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Prizes were up for grabs last year during the Homecoming pingpong ball drop. As part of the fun, pingpong balls, many with prize-winning numbers on them, were dropped from stop Mallinckrodt Center. Students tried to catch the balls and collect prizes. The Homecoming ’92 pingpong ball drop will be held from 11 a.m. to 1 p.m. on Thursday, Oct. 1, in Bowles Plaza.

‘Out of this world’

Homecoming highlights University community’s multiculturalism

From a keynote speech by Yolanda King, eldest daughter of slain civil rights leader Martin Luther King, Jr., to the theme “Out of This World!” the multiculturalism of the Washington University community will be highlighted during Homecoming ’92. The event is slated for Sept. 29 through Oct. 3. The “Out of This World!” Homecoming theme “encompasses the diversity of the campus,” said junior Elaine Howey, a publicity co-chair for the Homecoming Steering Committee.

“People have different thoughts, interests and backgrounds. Our theme reflects that. It encourages individuals to move beyond their own little worlds and reach out to other people.” To promote the theme, King, an actress and civil rights activist, will speak on multiculturalism at 11 a.m. Wednesday, Sept. 30, in Graham Chapel. Her lecture, which is part of the University’s Assembly Series, is free and open to the public.

Kozol has devoted almost a quarter-century to issues of education and social justice in America. He is author of numerous books, including Savage Inequalities: Children in America’s Schools. The book won a half dozen fellowships to support his writing, including Ford, Rockefeller and Guggenheim. He is a member of the Authors League of America, Authors Guild, and American PEN. Center.

The lecture is co-sponsored by the University’s African and Afro-American Authors League of America, Authors Guild, and American PEN. Center.

Professor explains why some shirk, others work

Ever since Ross Perot declared his interest in the U.S. presidency, the notion has debated the role a successful business executive might play in politics. Now, a new book by a political economist at Washington University has turned that debate on its head. The book, ‘Savage Inequalities,’ has been praised by successful business managers as must-read, but others see new every opportunity to shirk — to seek personal gain at the expense of the firm or co-workers. His findings have important implications for anyone who supervises the work of others.

Jonathan Kozol discusses ‘savage inequalities’

Author and educator Jonathan Kozol will speak on “Savage Inequalities” at 11 a.m. Wednesday, Sept. 30, in Graham Chapel. His lecture, which is part of the University’s Assembly Series, is free and open to the public.

Kozol discusses ‘savage inequalities’ in his new book, ‘Savage Inequalities: Children in America’s Schools.’ The book won a half dozen fellowships to support his writing, including Ford, Rockefeller and Guggenheim. He is a member of the Authors League of America, Authors Guild, and American PEN. Center.

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For more information, call 935-4620.
PET reveals abnormal brain function in depressed patients

S

pecific areas of the brain that function abnormally in people suffering from major depression have been identified by investigators at the School of Medicine. In the Sept. 1992 issue of The Journal of Nervous and Mental Disease, the investigators report that the left prefrontal cortex and left amygdala of the brain may play a major role in the onset and course of depression.

Led by Wayne C. Drevets, M.D., assis-
tant professor of psychiatry, the investiga-
tors used an imaging technique called
Positron Emission Tomography (PET). PET uses radioactive tracers that move through the bloodstream toward biologically active tissues. It makes three-dimensional pictures of blood flow that can be used to map brain function.

In the scans of depressed patients, Drevets detected a normal blood flow in the left prefrontal cortex, a large area of the brain located above the left eye, and in the amygdala, an almond-shaped structure buried deep within the temporal lobe.

"Blood flow is an indirect marker of brain cell activity. It increases in a particular area of the brain as the blood supplies nutrients that neurons use. Since PET images blood flow, it is an ideal technology to investigate the brain structures that function abnormally in depression," says Drevets.

Although PET scans cannot identify the specific chemical or physical abnormalities in the brains of depressed people, by mapping blood flow they can locate the areas of the brain in which abnormal rates of metab-
olism are occurring. For this reason, Drevets believes PET will be a very important tool in understanding the changes in the brain that underlie depression.

Biological illness

Drevets and his fellow investigators took a series of PET images of patients who suffer from a particular form of depression called Familial Pure Depressive Disease (FPDD). This form of unipolar depression is diagnosed by the family histories and from the patient's family history. With unipolar depressions, the episodes of low mood. That is different from manic-depressive illness, also called bipolar disorder, in which patients' mania and depres-
ion experience abnormal blood flow but can also fall victim to panic episodes involving extreme excitement and debilitating euphoria.

