Learning environment

Renovation of 40 classrooms across campus improves education, teaching

The Classroom Renovation Committee recently completed its goal to enhance the general condition of classrooms on the Hilltop Campus. Since 1990, the committee, which comprises faculty, students and administrators, has overseen the renovation of 40 classrooms, ranging from small classrooms, such as those in Cupples I Hall, to large lecture halls, like Room 149 in McMillan Hall, which now contains state-of-the-art audiovisual equipment.

The renovation work has included installing new lights, floors, walls, windows, sound and air conditioning systems, carpeting, desks and chairs; making sure the rooms are accessible to the disabled; and installing new blackboards with overhead lighting.

In addition to McMillan and Cupples I, the buildings with improved classrooms are Brown, Busch, January, Wilson, Rebstock, Hilltop Campus, Provost Edward S. Macias, Ph.D., associate professor of chemistry at Washington University. "There was a period when a dark tan was highly desirable, and people spent a lot of time acquiring a dark tan. People's attitudes have to change.

Taylor has studied the damaging effects of ultraviolet light on DNA (cytosine), G (guanine) and T (thymine). DNA is composed of a chemical alphabet only four letters long: A (adenine), C (cytosine), G (guanine) and T (thymine). Under normal circumstances, A pairs with T and G with C. When ultraviolet light hits DNA, it can react with C or T, abnormally fusing T and G with C.

Researchers studying carcinomas have found C to T mutations in DNA. CC to TT mutations are easily detected by repair enzymes, which swing into action. However, some mutations, in particular, have been found to increase premature aging of the skin, but also ultraviolet light rays have been linked to skin cancer.

"Early detection is the key in skin cancer. We know how to prevent it, we know how to do it, but people are not doing it." says John-Stephen Taylor, Ph.D., associate professor of chemistry at Washington University. "There was a period when a dark tan was highly desirable, and people spent a lot of time acquiring a dark tan. People's attitudes have to change.

Taylor has studied the damaging effects of ultraviolet light on DNA (cytosine) through funding from the National Cancer Institute, which recently renewed his grant for another five years. In addition to Gaines, Williams and McDowell, the other committee members are: David L. Cronin, Ph.D., assistant dean for administration, George Warren Brown, Provost Edward S. Macias, Ph.D., associate professor of mathematics and director of the Teaching Center, agreed. He has served as acting chair during Williams' absence.

"Improved teaching is more than faculty teaching and students learning, the learning process will function more smoothly, Williams said. Robert H. McDowell, Ph.D., professor of mathematics and director of the Teaching Center, agreed. He has served as acting chair during Williams' absence. "Improved teaching is more than faculty writing clearer messages on the blackboard," he said. "Everything is part of teaching — including the classroom environment. If the purpose of teaching is to learn, enhanced classrooms make learning easier."

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In planning the renovation projects, the committee's focus has been twofold, said Williams, who is on leave from the University and conducting research in Germany. "Each year, we totally redid a large lecture hall," she said. "We also oversaw basic renovation — such as painting chairs, installing lighting and good blackboards — in the smaller classrooms."

In order to avoid disrupting classes, the committee always began planning its projects in the fall so the work could be conducted the following summer, Williams said. Committee members also sought input from the faculty who use the rooms. Williams said that the committee has been greatly aided by students who conduct weekly checkups of the classrooms in the general assignment pool and provide general upkeep, such as noting what maintenance work needs to be done. Juan Gaines, associate registrar and a member of the Classroom Renovation Committee, established this student program in 1989.

With better environments for faculty to teach and students to learn, the learning process will function more smoothly, Williams said. Robert H. McDowell, Ph.D., professor of mathematics and director of the Teaching Center, agreed. He has served as acting chair during Williams' absence. "Improved teaching is more than faculty writing clearer messages on the blackboard," he said. "Everything is part of teaching — including the classroom environment. If the purpose of teaching is to learn, enhanced classrooms make learning easier."

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Scientist says most conserved protein regions have been found

To a recent issue of Science, School of Medicine researcher Balman Emami reported that scientists have already discovered most of the protein regions that are evolutionarily conserved in worms, yeast and humans. Philip P. Green, Ph.D., lead author of the report, says a comparison of newly found genes from several gene sequencing projects yields an estimate that there are probably fewer than 1,000 ancient conserved regions of proteins, and most are already in protein databases.

