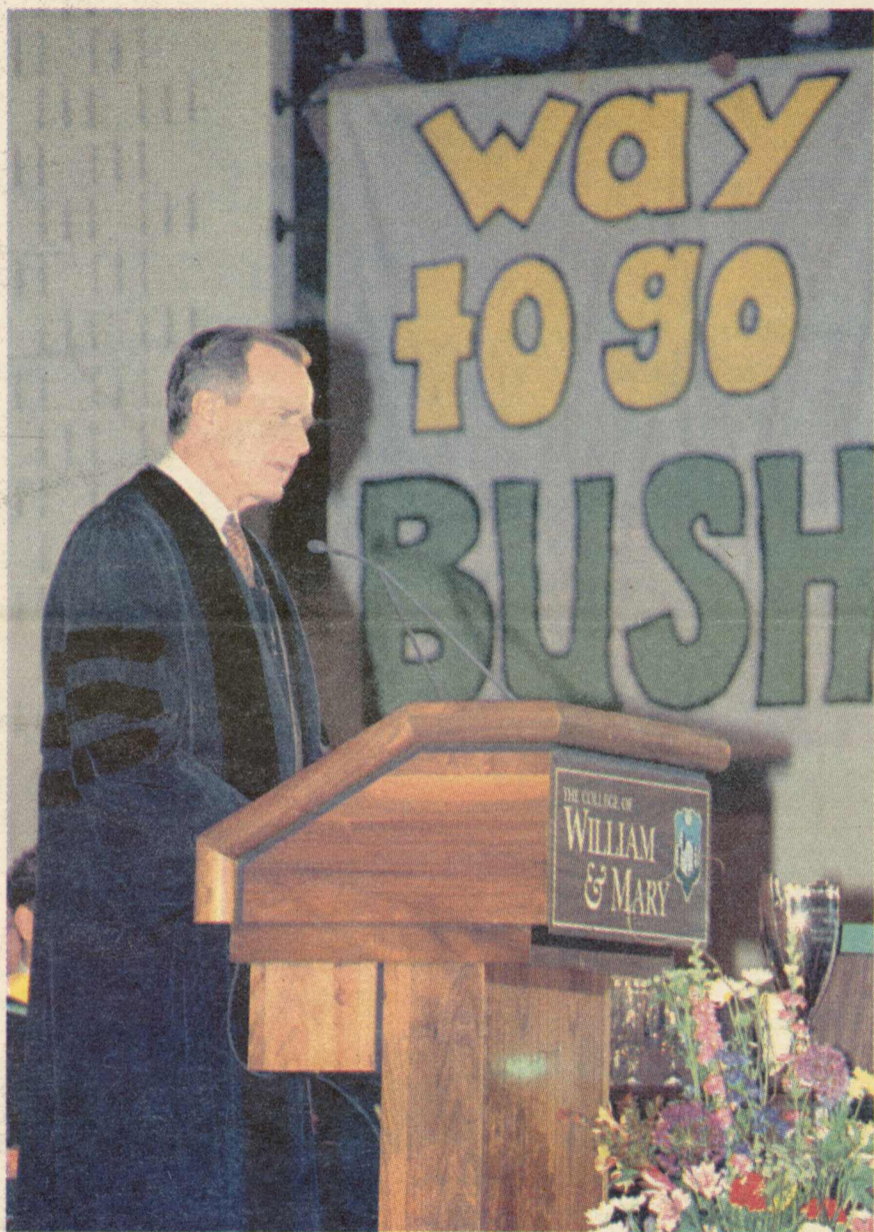
VOLUME XXIV, NUMBER 21

A NEWSPAPER FOR FACULTY, STUDENTS AND STAFF

MONDAY, MAY 22, 1995

## Bush Issues A Spirited Call To Public Service

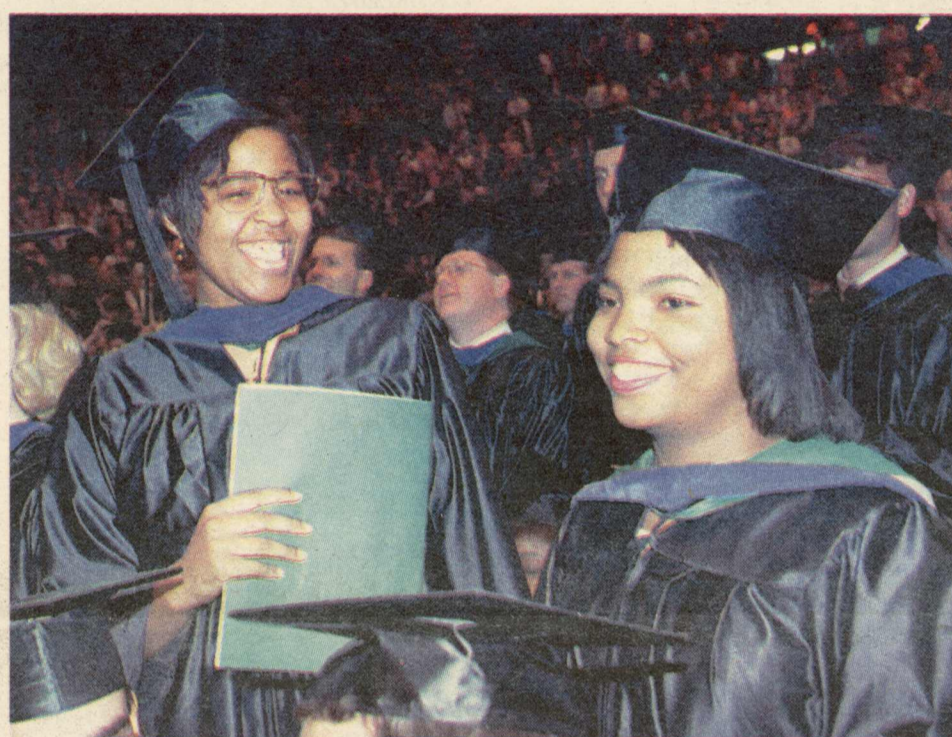
*Former President Addresses 1,663 Graduates At Commencement '95*



During his Commencement address, President Bush encouraged the graduates to continue pursuing public service after they leave William and Mary.

At right, Angela Davis (l) and Catrina Hill share in the joy of graduation. Both women earned BBA degrees in accounting.

Photos by C.J. Gleason/VISCOM and Bernie Boston



**I**t rained on their parade, but that couldn't dampen the enthusiasm or spirits of 1,663 graduates who received their degrees in William and Mary Hall on May 14.

After all, they had the former president of the United States in attendance, who not only gave them a spirited call to public service but dropped in unexpectedly on their pre-commencement activities at the Sir Christopher Wren Building prior to the Senior Walk across campus.

George Bush, 41st president of the United States, was definitely the hit of the party. Arriving at the College on Saturday, May 13, just after resigning from the National Rifle Association for intemperate language in a fund-raising appeal, Bush attracted national attention and was the lead story Sunday evening on several national television newscasts.

After President Sullivan introduced the former president as "a person of individual integrity and personal courage ... who isn't reluctant to face down a tyrant in the Persian Gulf and who is willing to stand up for our Federal agents who lost their lives in Oklahoma City," Bush briefly addressed the matter.

"I think we all ought to speak up against the excess of those crazy people who put them [law officers] in a bad light and refer to them as 'Nazis' and 'jack-booted' thugs," Bush said.

Other than that reference, the former president directed his talk to a call to public service that he said defined a "truly successful life."

"Few colleges possess as rich a legacy as William and Mary," Bush said, adding that he was especially pleased to note "your emphasis on public service ... your graduates and honorees read like a Who's Who in American History."

Calling William and Mary "a place of possibilities—a place where you have

developed your potential and prepared for the future," he encouraged graduates to continue their pattern of public service as they "go into the world and face reality."

William and Mary understands the value of service to others, Bush told more than 11,000 in William and Mary Hall, noting that more than half of the undergraduates at the College volunteer for public service each year. "It's what I call Points of Light in Action," Bush said. "I believe that any definition of life in America must include service to others. It's just that simple."

*"I believe that any definition  
of life in America must  
include service to others."*

*—George Bush*

## McLaughlin Named Ed School Dean

**V**irginia Laycock McLaughlin, Chancellor Professor of Education, has been named the new dean of the School of Education. McLaughlin's appointment was approved by the Board of Visitors May 13.

McLaughlin, a psychology major who graduated with highest honors and a Phi Beta Kappa key from the College in 1971, has focused her research and teaching in recent years on collaboration—using teamwork in the design and evaluation of educational programs.

"I've been working on collabora-

CONTINUED ON PAGE 2



Virginia McLaughlin

Bush's own dedication to public service and his accomplishments as a leader were noted in his citation for an honorary degree, one of three conferred at the ceremony. Others honored were J. Maxwell Irvine, principal and vice chancellor of the University of Aberdeen in Scotland, which is the alma mater of the Rev. James Blair, founder of the College; and David Beers Quinn, Andrew Geddes and John Rankin Professor of History Emeritus at the University of Liverpool. Quinn was the first James Pinckney Harrison Visiting Professor of History at the College from 1969 to 1970.