Everyone has days when they feel blue about one thing or another, but for those with clinical depres-
ion, mood often bears no relation to events in life. The depressed person knows he or she should not feel sad but simply cannot help it.

"Telling a person to cheer up is not enough. People with major depression have a biological illness. It's not a temporary mood swing," Drevets says.

Depression is one of the most common and least understood illnesses affecting Americans. It afflicts up to 15 percent of the population at some time in their lives. At least half of all suicides are related to major depression. It is as common as high blood pressure, but it is known what causes it or about how the brain mal-
functions to produce depression. In unli-
chonole people who have sleep problems, lack of appetite, low energy, and difficulty concentrating.

Tracking blood flow

to gather data for his study, Drevets per-
formed PET scans on 13 patients who met criteria for major depression as they were tested. Another 10 had been diagnosed with FPDD, but their depression was in a remitted state at the time of the PET scans. Another 33 people with no history of depression were scanned as control subjects.

The PET scans were conducted in two phases. Drevets divided the 13 depressed patients into two groups of six and seven patients, each with its own control group. For the first group of patients and controls, he took PET images of the brains of these patients after they were taking their medications, and then scans them again. The experiments should help him to see what effects the drugs have on the brain.

If the goal of a particular antidepressant drug is to keep the limbic-thalamo-cortical circuit from malfunctioning in FPDD causing the depressive circuit to be abnormally active," he says.

There are indications, Drevets says, that some antidepressant drugs enhance the function of some of the chemical "brakes" impinging on this circuit. He'll further ex-
amine that hypothesis in the coming months as he takes PET images of de-
pressed patients, administers antidepressant medication, and then scans them again. The experiments should help him to see what effects the drugs have on the brain.

In the scans of depressed patients, Drevets and his colleagues also obtained evidence that two other structures interconnected with the prefrontal cortex and amygdala, the caudate and medial thalamus, also have abnormal blood flow in FPDD.

"These four regions normally function together as components of two circuits or networks within the brain. One of these circuits involves the amygdala, prefrontal cortex, and part of the medial thalamus. It is called the limbic-thalamo-cortical circuit, and it appears to be overactive in the de-
pressed phase of FPDD. It may be that some set of chemical 'breaks' that would normally dampen the activity within this circuit is malfunctioning in FPDD causing the depressive circuit to be abnormally active," he says.

Everyone has days when they feel blue about one thing or another, but for those with clinical depres-
ion, mood often bears no relation to events in life. The depressed person knows he or she should not feel sad but simply cannot help it.

"Telling a person to cheer up is not enough. People with major depression have a biological illness. It's not a temporary mood swing," — Wayne C. Drevets

seems to indicate that elevated blood flow in the amygdala may be a "trait marker" for FPDD. PET images indicate the abnormal-
ity in the amygdala remains constant in these patients (trait), but actual depressive episodes seem to occur only when the prefrontal cortex also has excess blood flow (state).

Drevets hypothesizes the prefrontal cortex may be the area where continued overactive thinking occurs in depressed people.

Abnormal blood flow in the amygdala is suggestive of the severity of depressive-
episodes when they occur, Drevets has found. It represents the more striking abnormality in the amygdala, the more debilitating the depression.

"Overactive circuit

Drevets and his colleagues also obtained evidence that two other structures interconnected with the prefrontal cortex and

"People with major depression have a biological illness. It's not a temporary mood swing." — Wayne C. Drevets

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"Overactive circuit

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Choi works to prevent, reverse brain injury

"A few years ago one despaired that anything could be done about neurological diseases. Now we stand on the verge of treatments for diseases that have bedeviled man for centuries."

Choi works to prevent, reverse brain injury

For all of its sophistication, the human brain is a defenseless organ. Age — always a predator — steals nerve cells with little compassion. Diseases, like unchallenged invaders, pick off selected neuronal targets at will. Nerve cells can be easy prey, and there's little the brain or the body can do to prevent their untimely death.

But neuroscientists believe that things are changing. With the latest molecular technology and a new way of thinking about brain injury, they say the brain need not be considered a vulnerable, defenseless organ. New drugs and treatments are on the way to help resist age and degenerative disease.