Green is also interested in other areas of genetics at the University. Using computers, Green and collaborators in the medical school's Department of Genetics and scientists from the National Center for Biotechnology Information (NCBI) compared random gene sequences generated by the C. elegans, yeast and human genome sequencing projects. The gene encodes proteins, some of which contain domains that are similar in distinctly related organisms. These regions, called anciently conserved regions or ACRs, may represent genes that have evolved rapidly. ACRs are contained in roughly 90 percent of these were already in protein data bases, meaning they were present in previously identified proteins. The high match rate in a random sample of genes suggests to Green and others that most ACRs have already been found. "We believe that 85 to 90 percent of ACRs are now in protein data bases," Green says. The findings also help interpret why early findings from the yeast and C. elegans gene sequencing projects showed that only about 30 percent of the newly found genes matched sequences in existing data bases. "We originally thought this meant the data

Two-year diabetes research grants available

Faculty members who do research in diabetes and endocrinology may apply for funding through the Diabetes Research and Training Center (DRTC) at Washington University School of Medicine. Researchers at the Hilltop Campus as well as those at the medical school's teaching hospitals are encouraged to apply for the funding, which begins Dec. 1. The two-year grants range from $1,000 to $25,000. Applications from the basic sciences, translational, clinical and behavioral science departments are particularly encouraged.

The DRTC project and feasibility program for diabetes-related projects required to develop preliminary data that could lead to independent research supported by the National Institutes of Health (NIH). The NIH awards three to four such projects at the medical school yearly.

Two-year diabetes research grants available

Using the 3-D treatment planning tools, therapy was specifically tailored for this lung cancer patient. Shown is a front-to-back image of the tumor (arrow) and the surrounding structures (lung, heart, liver and spinal cord). The same position required for treatment.

Conventional planning relies on diagnostic scan images; if the patient has a bone in the way, the position is compromised.

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Raichle conducts inquiry into ‘symphony of thought’

In man’s brain the impressions from outside are not merely registered, they produce concepts and ideas. They raise the image of the external world upon the human brain. Therefore, it is not surprising that after a long period of searching and error of some of the concepts and ideas in human thinking should have come gradually closer to the fundamental laws of this world, that some of our thinking should recall the true structure of atoms and the true movement of the stars. Nature, in the form of man, begins to recognize itself.

Victor Frederick Weissskopf — 1962

If, as Weissskopf says, nature comes to recognize itself, can the brain then know itself? Can the tool of understanding be understood? Marcus E. Raichle, M.D., says yes.

Now a third of the way through the Decade of the Brain, Raichle says his goal of understanding how the brain works sounds less nebulous than it did 20 years ago when he began devoting his life to the problems of the body’s most complex organ. By using positron emission tomography (PET) to map the brain and identify areas that are active during precisely controlled tasks, Raichle has seen proof that eventually we will understand the mechanisms of normal thought and emotion.

In scene measure, Raichle says, the brain can be visualized as an orchestra, where English horn, oboe and cello combine on a passage for a particular effect. Likewise in the brain, specialized areas link to perform a certain task. PET images show increased activity in particular areas of the brain as a mental task is processed. By painstakingly designing experiments that require precise types of thinking, Raichle and his colleagues are well into the “long period of searching and error” that someday will identify who does what in the symphony of thought.

For example: Much of the recent seminal research concerning human brainwork done here concerns language because, as Raichle asks, “What is more human than language?” Working with Steven Petersen, Ph.D., to design language-processing tasks, Raichle, professor of neurology and radiology, has identified two distinct thought pathways in the brain: one automatic, the other non-automatic.

“In an old idea that we must automate much of what our brains do. We simply couldn’t get out of bed in the morning if we had to make every decision every time,” Raichle says. As an example of the autopilot, the brain sometimes relies on, he offers the common experience of the experiment of getting into a new car from one driven for years. Almost everybody looks for the ignition in the wrong place or steps on the brake for the clutch in an automatic movement that is nonetheless controlled by the brain. Or consider Petersen’s experience of driving down the same highway to work every day, then one evening while taking that highway to a baseball game he finds himself standing at his office door instead of at the ticket turnstile. Guided down the automatic pathway, he became what we sometimes call “absent-minded.”