The College also honored James P. Whittenburg, associate professor of

CONTINUED ON PAGE 4

## NEWSMAKERS

## Indian Supreme Court Visits College

The Marshall-Wythe School of Law hosted members of the Supreme Court of India, the world's largest democracy, yesterday, for a tour of the school and demonstration of its high-technology courtroom, known as Courtroom 21.

The five justices and other Indian dignitaries participated in a detailed demonstration of the courtroom's cutting-edge hardware and software and a discussion of the legal and practical implications of courtroom technology. The demonstration was conducted by Fredric I. Lederer, Chancellor Professor of Law.

In addition to the Indian visitors, the law school welcomed last week the Chief Justice of Norway and distinguished judges from Bulgaria, Malawi, Tanzania, Uganda and Zambia.

## Provost Encourages Use Of WAMI

Three items of considerable importance to the College community can now be reviewed on WAMI. The first item, from the Strategic Planning Implementation Committee, is a summary of strategic planning priorities for 1994-95, 1995-96, and 1996-97. These priorities will be discussed in an open forum with the College community in the fall. The second and third items, from the provost's office, are drafts of a revised College policy on external paid employment and a new College policy on financial conflict of interest. These policies have been submitted by the personnel policy committee and are currently being considered by the faculty assembly.

## Law Faculty, Students Recognized

Faculty and students from the Marshall-Wythe School of Law were recently honored with the following awards:

- The Walter L. Williams Jr. Memorial Teaching Award to Associate Professor Davison Douglas;
- The John Marshall Award to Associate Dean Connie Galloway;
- The Lawrence W. I'Anson Award (highest award conferred by the faculty) to Douglas Miller '95;
- The George Wythe Award (for service to the law school) to Carla Archie '95;
- The Thurgood Marshall Award (for service to the community) to the Honorable Margaret Poles Spencer.
- Virginia Trial Lawyers Association Award to Bryan Fratkin '95; and
- National Association of Women Attorneys Award to Jean King '95.

## Campus Crime Report April 1995

Crimes	
Assault	6
Larceny	
Bikes	10
From Motor Vehicles	2
From Buildings	7
Other	3
Arrests	
Driving Under The Influence	3
Liquor Law Violations	4
Drug Abuse Violations	2
Vandalism	2
Larceny/Theft	1
Miscellaneous (Not Traffic)	13
Summons Issued (Traffic)	42

# Gary Kreps Named Associate Provost

**G**ary A. Kreps, professor of sociology, has been named associate provost for research and graduate education at the College. Kreps' appointment was approved by the Board of Visitors May 13.

Kreps, who holds a bachelor's degree from the University of Akron, and master's and doctoral degrees in sociology from Ohio State University, has been active in helping to implement the campus Strategic Plan outlined by the College last fall. He has been the faculty assistant to the provost for the past year.

The associate provost is responsible for fostering and supporting research, and supervising the Office of Grants and Research Administration. Kreps will also coordinate graduate education and work

with the provost to implement the Strategic Plan.

Kreps began his teaching career as an assistant professor at Ohio State in 1971. He came to William and Mary as an assistant professor in 1972 and served as chair of the department of sociology from 1984 to 1991. Kreps was a staff officer for the National Research Council from 1976 to 1977, and received the William and Mary Alumni Association Teaching Award in 1979.

His major fields of interest include disaster and hazard studies, social organization and public policy.

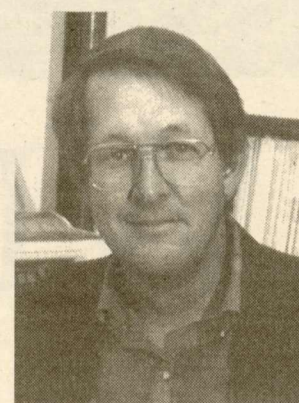
"Professor Kreps is a colleague of great distinction whose experience and superb judgment are certain to help William and Mary break new ground in research and graduate education," said

President Timothy Sullivan.

Sullivan's enthusiasm was echoed by Provost Gillian Cell.

"The appointment of the Associate Provost for Research and Graduate Education

recognizes the importance of these two areas of activity to William and Mary," Cell said. "Gary Kreps has the scholarly reputation and administrative experience essential to the position."



Gary Kreps

# McLaughlin Assumes School Of Education Post July 1

CONTINUED FROM PAGE 1

tion since the 1970s but it's received a great deal of emphasis in the last eight years," she said. "The return to collaborative service has been influenced by an appreciation of the complexity of tasks and the continual shortage of resources. To accomplish what we have to accomplish we need to work together and pool resources."

McLaughlin's knowledge of state and local agencies, schools and community groups was cited as being an asset to her new position. Said Provost Gillian Cell: "Virginia McLaughlin is a distinguished educator who enjoys great respect both on campus and around the state. I am confident that she will provide strong leadership to the School of Education at this important time in its history."

McLaughlin did her doctoral work in curriculum design and special education at Memphis State University. She also holds a master's degree in special education from Vanderbilt University. She was an assistant professor at Clemson Uni-

versity, where she received the Master Teacher of the Year award, and taught at Old Dominion University before coming back to William and Mary in 1983.

McLaughlin served as associate dean of the School of Education from 1984 to 1991 and as assistant to President Timothy Sullivan from 1992 to 1994.

a fine teacher, a well-regarded scholar and a seasoned administrator.

"Great things will happen during her deanship."

McLaughlin assumes her new position July 1.

*"Great Things Will Happen  
During Her  
[McLaughlin's] Deanship."  
—President Sullivan*

Sullivan had high praise for McLaughlin and her ability to assume a greater leadership role at the College.

"Professor McLaughlin is just the right person to lead the William and Mary School of Education into a new era of distinction," Sullivan said. "She is

## VIMS Director Resigns

On May 12, Dennis L. Taylor, dean of the School of Marine Science and director of the Virginia Institute of Marine Science, announced his resignation effective August 1. President Sullivan has accepted his resignation and indicated that an interim director will be named in the very near future.

## NEH Awards Grant To Marshall Papers Project

The National Endowment for the Humanities has awarded a grant of \$109,750 to *The Papers of John Marshall*, a multivolume editing project sponsored by the College and the Institute of Early American History and Culture.

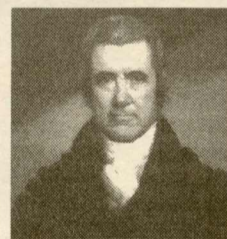
The two-year grant will enable the *Papers*' editors to complete preparation of volume nine of the series.

If an equivalent amount can be raised from private sources, the NEH will provide the Marshall Papers an additional \$15,000.

This is the the fifth major award that the NEH has awarded the project during the last ten years. Additional financial

support is provided by the National Historical Publications and Records Commission and by private foundations.

Volume 8 of *The Papers of John Marshall* will be published this fall by the University of North Carolina Press. It presents Madison's correspondence, papers and selected judicial opinions during the



John Marshall

years 1814 through 1819. The entire series is expected to comprise 12 volumes.

The staff of the Marshall Papers includes Charles Hobson, the project's director, editorial associate Laura Gwilliam and research assistant Robert Smith.

Marshall served as Chief Justice of the United States from 1801 to 1835.

## Virginia Governor's Fellows Named

Amy Sebring, a master's student in the public policy program, and Todd Sherer, a second-year law student, have been named 1995 Virginia Governor's Fellows.

For two months beginning May 30, each of the students will work closely with members of the Governor's Cabinet to obtain hands-on experience in government and public service.

The College will also provide a \$1,500 grant to the Fellows for their summer support.

Selection of Governor's Fellows is based on merit. Applicants must be graduating seniors or enrolled as degree candidates in a graduate or professional school.

The summer of 1995 marks the 14th year of this program, which is designed to strengthen ties between the state government and Virginia's academic community.

Twenty-eight students were chosen to be Governor's Fellows this year.

## Rector's Office Dedicated In Berkeley's Honor

The rector's office in Blow Memorial Hall was formally dedicated April 12 in honor of Mrs. Flora Willcox Berkeley, Class of '33.

President Timothy Sullivan joined Berkeley, her daughter and son-in-law Bobbie and Jim Ukrop, and friends of Berkeley's at a small ceremony and plaque dedication.

The dedication of the Rector's Office in Berkeley's honor resulted from a gift to the College from Mr. and Mrs. Ukrop.



President Sullivan and Mrs. Berkeley examine a copy of the Board of Visitors' resolution establishing the room in her honor.

# Tool Of War Becomes Instrument Of Science

## VIMS Researcher Adapts Night Vision Technology To Ecology

The same technology that helped the United States to win the Gulf War is helping scientists to better understand the dynamics of animal life in wetlands.

Since 1992, Kirk Havens, a wetlands ecologist in the department of resource management and policy at the Virginia Institute of Marine Science, has been working with the U.S. Army in using night vision equipment to count and track endangered and threatened animals.

"Night vision equipment is leading the way in defense technology in regard to the identification of targets," said Havens. "Now the technology is on the leading edge of natural resource science."