One neuroscientist leading the charge at the School of Medicine is Dennis W. Choi, M.D., Ph.D., Andrew B. and Gretchen P. Jones Professor of Neurology and head of the department. Choi's ideas about how to protect the brain from injury exemplify the aggressive new approaches medicine is taking against stroke, Alzheimer's disease, spinal cord damage and a variety of other neurodegenerative disorders.

These novel approaches stem from fundamental changes in thinking and new technology, Choi says. The field of neurology, he notes, was until recently up against a great deal of inertia. "We used to think we couldn't treat stroke because stroke causes brain damage," Choi says. "And people thought that brain death was unstoppable." But systematic study has revealed that nerve cell death may be the end result of a series of active steps. Interrupt any one of those steps and at least theoretically, it is possible to protect neurons and prevent brain damage.

As simple as this concept seems, Choi says it was a turning point for neurology. "When you start looking at it this way, brain injury becomes a fascinating and approachable problem," he says.

Fascination with difficult scientific problems is a common theme in Choi's life. His decision to enter the neurosciences "wasn't something he grew up thinking about," but rather the result of a well-focused interest in science. After completing undergraduate work in biochemistry at Harvard College in 1974, Choi received a doctorate in pharmacology from Harvard University in 1978. He also was awarded an M.D. from Harvard Medical School and the Harvard-MIT Program in Health Sciences and Technology in 1978.

After further training in Boston, Choi headed for the West Coast and Stanford Medical School for a position as assistant professor of neurology. As Choi arrived at Stanford, there was a flurry of activity in a little known area of neurotransmitter research that would play a major role in shaping his research career. The work began in the 1950s, when scientists noticed that a brain chemical called glutamate, normally important in sending signals between neighboring brain cells, could actually excite neurons to death. In the early 1970s, John W. Olney, M.D., a professor of psychiatry at Washington's School of Medicine, was studying this concept and slowly becoming more impressed with what he called "excitotoxicity." Olney believed that many brain injuries — from stroke to Alzheimer's disease — may be mediated by glutamate's "dark side."

As Olney's excitotoxicity theory gathered steam throughout the 1970s, scientists also noticed that glutamate is the major neurotransmitter in the brain. The radical idea that one of the brain's own major neurotransmitters could cause brain injury piqued Choi's attention.

But it wasn't until 1983, the year Choi moved to Stanford, that he spotted the journal article he'd been waiting for and became familiar with the work of another Washington University scientist. Steven M. Rothman, M.D., currently the Stein Professor and chief of the Division of Pediatric Neurology at Washington University, had been interested in the possibility that glutamate was somehow involved in the massive brain destruction seen in stroke victims. He began studying the effects of oxygen deprivation on nerve cells in culture. Rothman's "blockbuster discovery" in 1983, Choi says, showed that damage to oxygen-starved neurons could be minimized by a treatment that reduced the release of neurotransmitter-like injury. This work has spawned the now popular belief that NMDA blockers or antagonists may be invaluable in reducing the damage and death caused by stroke. Choi also is credited with showing that calcium, a particularly important neurotransmitter in mediating glutamate-induced neuronal death.

During the last 10 years, the excitotoxicity and neuroprotection fields have expanded rapidly and merged with other areas in neurobiology. A growing cadre of investigators at the medical school and at other institutions throughout the world are studying excitotoxicity and other types of neuronal cell death. "The momentum is terrific," Choi says. "It is almost a mindset that we will soon be able to intervene to reduce brain damage."

Indeed, candidate neuroprotective drugs are now in the lab, some are in the clinic and many are in the business of building biotech companies. The excitement has spread so quickly that there's a hardly a biotech company involved in the neurosciences that doesn't have a neuroprotective drug somewhere in development.

"Our approach is somewhat untraditional," Choi says. "Researchers hoping to develop new therapeutic approaches usually target an illness, such as Alzheimer's disease or stroke. We are studying the problem of nerve cell injury across disease boundaries, and we hope to learn enough about underlying principles to devise new therapies."

Besides directing this new research center at the medical school and serving as neurologist-in-chief at Barnes Hospital, Choi participates broadly in neuroscience organizations. He is the incoming chairperson of the national Brain Research Organization. He holds a listing on the advisory committees and journal editorial boards, including Science, Neuron, the Journal of Neuroscience, and Receptors and Channels.