To explore this automatic/non-automatic circuitry, Raichle showed subjects a list of 40 nouns on a screen, one at a time, and asked for an appropriate verb for each. The PET scanner revealed highly lateralized activity on the left side of the brain as the subjects searched in their mental dictionaries for responses such as the verb “hit” to the noun “hammer.”

Such experiments require great care to devise and refine. The group’s first try at assessing language memory involved showing subjects a series of words, then scanning while word stems were shown. The subjects were asked to recall any whole words they had seen that began with the word stem’s three letters. As traditional thinking would have predicted, the hippocampus became active, along with the frontal lobes.

But the activity all appeared on the right side of the brain, opposite to where language processing is generally assumed to occur. Later refinements of the experiment showed that subjects had been matching letter shapes and probably not processing language at all. In later versions of the study, the words were presented auditorily or in upper and lower cases to ensure that the brain was processing language tasks, Raichle explains.

In another series of brain studies, Raichle explores human memory. Neurologists traditionally have believed that the brain’s hippocampus is the seat of the memory. But by testing subjects’ ability to recall whole words when shown only their first three letters, Raichle is fine-tuning that understanding.

Though the interpretation of the recent studies remains open, Raichle believes that the hippocampus may be responsible for “writing down” occurrences, particularly those that fall outside expectations born of previous experience. But the scanner has shown little activity there during recalling.

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Soon, this work and more will be centralized in a new 70,000-square-foot facility scheduled for completion by summer 1994. The research center will be added to the medical school’s East Building and will house a PET scanner and three of the latest magnetic resonance (MR) scanners from Siemens, known colloquially among the scientists who use them as “magnets.”

The MR scanners will aid in brain research by greatly expanding our capacity for scanning the brain. Already it is true that the magnetic properties of red blood cells vary depending on how much oxygen they carry. When a portion of the brain becomes active and blood flow to that area rises, oxygen levels increase. The MR scanner can record that change and produce a computer-assisted image of the brain activity. MR technology requires no radioisotopes and spares patients exposure to even the minimal radiation doses associated with PET.

By combining these technologies in a center devoted entirely to research, Raichle says his group of investigators (known among the world’s neuroscientists as “the St. Louis group”) is placed in an “unbelievably enviable position. There may not be another center in the world with this kind of horsepower.”

When Raichle shows his offices to the East Building, it will be the first time he has relocated during 22 years at the medical school. He has always operated out of the sixth floor of Washington University’s Mallinckrodt Institute of Radiology and, in a small inside joke, he expects that “many days, I may end up back at the old office when I should have turned right.”

For the same 22 years, he has lived with his wife and four children in the house they bought when they first came to St. Louis. The family’s interaction with the University runs deep. Two sons have graduated from the University: one is a St. Louis attorney; the other now lives in Seattle. Two daughters are attending the University. The elder is a student of economics, and the younger is a sophomore majoring in psychology.

Each August, the family travels to Seattle, where Raichle was raised and where his mother and his sister make their home. Raichle has been a member of Puget Sound’s Hood Canal, commanding an unusual 19-foot boat that is still going strong at the Olympic Mountain Range beyond.

The location suggests Raichle’s passion for mountaineering. His family name is inherited from a former mountain guide, now known to mountaineers both in Europe and the United States as manufacturers of fine hiking and ski boots. In May, a number of Raichle’s fellow investigators, who are also aficionados of the mountains, plan to Mount Everest to further their work on the effects and prevention of altitude sickness. Professional responsibilities will prevent Raichle from joining them on this trip as he has on past ventures into the Himalayas.

Foregoing the mountain adventure, Raichle has other interests to occupy him. Since his youth he has sailed, and he maintains two wooden sailboats at the westernmost residence. He doesn’t sail in Missouri, because “sitting on a boat in that summer sun” doesn’t appeal to him. He and his wife agree that it is best to leave such diversions for the time when he can truly be away from the demands of his work.