Conventional techniques for measuring population densities and observing the activity of animals in the wild have long frustrated natural resource scientists. These methods, including visual surveys, trapping and marking, are often inadequate because many animals are nocturnal or can camouflage themselves easily under trees or brush.

"Present techniques are limited in their capability and require scientists to make a lot of assumptions," explained Havens. "We have long hoped for a more reliable method, particularly one that eliminates animals' camouflage ability."

With night vision equipment, scientists can covertly survey large tracts of land from the air and detect virtually any medium to large-sized animal, many of which are not visible even with the naked eye during the day.

In his work with colleagues at several other universities and the U.S. Fish and Wildlife Service, Havens has used two types of night vision equipment called thermal imagers and image intensifiers.

Thermal imagers, which the military typically uses to identify the unique heat signature emitted by pieces of machinery, can also detect the heat emitted from an animal's body. Widely employed during the Gulf War, image intensifiers, on the other hand, illuminate entire land-

*"We have long hoped for a more reliable method [of tracking animals]."*

*—Kirk Havens*

scapes by amplifying natural ambient light.

As a part of a technology exchange program administered by the Department of Defense, the U.S. Army's Night Vision and Electronic Sensors Directorate at Ft. Belvoir, Va., has been loaning Havens and retired laser research physicist Ed Sharp night vision equipment.

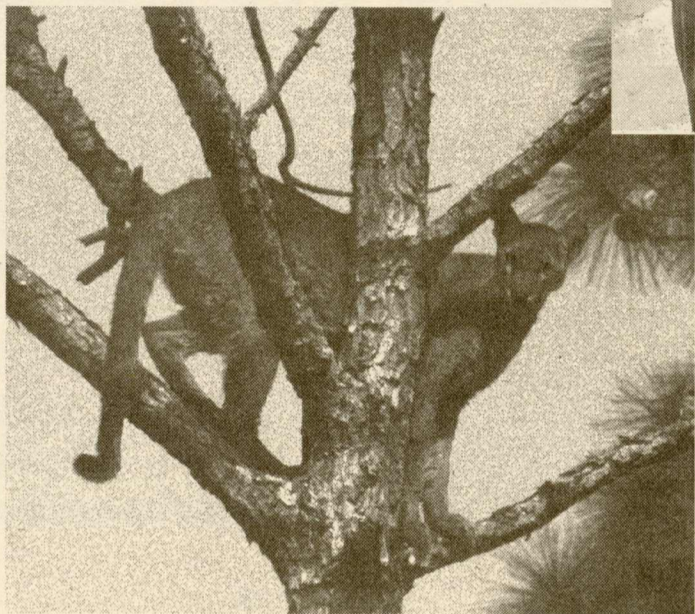
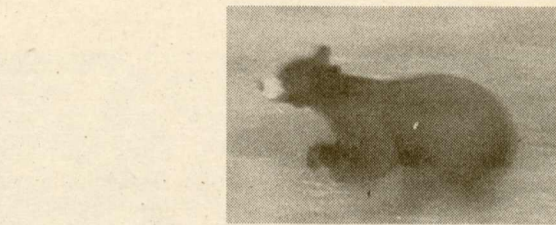
During the last two months, Havens and his colleague used the equipment for surveys of the black bear in Louisiana and the Florida Everglades panther, both of whose populations have been ravaged by habitat loss.

From a helicopter, Havens and his colleagues made calculated sweeps of specific habitat areas with a thermal imager attached to a video recorder.

In the Florida Everglades, they were able to identify the endangered panther. Even radio collar bands on the animals' neck could be distinguished with the night vision equipment.

Over the black bear's domain of the Atchafalaya Basin in southern Louisiana, Havens and his colleagues were not only able to detect the heat signature of the 300-pound bears, but also the potential location of their dens.

To fully understand the population dynamics of black bears requires obser-



Kirk Havens (above) used night vision equipment to track and count the threatened black bear in Louisiana and the endangered Florida panther (left).

vation of bear den activity, particularly females during hibernation. For this reason, Havens said that being able to locate the dens with night vision equipment represents a significant advance in monitoring capability.

"A bear's metabolism doesn't go down that much during hibernation, so the animals remain very warm," said Havens. "Since we apparently can find the dens, the idea is to drop a transmitter at the location and return to the site by land to observe the bears' activity or set up an automatic monitoring system."

Havens' colleague at Louisiana State University is using computer software to analyze the heat signatures captured on the more than six hours of videotape shot in Louisiana.

Like the military that has compiled a library of the unique heat signatures of machinery and military hardware, Havens thinks a library of heat signatures can be developed to identify the unique thermal images of various animals.

Widespread use of night vision technology for natural resource science is still a long way off. While available commercially, the equipment is extremely expensive. The U.S. Army also can only lend the equipment when its personnel are not using it.

Based on the preliminary perfor-

mance of the equipment, night vision equipment has exceptional potential to produce more accurate surveys of wildlife population densities and animal movement than conventional methods, Havens said.

In a documentary on the black bears of the Atchafalaya Basin, a French television production company will have a segment on Havens' work with the night vision equipment.

The U.S. Army has already benefited from its relationship with the natural resource scientists. Havens and his colleagues, for instance, have discovered ways to improve an image intensifier's area of illumination.

Havens has also found that the thermal imager technology cannot detect animals in water or mud—substances that shroud their heat signature.

In the long term, Havens believes night vision technology will eventually become an important instrument for natural resource scientists.

"Using this equipment will hopefully allow us a more reliable and cost-effective method for assessing the state of a threatened or endangered animal's population and ultimately give us a better understanding of their habitat requirements," he said.

by Poul E. Olson

## NOTES

### Good News About Health Benefits Premiums

*Spotlight 95*, a publication of the Virginia Department of Personnel and Training, reports that participants in the state health benefits programs will not have any premiums deducted from their June paychecks.

Also in June, employees will receive information about new baby benefits, a program to promote healthy pregnancies and healthy babies through education and risk assessment.

### 1,500 Chemists Gather At College June 11-15

The College will host the 34th annual National Organic Chemistry Symposium June 11-15.

About 1,500 scientists in the field of organic chemistry are expected to attend the event, the largest academic conference ever held at the College, which will showcase leading research in the discipline.

William and Mary's chemistry department has been ranked nationally in recent years by the American Chemical Society.

For more information about the symposium, call Chris Abelt, associate professor of chemistry, at ext. 12551.

### New Dialing Procedure In Effect Beginning May 24 For Campus Telephones

Beginning Wednesday, May 24, a '1' must be dialed before the area code in order to make a long distance call from College telephones.

An '8' (or '6' for restricted phones) must be dialed to access an outside line before dialing a '1' and the 10-digit long distance number. Currently, long distance calls will go through with or without the '1'.

This change is required to accommodate the new North American Numbering Plan which has added new area codes throughout the country. Individuals with any questions about the new dialing procedure should call telecommunications at ext. 11780.

### APVA Recognizes College For Historic Preservation

The Association for the Preservation of Virginia Antiquities presented the Mary Mason Anderson Williams award to the College on May 13 for its work in restoring and maintaining Ash Lawn-Highland.

The home of President James Monroe, a College graduate, in Albemarle County, Ash Lawn-Highland has been run by the College since 1974.

Revenue raised from contributions, grants, admission tickets and souvenir sales support the maintenance of the home and the Monroe Scholars program, which provides merit scholarships to William and Mary undergraduates.

### Manring Receives Prestigious Scholarship

The Saint Andrew's Society of the State of New York recently awarded Audrey Manring '95 its scholarship for one year of graduate study in Scotland.

Manring joins a distinguished group of more than 100 American and British scholars, including past William and Mary graduates, who have received these scholarships over the past 35 years.

Three students from across the country were chosen for the \$12,000 scholarship this year. Recipients must generally be of Scottish lineage.

Manring is also the recipient of the 1995 Cecil M. McCulley Humanities Award from the Phi Beta Kappa Society.

## Memorial Day Holiday

The College and Virginia Institute of Marine Science will observe Memorial Day on Monday, May 29.

Most of the administrative offices and the plant department (except for those employees required to maintain essential services as determined by management) will be closed. The decision to require employees to work should be made by the dean, director or department head, as appropriate, and should be communicated to the employee(s) as soon as possible. The Campus Police Department will maintain its regular schedule.

The names of permanent classified employees who are required to work must be reported in writing to the Office of Personnel Services no later than June 12, 1995 in order that these employees may be credited with compensatory leave. Hourly employees who are required to work during the holiday will be paid their regular hourly rates.

With the approval of management, compensatory leave should be taken as soon as possible after the holiday on which it was earned. Compensatory time not taken within 12 months will be lost.

On behalf of the administration of the university, I wish each member of the community a safe and enjoyable holiday.

Gillian Cell  
Provost

# Bush Points The Way For Class Of '95



Photos by C.J. Gleason/VISCOM and Bernie Boston.