An active teacher, Choi is responsible for a summer course on the Neurobiology of Human Disease at Cold Spring Harbor in New York, and he holds a position on the permanent teaching staff of an international neuroscience school in Italy.

Although balancing these commitments is difficult, Choi acknowledges, he finds this range of activities helpful in maintaining a sense of perspective regarding "where the field is and why it is there." Just a few years ago, he adds, neurologists believed that they couldn't treat brain damage. Now as they delve deeper, some are so bold as to ask, "When is a nerve cell really dead?"

"A very profound topic in neuroscience today is what is the nature of the point of no return," Choi says. "It's not unreasonable, he adds, to believe that in the future we will be reversing cells that we cannot revive today."

A number of faculty at the medical school who share Choi's sentiments. For them, the days of the brain as a hopelessly vulnerable organ are numbered. Choi believes this is a tremendously challenging and stimulating time for the neuroscience field in general. "Being a neurologist, neurosurgeon or neuroscientist at this moment in time is terrific," Choi says. "A few years ago one despaired that anything could be done about neurological diseases. Now we stand on the verge of treatments for diseases that have bedeviled man for centuries."

— Jim Keeley
Lectures

Thursday, Sept. 24


2:30 p.m. Mechanical Engineering Seminar, "CTI Status at McDonnell Aircraft Company," Raymond Conner, McDonnell Douglas Research and Engineering Fellow. Room 100 Bldg.


Friday, Sept. 25
9:30 a.m. Dept. of Pediatrics, School of Medicine and St. Louis Children's Hospital Pediatric Grand Rounds, "The Fragile X Syndrome," Michael Watson, assst. prof, departments of pediatrics and genetics, director, Genetics Electrolyte Lab. WU School of Medicine. Clinton Aud., 4950 Children's Place.


4 p.m. Dept. of Chemistry Seminar, "Development of Scalacim Lithium Organocomplexes for Enantioselective Electrocatalytic Addition to Enones," Bryan Bontrager, dept. of Chemistry, Brigham Young U. Room 311 McMillen Lab.

4 p.m. Dept. of Psychology Colloquium, "Can We Win the War on Drugs?" Kenneth Freudland, and prof. of medical psychology, WU Dept. of Psychiatry, Jewish Hospital. Room 202 East Hall.

Tuesday, Sept. 29

4 p.m. Dept. of Anthropology Colloquium, "Why Don't You Kill Your Baby Brother?" (Adult Discourse With Inuit Children), Jean Briggs, prof., Dept. of Anthropology, Memorial U. of Newfoundland. Room 149 McMillan Hall.

1 p.m. School of Engineering and Applied Science Seminar, "Physically Based Information Science for Magnetic Recording," Donald Porter, electrical engineering graduate student. Room 305 Bryan Hall.

1:30 p.m. Dept. of Mathematics Geometry Seminar by Lorenz Schwachhoefer, WU graduate student. Room 199 Cupples I.

2:30 p.m. Dept. of Mathematics Complex Seminar, "Analysis of Bacterial Fitness, WU graduate student. Room 199 Cupples I.

4 p.m. Dept. of Music Lecture by George Walker, guest composer, St. Louis Symphony Orchestra. Room 8 Blewett Annex.

Saturday, Sept. 26

Monday, Sept. 28
Noon. Division of Biology and Biomedical Sciences Seminar, "Selection Induced Anomalies in the Mouse," Diane Merritt, instructor, WU Dept. of Obstetrics and Gynecology. Room 521 Medical Library.

4 p.m. Division of Biology and Biomedical Sciences Seminar, "Selection Induced Mutations in Bacteria and Yeast," Barry Hall, prof., WU Dept. of Genetics, Yale U., New York. Room 322 Reebok Hall.

4 p.m. Dept. of Chemistry Seminar, "Development of Scalacim Lithium Organocomplexes for Enantioselective Electrocatalytic Addition to Enones," Bryan Bontrager, dept. of Chemistry, Brigham Young U. Room 311 McMillen Lab.

4 p.m. Dept. of Psychology Colloquium, "Can We Win the War on Drugs?" Kenneth Freudland, and prof. of medical psychology, WU Dept. of Psychiatry, Jewish Hospital. Room 202 East Hall.

5 p.m. Department of Biology and Biomedical Sciences Pediatric Research Seminar, "Tumor Suppression by Mn Superoxide Dismutase," James Grant, assst. prof., WU Dept. of Pediatrics, Third Floor Aud., Children's Hospital.