For satisfaction outside of work while in St. Louis, Raichle plays the English horn and oboe. He began as a child and played all through college, putting aside his instruments only during medical school. In 1976, he came out of retirement and joined Karen Kehoe, a symphony, which he describes as “an admixture of aspiring professionals and people like me who participate to fulfill our Walter Mitty wish to play in good music.” He plays three or four concerts a year; studies to improve and often is asked to perform solo on his instruments.

The orchestra — its organization, complexity and balance — is the source of many of the images Raichle uses to describe his work with the brain. It can be compared to playing music and leading scientific inquiry into brain function both because of the complex mechanisms of normal thought and emotion and because M. Sagan was talking in 1979, when he said:

“We are an intelligent species, and the use of our intelligence quite properly gives us pleasure. In this respect, we are unique. When it is use we feel very good. Under- standing is joyous.

— Steve Kohler

Local economics, and the younger is a sophomore majoring in psychology.

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— Steve Kohler
Calendar
April 29—May 8

Exhibitions

"Bachelors of Fine Arts Graduation Exhibition." Exhibit opening: 5-7 p.m. May 7. Exhibit continues through May 16. Gallery of Art, upper gallery, Steinberg Hall. Hours: 10 a.m.-4 p.m. weekdays; 1-5 p.m. weekends. For more info., call 935-6657.

"The Core Show." Exhibit opening: 5-7 p.m. April 30. Exhibit continues through May 16. Bixby Gallery, Bixby Hall. Hours: 10 a.m.-4 p.m. weekdays; 1-5 p.m. weekends. For more info., call 935-4643.

Master of Fine Arts Thesis Exhibitions II. Through May 2. Gallery of Art, upper gallery, Steinberg Hall. Hours: 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends. For more info., call 935-6657.

"Preparations for a Thera and Mona Van Duyse." Through May 7. Olin Library, Special Collections, Level 5. Hours: 8:30 a.m.-5 p.m. weekdays. For more info., call 935-4949.

"Washington University Art Collections - 19th- and 20th-century European and American Art." Through Max. Gallery of Art, lower gallery, Steinberg Hall. Hours: 8 a.m.-5 p.m. weekdays; 1-5 p.m. weekends. For more info., call 935-4952.

"Bodies, Bone and Bileference: China Perceived by Westerners, 1914-1941." Through May 28. Glasser Gallery, seventh floor, Steinberg Hall. Hours: 8 a.m.-10 p.m. weekdays; 1-4 p.m. weekends. For more info., call 935-4949.

"Goddesse, Queens and Women of Achievement on Coins and Medallions From the Wulfing and Bixby Collections." Through July 3. Gallery of Art, lower gallery, Steinberg Hall. Hours: 8 a.m.-5 p.m. weekdays; 1-5 p.m. weekends. For more info., call 935-4952.

Lectures

Thursday, April 29


Noon. Dept. of Pediatrics Research Seminar, "A Novel GATA-Binding Transcription Factor Expressed in Heart and Endodermal Lineages," David Wilson, asst. prof., of pediatrics and child health, WU School of Medicine. Thursday, July 3, Gallery of Art, lower gallery, Steinberg Hall. Hours: 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends. For more info., call 935-4952.

4 p.m. Central Institute for the Deaf Research Seminar, "Identification of Genes for Inherited Disorders Using Mapping Technologies," Helen Donis-Keller and Paul Doherty, Dept. of Medical Genetics, WU School of Medicine. Second Floor Aud., St. Louis Children's Hospital. 400 S. Kingshighway.

Friday, April 30

8:30 a.m.-5 p.m. Office of Continuing Medical Education seminar, "Current Issues in Amplification," Frontenac Hilton Hotel, St. Louis, Mo. Cost: $75. For more info., call 362-6993 or (800) 325-9862.

9:15 a.m. Pediatric Grand Rounds, "Immunizations -- Up To Date?" Penelope G. Shackelford, prof. of pediatrics and associate prof. of microbiology, WU School of Medicine; Pediatric Infectious Diseases Division, St. Louis Children's Hospital. Clopton Aud., 4950 Children's Place.

Noon. Dept. of Cell Biology and Physiology seminar, "Manipulation of Wound Healing With Growth Factors," Jeffrey M. Davidson, Dept. of Pathology, Vanderbilt U. School of Medicine, Nashville, Tenn. Room 423 McDonnell Medical Sciences Bldg.