*"... Be bold in your dreaming; be bold in your living; be bold in your caring, your compassion, your humanity. Then when you sit at your grandchild's commencement half a century from now, you'll look back at the tapestry of your life and find it good. And that, my fellow classmates, will be your greatest success of all."  
—President Bush*

CONTINUED FROM PAGE 1

history, with the Thomas Ashley Graves Teaching Award for sustained excellence in teaching; Vicki Healy with the Botetourt Medal for the greatest distinction in scholarship; Daniel Greenwald with the James Frederic Carr Cup for exemplary character, scholarship and leadership; and Dara Lehigh, Mikael Davis, and Father Charles Kelly, campus minister from St. Bede's Catholic Church, with the Algernon Sydney Sullivan Award, "in recognition for [their] influence for good."

James J. Vergara Jr. '69, an attorney from Hopewell, Va., and a member of the Board of Visitors, received the Distinguished Military Graduate Award, which honors an alumnus of the ROTC program who has made significant contributions to society. William F. Mirguet Jr. '69, a businessman and also a member of the Board of Visitors, delivered the address to the new military officers.

The senior class selected as its honorary marshalls, who lead the graduates on their traditional walk, W. Samuel Sadler '64, vice president for student affairs; Nancy Burkett, coordinator of internships in the office of career services, and Kathleen F. Slevin, associate professor of sociology.

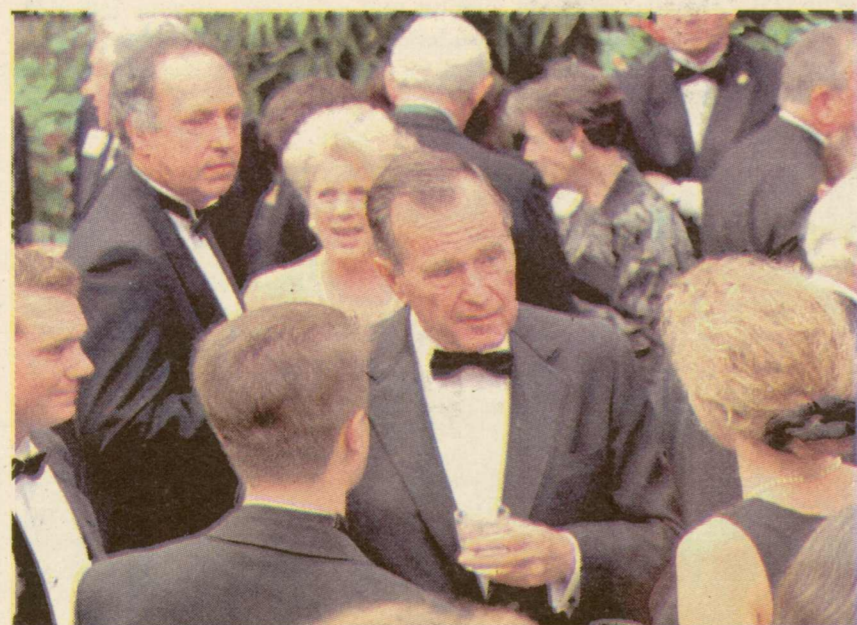
Judith Karin Lorimer, the student Commencement speaker, delivered remarks on behalf of the senior class.

Abner J. Mikva, a former congressman and judge of the U.S. Court of Appeals, who has served as counsel to President Clinton since October 1994, delivered the commencement address at Marshall-Wythe School of Law exercises. Dr. Jack Daniel Spiro, senior rabbi at Beth Ahabah in Richmond, spoke at the baccalaureate ceremony. Robert Skunda, secretary of commerce and trade for the Commonwealth of Virginia, spoke to the M.B.A. and B.B.A. graduates of the School Business Administration.

Arriving on Saturday on a plane provided by James W. McGlothlin '62, President Bush attended a dinner in the Muscarelle Museum of Art for honorary degree recipients. On Sunday, despite intermittent rain, he surprised seniors assembling for the Senior Walk in the



The traditional candlelight ceremony for graduating seniors was held Saturday night in the Wren Yard.



President Bush visits with members of the College community at a black-tie dinner for honorary degree recipients on Saturday evening at the Muscarelle Museum of Art.



During the Commencement ceremony, President Bush relaxed in a 230-year-old Grand Master's Chair in which five former American presidents had sat while on campus to receive honorary degrees.

CONTINUED FROM PAGE 4

Wren Yard before going to William and Mary Hall. From the steps of the Sir Christopher Wren Building, Bush told the students that he thought that they "would be browsing through the stacks in the library" and then said it was "a great honor to be here. Good luck and God bless you." Some of the students responded by chanting "Four more years."

At the beginning of commencement exercises, President Sullivan, noting that many of the graduates had been drenched in a downpour on their walk across campus, said, "We are here to celebrate the achievements of The College of William and Mary, and... no degree of dampness can stifle the enthusiasm we feel here today."

Bush's sense of humor and relaxed manner were evident throughout his talk. As he began his address, Bush called attention to the historic 230-year-old Grand Master's Chair in which five former American presidents had sat while on campus to receive honorary degrees.

"I am pleased to be sitting in this enormous chair," Bush said. "My predecessors were obviously men of distinction, broad in intellect. They were also broad in the beam if they needed a chair like that."

Later, he recalled a commencement at his alma mater, Yale, where a speaker explained that the letters Y-A-L-E stood for Youth, Altruism, Loyalty and Excellence. When the speaker asked a student why he had his head down during what was an extremely long talk, the student said "I was thanking God I didn't go to The College of William and Mary."

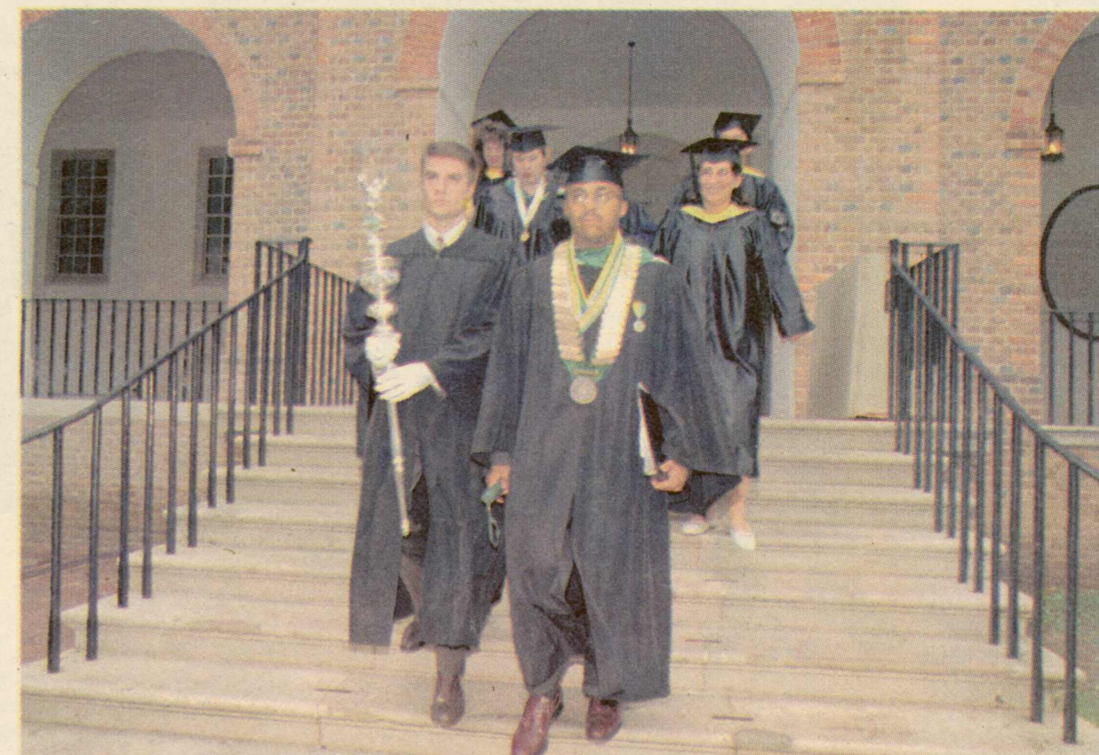
Bush joked that he had had an identity crisis since he left the presidency and thanked William and Mary for inviting him to commencement so he could learn who he was again. First, he said, he was known as the wife of an author, then the father of a governor (his son, George, is governor of Texas) and then a rogue golfer who struck a woman with an errant shot which drew this response from Mrs. Bush: "Do you have to play golf? Isn't there enough violence on television!"

Saying he was an optimist about the future, Bush closed by telling the graduates to be bold "in your dreaming... your caring, your compassion, your humanity. Then when you sit at your grandchild's commencement a half century from now, you'll look back at the tapestry of your life and find it good. And that, my fellow classmates, will be your greatest success of all."

by S. Dean Olson



The rain couldn't dampen the graduates' enthusiasm for their special day.



Greg Werkheiser (l), former president of the Student Association, and Kevin Turner, president of the senior class, lead their fellow graduates down the steps of the Sir Christopher Wren Building marking the start of the traditional Senior Class walk across campus.