Wednesday, Sept. 30

11 a.m. Assembly Series Lecture, "Savage Inequalities," Jonathan Kozol, author of the book by the same title, Graham Chapel. (At 2 p.m. a panel discussion will be held in the Women's Bldg. Lounge) For more info., call 933-4620.


4 p.m. Dept. of Physics Colloquium, "Quantitative Theory of the Comet Heart," James Miller, prof., WU Dept. of Physics. Room 204 Crow.

4 p.m. Dept. of Mathematics Analysis Seminar with Albert Baernstein II, WU graduate student. Room 199 Cupples I.

4 p.m. Olin School, the Assembly Series and the School of Engineering and Applied Sciences present a lecture, "Global Business Perspective in an Information Age" Tadahiro Sekimoto, president of NEE Corp. Room 520, Anderson Student Center.


Thursday, Oct. 1


11:10 a.m. George Warren Brown School of Social Work Lecture, "New Directions in Community Mental Health: Transition to Local Care," the four executive deputy commissioners, South Carolina Dept. of Mental Health. Brown Hall Lounge.


4 p.m. Division of Biology and Biomedical Sciences Student-run Seminar, "Control of Matting Type in Yeast," James Broach, Princeton U., New Jersey. Room 199 Cupples I.

7:30 p.m. Performing Arts Department Lecture/Demonstration, "David Dorfman Dance," the company director, David Dorfman Dance Company. Room 207 Mallinckrodt.

Friday, Oct. 2
9:15 a.m. Pediatric Grand Rounds, "Preventing HIV Infection in Adolescents: School-Based AIDS Education," F. Sessions Cole, prof. of pediatrics, assoc. prof. of cell biology and physiology, WU School of Medicine; director, Division of Newborn Medicine, St. Louis Children's Hospital. Clayton Aud., 4950 Children's Place.


1 p.m. School of Engineering and Applied Science Seminar, "Characterization of Assymetrical Buckling of Tubular Internal Holed Infrared LEDs," Bonnie Swanson, WU electrical engineering graduate student. Room 305 Bryan Hall.

1 p.m. Dept. of Mathematics Geometry Seminar by Quan-Siu Chu, WU graduate student. Room 199 Cupples I.

2:30 p.m. Dept. of Mathematics Complex Dynamics Seminar by Nicola Arcozzi, WU graduate student. Room 199 Cupples I.

Exhibitions


"Green Acres: Neocolonialism in the U.S." Through Nov. 1. WU Gallery of Art, upper and lower galleries, Steinberg Hall. Hours: 10 a.m.-5 p.m. weekdays, 1-3 p.m. weekends. For info., call 933-4523.


Performances

Friday, Sept. 25
8 p.m. Edison Theatre "Ovation's!" Series and the National Theatre of the Deaf present "Oribeba." (Continues through Sept. 26) Edison Theatre. Cost: $20 for general public; $15 for WU faculty, staff and senior adults; and $10 for students and WU I.D. For info. and tickets, call 933-6543.

Friday, Sept. 26
2 p.m. Edison Theatre "Ovation's!" Series and the Little Theatre of the Deaf present the Deaf theatre of the "Present Deaf."

Saturday, Sept. 26-Oct. 3
Business school award presided over by president of Tokyo corporation

Tadahiko Sekimoto, president of telecommunication and computing giant NEC Corp., will discuss "Global Business Perspectives in an Information Age" at 4 p.m. Thursday, Sept. 26, in the May Auditorium of Simon Hall at the John A. Morris School of Business. The lecture is free and open to the public.

Sekimoto's address is jointly sponsored by the Olin School, the Assembly Series and the School of Engineering and Applied Science. The Olin School will present Sekimoto with its "Excellence in Business" award, which recognizes outstanding achievement in business management.

NEC Corp., headquartered in Tokyo, is one of the world's largest manufacturers of computer, communication and home electronic systems and equipment. NEC invests in research and development, specializing in the integration of computer and communication technology to meet special customer needs. Sekimoto directs a global sales, service and manufacturing network that includes 70 overseas subsidiaries and affiliates in 28 countries.