Saturday, May 1

7:30 a.m.-11:35 p.m. Office of Continuing Medical Education seminar, "Depression and Related Disorders as Women," Raj Nakers and Elizabeth F. Prater, program chairpersons. (6 credit hours AMA Category 1.) Doubletree Conference Center, Chesterfield, Mo. Cost: $75 for physicians; $40 for physicians-in-training and allied health professionals. For more info., call 362-6893 or (800) 325-9862.


3:30 p.m. Jewish Hospital presents a program for Mental Health Awareness Month, featuring Chris Stroemer, who was the subject of the movie "The Three Faces of Eve." She will discuss multiple personality disorders. Steinberg Amphitheatre, Jewish Hospital.

4 p.m. School of Medicine presents the Julia Frazier III, prof. of biochemistry and molecular biology, University of Oxford. Clopton Aud., ground floor, WU Clinic Building, 4950 Children's Place.


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Wednesday, May 5

7-3 p.m.-3:30 p.m. Office of Continuing Medical Education seminar, "An Update in General Thoracic Surgery," Tod L. Cooper and Alec Patterson, program chairmen, (6 credit hours AMA Category 1.) WU Medical Center, St. Louis. Cost: $50 by May 4; $70 on-site for physicians, physicians-in-training and allied health professionals; free for full-time staff. For more info., call 362-6893 or (800) 325-9862.

Thursday, May 6

4 p.m. Dept. of Molecular Biology and Pharmacology and the students of the Division of Biology and Biomedical Sciences seminar, "Determination of Retinal Cell Fate," Connie Cepko, Dept. of Genetics, Harvard U. Lecture, Erlanger Aud., McDonnell Medical Sciences Bldg.

Friday, May 7


6 and 8:30 p.m. WU Association Travel Lecture Series, "The Faces of Italy" by Dale Johnson, former director of the television series "The Lone Star Sportsman." His most recent film for the National Forest Service won a gold medal at the New York International Film Festival. Graham Chapel, Cost: $4.50 at the door. For info., call 935-5312.

Music

Thursday, April 29

8:30 p.m. Department of Music presents the WU Vocal Jazz Ensemble concert directed by Fred Blauholder. Steinberg Hall Aud.

Friday, April 30

8 p.m. WU Opera presents opera scenes, directed by John and Jolty Stewart. Scenes from Maometto's "Cendlinello," Rossini's La Calendrier
**Sports**

**Baseball**

Last Week: Washington 6, McKenzie 5; Washington 6-5, Rose-Hulman 3-2; Washington 6-2, Millikin 3-4; Washington 9-3, Carnegie Mellon 2-1; Washington 6-5, Brandeis 3-2; Emory 5, Washington 0

This Week: University of Chicago, 6 p.m.

Women's Tennis

Last Week: Washington 9, Carnegie Mellon 0; Washington 6, Brandeis 3; Emory 5, Washington 0

This Week: Regular season complete.

Current Record: 18-18-1

Heading into last weekend's five-game homestand, the Bears needed to win at least three of the five games to match their consecutive year. On Friday they played McKenzie. Trailing 5-3 in the second set, the Bears came back to win the third set and make it 7-6. On Saturday, the Bears played Carnegie. After whitewashing Carnegie Mellon on Friday, the Bears scored a 6-3-6 semifinal win over Emory on Saturday. During the Bears' finals national power Emory defeated the Bears 5-0. Among these looking to secure all-Association status in this week's balloting will be second-singles junior Kim Villaen, Cincinnati, Ohio; third-singles senior Ivy Brown, Morningside, N.J.; and fifth-singles junior Stacy Leed, University of Pittsburgh, Okla.

Men's Tennis

Last Week: Washington 8, Missouri-St. Louis 6; Washington 9, George Washington 6; Emory 5, Washington 0; Brandeis 3-2; Chicago 6, Washington 0

This Week: Regular season complete.

Final Record: 6-0

With a third-place finish at the AUA Championships, Washington extended its streak of winning seasons to 13 with a final season record of 7-6. Washington fell 3-5 to Emory. The Bears bounced back in the third place match with a win over the Bears. The Bears' top double, Andrew Kindbom and Keigh Johnson, won the Bear's 3-0 win.