President Sullivan congratulates Associate Professor of History James Whittenburg, the recipient of the 1995 Thomas Ashley Graves Award for sustained excellence in teaching.



President Sullivan and Rector James B. Murray Jr. flank honorary degree recipients J. Maxwell Irvine, President Bush and David Beers Quinn.



The mother of a ROTC graduate snaps a picture of her son and proud family outside William and Mary Hall.

CONTINUED ON PAGE 5

# Breathing New Life Into The Learning Experience

**M**ath and science courses, both at the college and public school level, are generally taught with limited reference to the outside world.

That's the opinion of three William and Mary faculty members who want to breathe new life into the education experience.

As part of a state initiative to bolster student competency in math and science, Associate Professor of Math George Rublein, Professor of Education Ronald Giese and Jody and Layton Smith Professor of Education Joyce VanTassel-Baska, and their colleagues at 15 other public and private institutions in Virginia, are pursuing initiatives beginning next fall to improve the instructional skills of teachers in math and science.

The common crux of the William and Mary group's project, funded by grants from the State Council for Higher Education, is to wean teachers from their reliance on textbooks and look to the "real world" for problems demonstrating concepts in math and science to students. Pivotal to this objective is honing the teachers' understanding of the concepts and higher level processes associated with these disciplines.

"There's no real reason why mathematics has to be confined to textbooks," said Rublein. "[But] in the middle schools, mathematics is taught as a textbook exercise disconnected from the kids' immediate surroundings."

Textbooks, Rublein suggested, can rarely bring concepts in math and science to life. When teachers tie their lessons to textbooks, learning consequently takes the form of rote memorization and little understanding.

To provide a model of the kind of teaching and learning that he believes

*"There's no real reason why mathematics has to be confined to textbooks."  
—George Rublein.*

should occur in the mathematics classroom, Rublein will run a course for more than 300 secondary teachers focusing on the application of mathematics to solving physical problems associated with commercial airplane flight.

"I want teachers to look around for real-world problems which their students can figure out, such as why do schools

cost so much so build," Rublein said. "Kids should come away from a math class and be able to tell on the spot what this stuff is good for."

Like Rublein, Joyce VanTassel-Baska believes the concepts taught in math and science must be put into a real-world context for students to truly understand them.

Students learn best, she said, when they are able to generate understanding and new knowledge for themselves rather than have it imposed on them.

Administered through the Center for Gifted Education and co-taught by faculty in the math and science departments at the College, VanTassel-Baska's project will focus on 40 area primary school teachers of high-ability students.

Her initiative assumes an interdisciplinary, problem-based learning approach to improving the teachers' instructional skills in mathematics, science and technology.

VanTassel-Baska and her teaching team will use Lake Matoaka as the centerpiece of their effort to demonstrate how concepts from a variety of disciplines can be applied to understanding everyday occurrences.

"Real-world contexts like these put learning in perspective by showing how it almost always involves the interrelat-

ionship among various disciplines," explained VanTassel-Baska.

"I'm hoping that by putting the teachers through these exercises and experiences, they'll use them with their own students," she added.

For his program, Ronald Giese also plans to give 24 area elementary schools teachers some ideas about livening up instruction in the physical sciences, often among the least well taught disciplines at the elementary level.

Unlike their colleagues at the secondary level, elementary school teachers typically teach a range of subjects. But because most have only had a few college courses in chemistry, physics, earth science and biology, they are often weakest in the the physical sciences.

To be able to impart knowledge effectively to their students, Giese will refresh the teachers on the basic concepts of the physical sciences and also show them the fundamentals of designing meaningful experiments.

Giese, Rublein and VanTassel-Baska don't blame the teachers for their shortcomings in math and science instruction.

"It's not the teachers' fault," said Giese. "It's ours."

For at least 20 years, he said, efforts have been made to overhaul the dis-

jointed system of preparing teachers for the classroom.

"Each time we address this problem, some progress has been made," said Giese. "But we still have a long way to go."

Giese and his colleagues believe teachers of math and science must ultimately have more in-depth exposure to these disciplines at the college level.

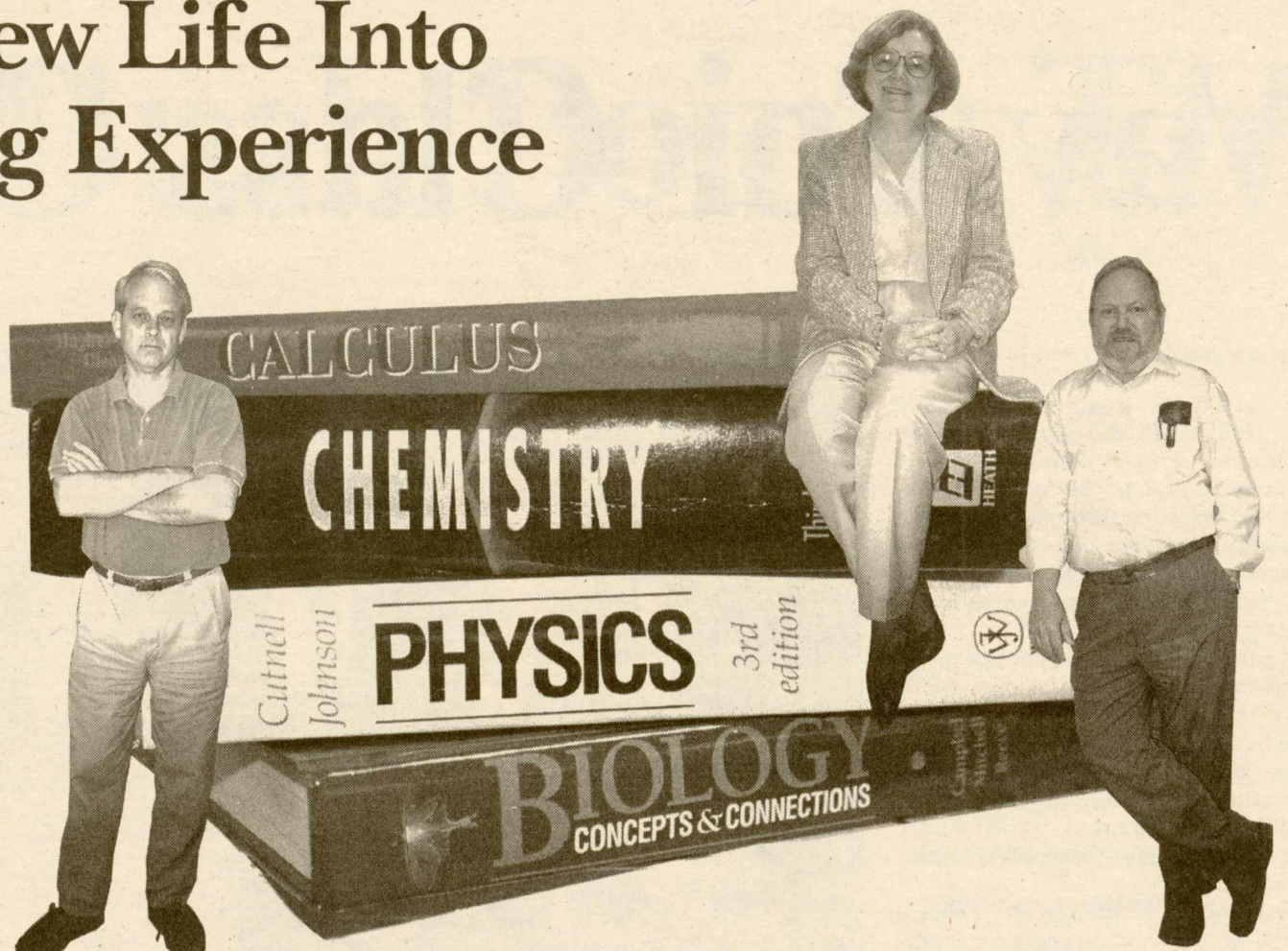
The courses aspiring educators take must also be tailored to their future needs as teachers, said the William and Mary professors.

"At most institutions, mathematics curricula are aimed at people who are going to go off and actually do it," said Rublein. "We don't show the aspiring teacher how to use the concepts that they learn in college."

While recognizing their efforts can't fix a chronic, system-wide problem, Rublein, VanTassel-Baska and Giese are hopeful their efforts will inspire at least a handful of educators to put the textbook aside in favor of real-world applications of math and science.

Said VanTassel-Baska, "Anything that drives instruction away from textbooks and toward real-world applications will tend to breathe some new life into the learning experience."

by Poul E. Olson



George Rublein (left), Joyce VanTassel-Baska and Ronald Giese are pursuing separate initiatives to draw teachers of math and science away from textbooks and instead to look at the real world.

## Unlocking The Earth's Geological Mysteries

*Young Investigator Studies Fracture Zones And Meteor Impact*

Since joining the geology department last fall, assistant professor Sarah Kruse has been using her Young Investigator Award for research initiatives of both global and local significance.

In 1992, the National Science Foundation presented her the prestigious award, which includes \$25,000 a year for five years for geophysical research projects of her choice.

Using satellite data over the Pacific Ocean, Kruse has been attempting to unlock the mechanical properties and dynamics of fracture zones in the outer layer of the earth known as the lithosphere.

Fracture zones, sites where older and younger parts of the seafloor meet, are similar to faults but there is little if any movement between adjacent rocks.



Sarah Kruse analyzes satellite data of the Pacific Ocean using the computer behind her.

The strength of fracture zones has long been a controversial topic among geologists. Kruse's preliminary findings suggest these formations are usually

zones of strength in the lithosphere.

Explaining the significance of this, Kruse said, "The ocean floor is much simpler than continents. If we can understand the geology of the ocean floor, then we can move onto the continents where people live."

As part of a joint effort with the Gerald Johnson, professor of geology, and the United States Geological Survey, Kruse is also organizing a project to help to map the impact zone believed to have been created around the Chesapeake Bay when a meteor hit it 35 million years ago.

Since 1992, the NSF has provided and additional \$44,000 for Kruse's research to match funds that she raised from private sources.

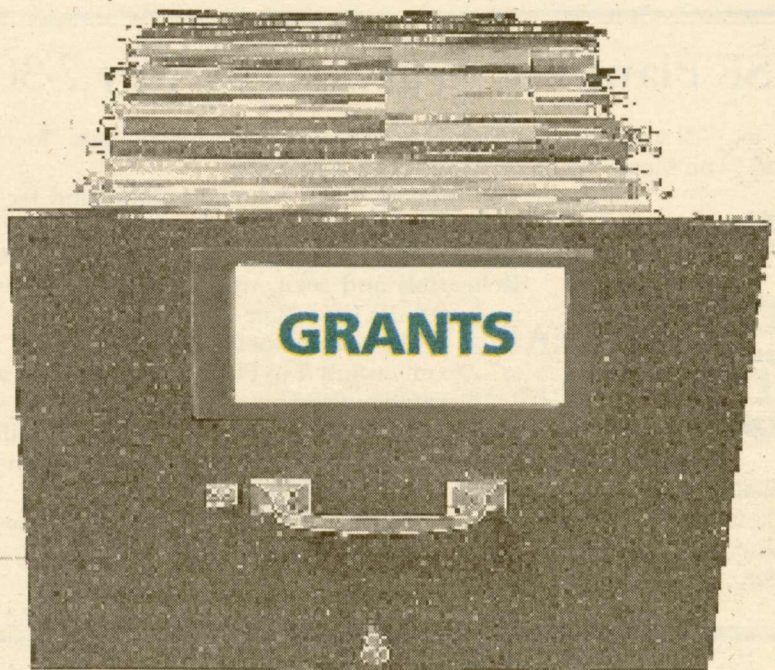
## Dean's Prizes In Women's Studies Awarded

The annual Dean's Prizes in Women's Studies were recently awarded to students in Arts & Sciences and the Schools of Education and Marine Science.

Two prizes of \$100 each went to senior Diane Lowman and sophomore Cybelle McFadden, both in Arts & Sciences.

The School of Education also awarded two prizes of \$100 each to graduate students Barbara Morgan and Kimberly Olsen.

Adele Pile, a Ph.D. student in the School of Marine Science, received the Dean's Prize for Advancement of Women in Science.



**Anthropology**

**Bowen, Joanne**, adjunct professor, "Proposal to Analyze Faunal Remains from Jordan's Journey," Virginia Department of Historic Resources, \$10,000.

**Moyer, Curtis**, archaeologist, "Conservation of Poplar Forest Artifacts," Corporation for Jefferson's Poplar Forest, \$190.

**Moyer, Curtis**, archaeologist, "Conservation of Kenmore Artifacts," Kenmore Association, Inc., \$110.

**Center for Archaeological Research**

**Blanton, Dennis B.**, co-director/research, and **Donald W. Linebaugh**, co-director/administration, "Supplemental Phase I Archaeological Survey of the Proposed Route 616 Project, Suffolk," Virginia Department of Transportation, \$3,208.

**Blanton, Dennis B.**, co-director/research, and **Donald W. Linebaugh**, co-director/administration, "Limited Archaeological Testing of the Smokehouse, Ash Lawn-Highland Property, Albemarle County," Ash Lawn-Highland, \$3,464.

**Blanton, Dennis B.**, co-director/research, and **Donald W. Linebaugh**, co-director/administration, "Additional Phase II Evaluation for Historic Research of Site 44Pg381, Route 10 Prince George and Chesterfield Counties," Virginia Department of Transportation, \$223.

**Blanton, Dennis B.**, co-director/research, and **Donald W. Linebaugh**, co-director/administration, "Revised Treatment Plan for Data Recovery at Site 44AH277 Associated with Route 29, Lynchburg Bypass Project, Amherst County," Virginia Department of Transportation, \$81,719.

**Blanton, Dennis B.**, co-director/research, and **Donald W. Linebaugh**, co-director/administration, "Additional Phase III HABS Documentation, Middle Camp, Trammel," Virginia Department of Transportation, \$12,239.

**Blanton, Dennis B.**, co-director/research, and **Donald W. Linebaugh**, co-director/administration, "Phase II Evaluation of Site 44ST257, Manpower Center, Marine Corps Base, Quantico, Virginia," U.S. Department of the Army, \$42,018.

**Donald W. Linebaugh**, co-director/administration, "Kippax Plantation: Traders, Merchants Planters, An Exhibit Celebrating the Families of Pocahontas," Virginia Foundation for Humanities and Public Policy, \$5,000.

**Applied Science**

**Manos, Dennis M.**, director and CSX professor, and **Liang-Guo Wang**, research scientist, "Combustion Diagnostics Using Diode Lasers," National Aeronautics and Space Administration, \$44,924.

**Manos, Dennis M.**, director and CSX professor, and **Tom Chyba**, research scientist, "Evaluation of Alexandrite Lasers," National Aeronautics and Space Administration, \$3,003.

**Manos, Dennis M.**, director and CSX professor, "Fiber Optic Chemical Sensing," National Aeronautics and Space Administration, \$13,128.

**Manos, Dennis M.**, director and CSX professor, and **Bing Lin**, research associate, "Investigation of Application of Passive & Active Microwave & Passive Optical Observations by Satellites to Remotely Sense Cloud Properties," National Aeronautics and Space Administration, \$11,519.

**Manos, Dennis M.**, director and CSX professor, "Neutral Stream Etchings," Sematech, Inc., \$24,000.

**Orwoll, Robert A.**, professor, "Preparation, Fabrication, and Evaluation of Advanced Polymeric and Composite Materials," National Aeronautics and Space Administration, \$147,334.

**Smith, Barry T.**, research associate, with graduate student **Michael D. Seale**, "Use of Lamb Waves to Monitor Fatigue Damage In Composite Materials," Virginia Space Grant Consortium, \$5,000.

**Thompson, David W.**, professor and Chancellor professor of chemistry, with graduate student **Robin E. Southward**, "The Single-Phase Chemical Metallization of High-Performance Polymer Films," Virginia Space Grant Consortium, \$5,000.

**Arts and Sciences**

**Scholnick, Robert J.**, dean of graduate studies, "Norfolk State-William and Mary Pregraduate Summer School Program," State Council of Higher Education for Virginia, \$22,000.

**Biology**

**Saha, Margaret S.**, assistant professor, "Angiogenesis And The Role of xERG1 in Xenopus," National Institutes of Health, \$104,250.

**Saha, Margaret S.**, assistant professor, "Termination of the Dorsal-Ventral Neural Axis

in Xenopus," National Science Foundation, \$9,000.

**Watts, Bryan D.**, research assistant professor, "Management of Eroding Shorelines For Bank-dependent Wildlife Populations," U.S. Department of the Army, \$131,000.

**Watts, Bryan D.**, research assistant professor, "Beneficial Uses of Military Grasslands," U.S. Department of the Army, \$85,000.

**Watts, Bryan D.**, research assistant professor, "Bald Eagle Management Plan for Narrows, Falls, and Tuckertown Reservoir," Alcoa Aluminum Company, \$15,000.

**Chemistry**

**Kiefer, Richard L.**, professor, with undergraduate student **David M. Wilmouth**, "Examination of Polymeric Materials Exposed To Atomic Oxygen to Look For the Presence of Long Lived Radicals," Virginia Space Grant Consortium, \$7,500.

**Kranbuehl, David E.**, professor, "Smart Materials and Process Study," Northrop Corporation, \$11,968.

**Kranbuehl, David E.**, professor, "High Performance Polymeric Adhesives and Composites," National Science Foundation through Virginia Polytechnic Institute and State University, \$50,000.

**Classical Studies**

**Oakley, John H.**, Chancellor professor, "A Book Subsidy for 'The Achilles Painter'," Alexander von Humboldt Stiftung Foundation, \$19,000.

**Computer Science**

**Nicol, David M.**, associate professor, and **Gianfranco Ciardo**, assistant professor, "Parallel Algorithms for the Simulations and Analysis of Stochastic Petri Nets," National Aeronautics and Space Administration, \$51,380.