Cooper Camp is open to boys and girls ages 7 to 15. There will be two sessions, June 21-25 and July 12-16. Participants can attend from 9 a.m. to noon, 1 to 4 p.m. or all day. Cost is $60 for a week of morning or afternoon sessions and $105 for all-day sessions. Basketball camp will be taught by Ty Kenas and staff. Basketball camp will be offered June 14-18 from 9 a.m. to 4:45 p.m. It is open to boys and girls ages 10-15.

Athletics department offers 1993 summer camps for youths, adults

The Department of Athletics has announced its offerings for the Bears' 1993 Summer Programs. There are a number of youth and adult programs, and all are open to the public.

For adults, tennis is available on Mondays and Wednesdays, May 12-26, with a session for beginners from 5:15 to 6 p.m. and a session for intermediate players from 6:15 to 7 p.m. The cost for the tennis program is $50. U.S. Tennis Association policies will be followed, and the instruction is provided by U.S. Tennis Association certified instructors.

For youth programs, focus will be on soccer, basketball, and volleyball. The Kindbom-Meyer Football Passing Camp is open to boys entering 7th through 12th grades. Skill positions, line positions, and fundamentals will be taught by Larry Kindbom and staff. Session I runs from June 9-11 and Session II runs from June 14-16. Session II also will include kicking skills. Both programs will be held from 9 a.m. to 4 p.m. The camp costs $70 a session.

Soccer Camp is open to boys and girls, ages 7 to 15. There will be two sessions, June 21-25 and July 12-16. Participants can attend from 9 a.m. to noon, 1 to 4 p.m. or all day. Cost is $60 for a week of morning or afternoon sessions and $105 for all-day sessions. Basketball camp will be taught by Ty Kenas and staff.

Basketball Camp will be offered June 14-18 from 9 a.m. to 4:45 p.m. It is open to boys and girls ages 10-15. Fundamental instruction and games will be taught by Mark Edwards, Nancy Fahey and staff. Basketball Camp costs $105.

Various Hit Volleyball Camps will be available for children and young adults enrolled in 2nd through 12th grades. Head volleyball coach Teri Clemens will teach the camps. Dreamers camps for 6th through 9th grades will be held June 26-28. Basketball Camp will be offered June 26 through 28.

Believers Camp for players entering 7th through 9th grades will be held June 28- July 2 from 9 a.m. to 4 p.m. Monday-Thursday and 9 a.m. to noon on Friday. The cost is $155.

Achievers Camp for players entering 9th through 12th grades will be held June 21-25 from 9 a.m. to 4 p.m. daily and 9 a.m. to noon on Friday. The cost is $105. Elite Achievers weekend, a weekend of tournament play after Achievers Camp, will be held June 25-27. The weekend is open to players in grades 10 through 12. The Achieversa Camp and Elite Weekend costs $135.

Specialized camps include: Sets Catch Camp (9 a.m. to 4 p.m. July 5-6, $50); Middle Blocker Camp (9 a.m. to 4 p.m. July 5, $25); and Outside Hitter Camp (9 a.m. to 4 p.m. July 8, $25).

For information and registration, call the Department of Athletics at 935-5200.
Kisker served as an instructor and assistant dean of students at Mercy High School in St. Louis from 1974 to 1977. He earned a bachelor of arts degree in philosophy and history from Benedictine College in Atchison, Kan., and a master of arts in college student development from Southern Illinois University in Carbondale, Ill. He received his doctorate in higher education at St. Louis University in 1988.

Kisker has served in leadership positions in the student affairs program, beginning with his appointment with the University in 1978 through 1988. Kisker is a graduate of Colgate University and has undergraduate work at Cornell. Prior to coming to Washington University in 1978, he was the chief student affairs officer at Lawrence University in Appleton, Wis.

Congress of the South Forty and EAG are working together to increase awareness of energy use among students. Congress members approached the environmental group last fall because of high energy bills. The EAG members came up with a contest idea for the best energy-saving slogan. Slogans with the slogans will be displayed in bathrooms, hallways and deen rooms.