**English**

**Fehrenbach, Robert J.**, professor, "The Mark Curtis Library," gift from Katherine K. Curtis to "Private Libraries in Renaissance England," \$23,870

**Geology**

**Goodwin, Bruce K.**, professor, and **Stephen C. Clement**, professor, and **C.R. Berquist, Jr.**, research associate, "Creation of Digital Topographic and Geologic Maps for Education by GIV Mapping Technology," United States Geological Survey, \$10,080.

**Mathematics**

**Woerdeman, Hugo**, assistant professor, "IPA to NIH," National Institutes of Health, \$12,721.

**Music**

**Preston, Katherine K.**, assistant professor, "Against the Grain: Prima Donna/Impresarios of English Language Opera in Late Nineteenth-Century America," American Council of Learned Societies, \$9,500.

**Physics**

**Benner, D. Chris**, research associate professor, and **Malathy D. Venkataraman**, research associate professor, "High Resolution Spectroscopy to Support Atmospheric Measurements," National Aeronautics and Space Administration, \$103,491.

**Champion, Roy L.**, professor, and **Lynn D. Doverspike**, professor, "Negative Ion Detachment Processes," U.S. Department of Energy, \$112,000.

**Gross, Franz L.**, professor, "Topics In Theoretical Physics," U.S. Department of Energy, \$92,000.

**Krakauer, Henry**, professor, "First Principles Calculations for Ferroelectrics," Office of Naval Research, \$107,000.

**Sher, Marc T.**, associate professor, and **Carl Carlson**, professor, "Topics in Theoretical Physics," National Science Foundation, \$80,000.

**Tracy, Eugene R.**, associate professor, and **Reggie Brown**, visiting professor of applied science, "Improved Techniques for Modeling and Controlling Nonlinear Systems with Few Degrees of Freedom," Air Force Office of Scientific Research, \$83,746.

**Venkataraman, Malathy D.**, research associate professor, "High-Resolution Spectroscopy of Molecules to Support Upper Atmospheric Studies," National Science Foundation, \$13,288.

**Sociology**

**Kreps, Gary A.**, professor, and **Susan L. Bosworth**, assessment coordinator, office of student assessment, "Continuing Archival Studies of Role Enactment, Organizing and Disaster," National Science Foundation, \$62,905.

**School of Education**

**Korinek, Lori**, associate professor, and **Chris Walther-Thomas**, assistant professor, "Dual Endorsement Master's Degree In Special Education (DEMD)," U.S. Department of Education, \$109,696.

**McLaughlin, Virginia L.**, Chancellor professor, and **Chris Walther-Thomas**, assistant professor, "The Resource/Collaborating Teacher Project," U.S. Department of Education, \$105,959.

**McLaughlin, Virginia L.**, Chancellor professor, and **Lori Korinek**, associate professor, "Teachers of Students with Emotional Disturbance (TSED)," U.S. Department of Education, \$110,798.

**Rokutani, Laurie**, instructor, "Assessment of the Student Assistance Programs and Services," Virginia Department of Education, \$1,500.

**Rokutani, Laurie**, instructor, "Training in Support of Student Assistance Program Professionals in the Tidewater Area," Virginia Department of Education, \$1,300.

**Williams, Brenda T.**, associate professor, and **Virginia L. McLaughlin**, Chancellor professor, "Leadership Preparation for Collaborative Service Delivery," U.S. Department of Education, \$114,812.

**Virginia Institute of Marine Science**

**Mason, Patrice**, research associate, "Electron Microscope Studies on NASA Langley Materials," National Aeronautics and Space Administration, \$10,000.

**Institute of Early American History & Culture**

**Hoffman, Ronald**, director, "The Charles Carroll of Carrollton Family Papers," National Archives and Records Administration, \$13,650.

**Public Policy**

**Finifter, David H.**, director, "A Comparative Analysis of the City of Norfolk," City of Norfolk, \$5,500.

**Ash Lawn-Highland**

**Holmes, Carolyn C.**, executive director, "The James Monroe Papers Project," National Endowment for the Humanities, \$6,000.

**Preston, Daniel**, editor, *Monroe Papers*, "James Monroe Papers Calendar," John Stewart Bryan Memorial Foundation, \$5,000.

**Preston, Daniel**, editor, *Monroe Papers*, "James Monroe Papers," Florence Gould Foundation, \$500.

**WILLIAM & MARY NEWS**

The next issue of the *William and Mary News* will be published on Wednesday, June 21. Deadline for submission of items is 5 p.m. on Friday, June 16, although submissions prior to the deadline are encouraged. Call ext. 12639 with any questions or concerns.

The *William & Mary News* is issued throughout the year for faculty, staff and students of the College and distributed on campus Wednesday afternoons.

News items and advertisements should be delivered to the *News* office in Holmes House, 308 Jamestown Rd. (221-2639), faxed to 221-3243 or e-mailed to [wmnews@mail.wm.edu](mailto:wmnews@mail.wm.edu), no later than 5 p.m. the Friday before publication.

- Poul E. Olson**, editor
- Marilyn Carlin**, desktop publishing
- C. J. Gleason/VISCOM**, photography
- Stewart Gamage**, vice president for community relations and public service

**Philosopher Examines Evolutionary Functions Of The Mind**

Paul Davies, assistant professor of philosophy, disagrees with his colleagues and psychologists who believe evolution by natural selection explains the functions of the mind.

The problem, Davies says, is the theory of evolutionary functions which suggests organisms acquire functional properties as a consequence of evolution by natural selection. It is thought, for instance, that the heart developed the evolutionary function of pumping blood.

Davies, however, is skeptical about the theory, especially in understanding the composition and operations of the human mind.

"Evolutionary functions may explain the functions of the mind generally, but I doubt they can tell us anything more specific than that," said Davies.

With a \$4,000 summer stipend from the National Endowment for the Humanities, Davies will defend this position for a project titled "Evolutionary Functions and the Mind."

He plans to present parts of his research to a philosophical conference in Glasgow, Scotland, in July.

Davies specializes in the philosophy of the mind and biology.



**Paul Davies**

# CALENDAR

## CONFERENCES

**June 22-25**

The Society of the Alumni presents its Alumni College. This year's theme is "A House Divided: The American Civil War, 1861-1865." Participants are invited to relive the moments of history that polarized families and study the events that eventually led to healing the wounds of war. The weekend includes a children's program as well as a pre-program tour of James River plantations. For information or registration, call the Alumni Society at 221-1172.

## MEETING

**June 15**

Black Faculty and Staff Forum (BFSF) meeting from noon to 1 p.m. in the James Room, University Center. Executive committee meets June 12 at 11 a.m. in Thiemes House.

## MISCELLANEOUS

**May 25**

Department of Employee Relations Counselors (DERC) televideo training session on new grievance procedures from 9 to 11:45 a.m. in the Dodge Room, Phi Beta Kappa Memorial Hall. Call Debbie Rorrer at 221-3155.

**June 4**

A Muscarelle Museum docent conducts a tour of the museum collection and special exhibitions beginning at 3 p.m.

**June 4-9**

The Virginia Tidewater Consortium announces the 17th Annual Summer Institute on College Teaching at William and Mary. The cost is \$565 per person. Enrollment is limited, early registration is advised. Call 683-3183.

## VSF Plans For 17th Season, July 7-30

For its 17th summer, the Virginia Shakespeare Festival will stage "Richard III" and "The Merry Wives of Windsor," in repertory.

Auditions and interviews for volunteer actors and technicians are scheduled for 7 p.m. on May 27 in Phi Beta Kappa Memorial Hall. Interested persons may call 221-2674.

Rehearsals and set construction begin May 30 and the box office opens June 6.

The season opens with "Richard III" at 8 p.m. on July 7 in Phi Beta Kappa Memorial Hall. All evening performances begin at 8 p.m., with matinees at 2 p.m. on July 9, 16, 23 and 30. The theatre will be dark July 10, 11, 17 and 24. Additional scheduling information will be available at the box office beginning June 6. Call 221-2674.

Tickets are \$12 per play, \$20 for tickets for both plays when purchased at the same time and \$9 per play for groups of 20 or more when purchased together.



## EXHIBITS

**May 27-Aug. 27**

A new exhibition, "Before Discovery: Artistic Development in the Americas Before the Arrival of Columbus," opens at the Muscarelle Museum. The exhibit, on loan from the Lowe Art Museum at the

University of Miami, Florida, was organized as an official Christopher Columbus Quincentennial project. It draws together over 150 pre-Columbian artifacts from Mexico, Costa Rica, Colombia, Ecuador and Peru, which offer insight into the ideas and culture of the native American peoples who preceded the European inhabitation of North and South America.

## LOOKING AHEAD

**June 26-30**

The Muscarelle Museum and James City County Parks and Recreation Department present "Camp Articulation: Discover Your Five Senses—Through Art," for children ages seven to 10. Works from the museum's permanent collection will be used as the starting point for learning the relationship between our five senses and two- and three-dimensional works of art. The cost is \$75 per camper, and maximum enrollment is 20. Registration is required. Call 221-2703 or 229-5676.