The student group also is working with two other campus Y organizations, the American Association of Student Officers to End Poverty and Operation Green, to clean up the area around their neighborhood. In March the organization visited the Hamilton Heights neighborhood and beautified two government housing blocks and mulched daffodil beds.

As part of Earth Week, April 19-24, EAG also sponsored a clean-up of Forest Park's waterfall area on April 24. The work also included trash—staying, gas—giving, car conservation day and various speakers from the community. According to Cragan, "car conservation day was an effort to get students to carpool, walk or bicycle, rather than drive."

Automobiles not considered energyefficient were "ticketed" by the student group.

Along With energy conservation and recycling, EAG's community outreach program works with the Sierra Club and the Saint Clair's Club on a project called Inner City Outing. In April, they went on a overnight camping trip to give students a chance to experience the wilderness. For more information about the group or membership activities, call Jessica Cragan at 935-2203 or Sarah Bantz at 935-1181.

April Welcome' visitors give their impressions

"A Spring Welcome" is an expanded student recruitment program designed to offer prospective students and their parents the opportunity to experience a typical day on campus. Prospective students are sitting in the bin at the end of the school year. This year, about 30 students became involved in recycling.

"Which is the campus great? There's a nice atmosphere. My favorite thing about the campus is that it's so close to the park. I like it."—Dan Utain, son of Sandy Utain, mother of Sandy Utain, mother of

"These have been really good."—Bruce Utain, father of

"The people have been extremely helpful and friendly. I like the fact that we're getting personalized attention. Also, we were impressed with the program."

Sandy Utain, mother of

Bruce Utain, father of

Cherry Hill, N.J.

Cherry Hill, N.J.

The Student environmental group promotes on-campus conservation

The Student environmental group promotes on-campus conservation

There's a hole in the ozone, toxins are wind-blow, water is deplet- ing, and forests are receding. Have environmental issues become cliques? Is recycling a thing of the past? Not according to junior Jessica Cragan and sophomore Sarah Bantz, co-facili- tators of the student Environmental Action Group (EAG) at Washington University. Cragan and Bantz believe that the work for the environ- ment is more important now than ever. "It's important for our group to effect change locally and actually make some sort of difference in the St. Louis com- munity," Cragan said.

The Environmental Action Group, funded through the Committee Y and Student Union, is free and open to new mem- bers. Composed of approximately 25 Washington University students, EAG participates in a variety of activities— from petitioning government officials concerned with environmental issues, to promoting on-campus energy conser- vation.

Last fall, the student group's com- munity outreach program took part in a project called "Operation New Spirit" in East St. Louis. Working with the Make East St. Louis Beautiful organi- zation, EAG planted daffodils in front of city hall and in other public areas. This past fall, EAG helped expand the city recycling program to student apartments. Washington University students may purchase a recycling bin for $6 through the Student Union's City Recycling program's sanitation department. This fee is an open return to the University at the end of the school year. This year, about 30 students became involved in recycling.

How has most impressed you about Washington University?

Sandy Utain, mother of

"I like how the Univer- sity blends in with the surrounding city life. I like the urban campus, and St. Louis is great. Beautiful. I've enjoyed visiting both the campus and the city."—Sandy Utain, mother of

Dan Utain, son of

"The feel of the campus is great. There's a nice atmosphere. My favorite thing about the campus is that it's so close to the park. I like it."—Dan Utain, son of

Manjali Gupta

Bloomington, Minn.

"I like the size of the campus. It's a lot more manageable. It's a pre-med, and I like the class size. I've been introduced to new people; I've met a couple of students who go here, and that's been really good."—Manjali Gupta

Harry E. Kisker

"I was impressed with the classes. They don't seem too big or too big. Also, the campus looks and feels collegial."—Harry E. Kisker

Joe Pergola

Tampa, Fla.

"It's a beautiful campus. The people have been so helpful. I was interested in the fact that everybody has been willing to stop and help me and show me around."—Joe Pergola

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For The Record

The following is a recent release available at the Campus Recruiters/RostraCure on the campus of the University of Wisconsin in Madison, Wisconsin. For additional information, please contact the National Academic Community of National Research Council's work on group on science curriculum standards for students enrolled in kindergarten through the 12th grade.