**July 11-20, July 25-Aug. 3**

Children's classes for children pre-school through 10th grade (1995-96 school grade levels) are scheduled at the Muscarelle Museum. Classes are given in two sessions: "Art Makes Sense," on consecutive Tuesdays and Thursdays beginning July 11, offers "Touch and Go" (age 3-4 with adult partner); "The Sound of Art" (ages 5-6 with adult partner); "A Traditional Taste" (grades 1-2); "The Smell of Success" (grades 3-4); "Keep in Touch" (grades 5-6); and "Seeing Is Believing" (grades 7-10).

"Ancient Art," on consecutive Tuesdays and Thursdays beginning July 25, offers "Discover the Difference\*Materials" (ages 3-4 with adult partner); "Discover the Difference\*Subjects" (ages 5-6 with adult partner); "All That Glitters" (grades 1-2); "Textile Treasures" (grades 3-4); "Vases and Vessels" (grades 5-6); and "Form and Function" (grades 7-10). Cost is \$20 per session and scholarships are available in cases of financial need. Enrollment fee covers cost of all materials and supplies. Registration is required and opens June 1. Call 221-2703.

**July 12, 26**

The Muscarelle Museum invites members of the community to attend two family festival picnics from 6 to 8 p.m. Themes for the evenings are "Musical Discovery" (July 12) and "A Sensational Evening" (July 26). Following a picnic dinner outside on the Kinnamon Plaza, there will be entertainment, music and art projects in the museum galleries. Cost for the package (dinner, beverage, entertainment and all supplies for art projects) is \$7 for children and \$10 for adults. Space is limited; reservations are required. Call 221-2703.

## COMMUNITY

**May 24**

The Williamsburg Symphonia presents the fourth concert of its "Flights of Discovery" subscription series at 8:15 p.m. in Phi Beta Kappa Memorial Hall. On the program are Bizet's Petite Suite from "Jeux d'enfant," Beethoven's Piano Concerto No. 4 and Stravinski's "Pulcinella Suite." A pre-concert discussion will be presented at 7:15 p.m. by Bettejane Crossen, a performer and teacher, who is affiliated with the Christopher Wren Association. Tickets are \$14-\$20, \$8 for full-time students, and may be purchased by calling the Symphonia office at 229-9857 or visiting the ticket outlet at The Coffeehouse, Williamsburg Crossing.

## Student Art Selected For President's Collection



Artwork by seven graduating art majors has been selected for the President's Collection of Faculty and Student Art. Purchase awards have been given to:

Brett Baker, for his painting *Sabines V* (shown in foreground of photo); Rebecca Berlin, for ceramics; Marques Comar, for sculpture; Andrew Hartman, for ceramics; Britney Hewitt, for painting; Aleksandra Holod, for painting; and Aaron Norfolk, for painting.

Begun in 1992, the collection's mission is to acquire College artwork, student and faculty, and display it around the campus. Using an endowment set up by President and Mrs. Sullivan, alumni and friends, the collection's director, Valerie Hardy, maintains and increases the holdings through purchases as well as donations.

Works from the collection are currently exhibited in the University Center, undergraduate admission office, the President's House, development office, the Brafferton and the Board of Visitors' dining room.

## CLASSIFIED ADVERTISING

Classified ads are included as a service to members of the College community and will be accepted from faculty, staff, students and alumni only. Only one ad per person per issue is permitted and should be no longer than 40 words. Ads must be submitted no later than 5 p.m. on the Friday preceding News publication. Send ads in writing to the William and Mary News office or via electronic mail to [wmnews@mail.wm.edu](mailto:wmnews@mail.wm.edu). Ads will run one week only with an option to renew for one additional week. No ads or requests for renewal will be accepted over the phone. For more information, call the News office at ext. 12639.

### FOR SALE

1980 Toyota Corolla 1.8, 143,500 original miles, reliable, new inspection. Needs some body work and paint. Asking \$575. Call ext. 13989 or 887-0871, leave message.

1984 Renault (GMC) Encore, 120k, needs engine work, water pump, 5-speed, new fuel injector and pump. \$150 or best offer. Call Phil, 220-8035.

1984 Saab 900S, brown, 5-speed, sunroof, AC, spoiler, alloy wheels, AM-FM tape, power windows. \$1,700. Call 564-8814.

1986 Nissan Maxima loaded with options. Approx. 150,000 miles. Book value \$3,500, sell for \$2,500/firm. Call 566-4010.

1988 Chevrolet Caprice Classic Brougham, V8, 4-door, AT, cruise, AC, PB, PS, AM-FM cassette. Excellent condition. \$3,000. Call 229-5268.

1990 Honda Civic DX, 2-door hatchback, 5-speed, AC, new AM/FM cassette with security system, 94,000 miles, burgundy, very good condition. \$4,100 (\$1,000 below book value). Call Patrick at ext. 11274 or 253-1656.

1992 VW Golf GTI, red, 5-speed, 3-door,

sunroof, AC, alloy wheels, AM-FM tape, 70K. \$7,800. Call 564-8814.

First Colony, 2-story colonial, 4 BRs, 2-1/2 baths, LR, formal DR, open kitchen and family room with fireplace. 2,000 sq. ft. living space plus 16'x20' screened porch, 2-car garage. Hardwood floors, great storage. Wooded lot, quiet street, James River access, park and pool available. \$155,900. Call 220-2879.

Leading Edge 286 PC, 40 MB hard drive, 3.5" and 5.25" floppy drives, monochrome monitor. Original packaging, four yrs. old, very reliable. \$200. Call Patrick at ext. 11274 or 253-1656.

Pecan bureau with gold-framed mirror, \$95; walnut highboy with handpainted doors, \$85; stereo component cabinet, \$65; kerosene room heater, \$25; TV cabinet, \$25. All in excellent condition. Call Anne Rhodes, ext. 11035.

Two brown storm windows, 55"x36". \$20 for both. Call 253-7539 and leave message.

### FOR RENT

W&M family on leave has furnished house in Queenswood. 3 BRs, 2-1/2 baths, deck, porch,

large yard. Light, clean, spacious, Steinway grand piano. Walking distance to shopping, easy access to Colonial Parkway. \$1,000/month. Call Anne at ext. 11097 or Inge Geyer at 229-8292.

Brand new, furnished 4-BR, 3-bath, Ford's Colony home for lease from June 1 through Aug. 15. Rent and dates somewhat negotiable. No pets, no smokers. Security deposit/references required. Call ext. 12865.

Williamsburg-summer sublet: furnished 1-BR condo in Midlands near Matoaka woods, shopping and campus. Upstairs den, downstairs LR, AC. No pets. \$500 + utilities. Available May 27-Aug. 31. Call Sharon at 564-9108.

### WANTED

Someone to share 3-BR ranch home 3 miles from CW. Washer/dryer, cable TV, AC. Male or female, non-smoker preferred. No pets. \$200/month + shared utilities. One month's security deposit, standard one-year lease. Call 565-3061, leave message.

Want to buy your used wicker furniture; sofa, chairs, etc., for screened porch. Call ext. 12260 or 229-5830 for between 7:30 a.m. and 4:30 p.m.

Housesitter available for 2-week minimum. Mother of W&M senior, living in Tennessee, willing to housesit in exchange for use of house and small remuneration/gas money/other incentive. Good with plants, like cats. Available for summer beginning early June. Call (615) 531-0621.

## EMPLOYMENT

The following positions at the College are open to all qualified individuals. Those wishing to apply must submit a Commonwealth of Virginia application form (and resume if they wish), which includes applicant's social security number, to the Office of Personnel Services, Thiemes House, 303 Richmond Road, by no later than 5 p.m. on the deadline date. For application deadlines and additional information, call ext. 13167.

Informational interviews will be held in the Office of Personnel Services from 9 a.m. to noon on Thursday of each week.

The College will make a reasonable effort to accommodate persons with disabilities in the application, testing and/or interview process. If possible, please contact Debby Rorrer, ext. 13155, at least three days in advance of the need for accommodation.

**Administrative Assistant**—Salary range \$12,000-\$14,000. No employee benefits provided; works mid-Aug.-mid-June, beginning Aug. 15. Location: Rita Welsh Adult Skills Program.

The following positions have been released from the State hiring freeze. They are regular full-time positions which do carry benefits.

**Executive Secretary Senior**—(Grade 7)—Entry salary \$18,765. #00313X. Location: Provost's Office.

**Fiscal Technician Senior**—(Grade 8)—Entry salary \$20,514. #N0010X. Location: Athletics.

**Laboratory Technician Senior**—(Grade 5)—Entry salary \$15,703. #00069X. Location: VIMS (Biological Sciences).

## Swem Library Schedule

May 19	8 a.m.-5 p.m.
May 20	Closed
May 22-26	8 a.m.-5 p.m.
May 27-29	Closed
May 30-June 30	
Monday-Thursday	8 a.m.-6 p.m.
Saturday	10 a.m.-5 p.m.
Sunday	1 p.m.-6 p.m.
July 1-2	Closed
July 3-4	8 a.m.-5 p.m.