Ekt

Carter Revard, Ph.D., professor of engineering, presented a paper titled "The Dynamic of AIDS" during the Western States Section's spring meeting held in New York City. Revard served as a judge in a poetry contest. He also read his poetry during a reading sponsored by Eastern Illinois University's cultural affairs committee. The lecture series, which was held at Eastern's campus in Charleston, Ill., is titled "One Nation: Many Voices.

Guidelines for submitting copy:
Send your full name, title, department, phone number, and highest earned degree, along with a typed description of your noteworthy activity for For The Record, c/o Carolyn Sanfend, Campus Box 1070. For more information, call Carolyn Sanfend at 935-5293.

Students receive awards to study in Germany

Cnegry W. Bauer, Dale K. Huffman and S. Robert E. Sparks, Ph.D., professor of biochemistry and molecular biology, received the first DAAD stipends from the German Academic Exchange Service (DAAD). In addition to the stipends, the service provides the students with round-trip airfare to study in Germany. Students receive awards to study in Germany for 1 year and recharged with the German Academic Exchange Service (DAAD).

Students receive awards to study in Germany

Hearing Levels of U.S. Industrial Workers

Sarah C. R. Elgin, Ph.D., professor of psychology and of behavioral and molecular biology, is a member of the National Academy of Sciences/National Research Council's work on group on science curriculum standards for students enrolled in kindergarten through the 12th grade.

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The following is a list of positions available at the School of Medicine. Applications should be submitted on the Application Form, available from the School's Web site or by calling 935-5990.

**Department Secretary**

- **Responsibilities:** Must be able to work a non-standard schedule, including weekends and holidays. Must be able to coordinate and schedule appointments, handle a high volume of phone calls, and act as a liaison between the department and other parties.

**Technical Director**

- **Responsibilities:** Must have experience in computer science and be familiar with UNIX and 4GL.

**Physician (Non-faculty)**

- **Requirements:** Must have a high school diploma, equivalent experience, or equivalent education.

**Trainee in Psychiatry**

- **Requirements:** Must have a medical degree and be a member of the American Medical Association.

**Trainee in Neurology**

- **Requirements:** Must have a medical degree and be a member of the American Medical Association.

**Assistance in Development of Interactive Information Systems**

- **Requirements:** Must have a degree in computer science or a related field and be able to work independently.

**Otolaryngology**

- **Requirements:** Must have a medical degree and be a member of the American Medical Association.

**Synthetic building blocks**

Taylor, a synthetic organic chemist, is one of only a few researchers in the world to engineer a synthetic virus and let the E. coli replicate the viral virus and let the E. coli replicate the viral code. Taylor's synthetic models not only will help researchers learn more about how skin cancer develops but can help provide similar information about other types of cancers.

**Ozone depletion threatens food chain**

"We introduced the product into a bacte- rial virus and replicated it. We call it the "morning after" cream, says Taylor. "By analyzing the enzyme's properties, we observed what we had proposed to occur." The result of these basic research find- ings will help scientists "find the pathways from the sun to the mutation that leads to cancer," says Taylor. The enzyme has been isolated and screened for mutants.

Other life species may be even more sensitive to ultraviolet light, says Taylor. "That's a very small amount, but it's a significant amount," says Taylor. "We are beginning to understand the ozone depletion phenomenon." The ozone depletion phenomenon has been credited for much of the increase in skin cancer.

Taylor's team will continue to accumulate information about other types of cancers. They hope to understand the ozone depletion phenomenon better than anyone else in the world.

The ozone is distributed throughout the stratosphere, which is about 20 miles thick. Ozone absorbs all forms of light that are absorbed by DNA, but it absorbs themselves before they reach the skin.

Taylor estimates that the amount of sunlight-induced damage in naked DNA (unprotected by skin pigmentation), which is on the upsurge; its incidence has grown more rapidly than any other cancer except lung cancer, reports the Nov. 13, 1992, issue of Science. The scientific journal reports that 32,000 Americans develop malignant melanoma each year, and 1,000 die from the disease each year.

One in five Americans will develop skin cancer in his or her lifetime, according to Taylor. With continued erosion of the ozone, the number of skin cancer deaths as a natural sunscreen, those statistics could soon rise to one in four Americans, he says.

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