Tickets available for sale of Fame ceremonies

Individual and group tickets for Washington University's inaugural Athletic Hall of Fame ceremonies on Saturday, Oct. 3, are now available to the Washington University community and general public. Tickets for the noon luncheon cost $25 per person and are available through Tuesday, Sept. 29, by calling the Department of Athletics at 935-5131.

The luncheon and induction ceremonies will be held in Ridgley Hall's Holmes Lounge on the Washington University campus. Later that evening during halftime of the Bears'

Football

Last Week's Results: Washington 21, Case Western Reserve 0, Saturday, Sept. 26, 7 p.m. (EDT), Rochester, N.Y.

Current Record: 2-1

After evening their UAA record at 1-1 following Saturday's 21-9 victory over Case Western Reserve, the Bears take to the road this week, playing UAA leader Rochester. Rochester upset Carnegie Mellon 16-10 this past weekend in Pittsburgh, leaving the Bears in a second place tie with Carnegie Mellon behind 2-0 Rochester.

In Saturday's victory over Case Western Reserve, sophomore linebacker Matt Martel, Gommec, Illinois, shuttled no. 27 tackle to herself and Defensive Player of the Week honors.

Sekimoto, a pioneer in digital communications technology, joined NEC's Central Research Laboratory in 1948, after graduating from Tokyo University. He earned a doctoral degree in engineering from Tokyo University in 1962.

Sekimoto currently left NEC to serve as Japan's first assignee to the multinational digital communications research consortium, FEAt. In that position, Sekimoto directed the development of digital satellite communications technologies from 1966 to 1967. After his return to NEC, he continued research on advanced communications systems and technology while moving into top management. He has been president of the company since 1980.

Sekimoto also is vice chairman of the KEIDANREN (Japan Federation of Economic Organizations) and chairman of the Japan Electronic Industry Development Association.

His other awards include the Edwin Howard Armstrong Achievement Award by the IEEE in 1982; the Blue Ribbon Medal from his Majesty, the Emperor of Japan, in 1989; the Satellite Hall of Fame Award from the Satellite Professional Organization International in 1992; and the Apollo Spaceflight Achievement Award from the American Institute of Aeronautics and Astronautics in 1992.

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Managers must borrow tricks from politicians, business professor says

Irwin, "the thinking person's clown," will mime, juggle and dance his way across the Edison stage Oct. 2 and 3.

"The workplace is in reality a political institution in which all the players... have their own personal agendas." — Gary J. Miller

Managers should lead by example and hold subordinates accountable. This productive culture is crucial, asserts Miller, if managers wish to overcome the built-in limitations of economics, psychology, sociology and political science to stress the importance of managerial leadership and cooperation.

Managers should realize, argues Miller, that there are efficiency improvements that can be gained in organizations and institutions. The problem is that economists have not convinced managers that this will induce positive behavior from the employees.

"The Tonight Show" and "Northern Exposure"...

Gerry Everding
For The Record contains news about a wide variety of faculty and staff scholarly and professional activities.

Of note
Christine Ruane, Ph.D., assistant professor of Russian and Soviet history, has been invited to give the annual Barbara Held prize for the best 1991 article in Slavic women's history from the Association of Women in Slavic Studies. She received the prize for her article titled “The Veiled Virgin of St. Petersburg: Schoolteachers and the 1897 Marriage Ban.”

As a result of her research on medieval and early modern women’s social and political participation, Dr. Ruane has been invited to give the annual Barbara Held prize for the best 1991 article in Slavic women's history from the Association of Women in Slavic Studies. She received the prize for her article titled “The Veiled Virgin of St. Petersburg: Schoolteachers and the 1897 Marriage Ban.”

The Washington University Dental Alumni Association has awarded Akiko Tsuchiya, Ph.D., professor emerita of psychology, a grant toward the travel expenses of working with her research assistant, Dr. Christine Ruane, to study the effects of gender stereotypes on children's performance in math and science. Dr. Tsuchiya's research interests include the development of gender stereotypes and the role of gender in children's thinking and behavior. She has published extensively on these topics and has received several grants to support her research.

H. Philip Venable, M.D., professor emeritus of entomology and entomological sciences, was honored by the USDA for his contributions to entomology through scientific presentations, AIAA instructional courses, and publications.

Speaking of
During the American Psychological Association's Annual Convention in Washington, D.C., John L. Kardos, Ph.D., professor emeritus of psychology, gave a invited address titled "Psychotherapy: Then and Now." He also participated in a discussion on "Research in Counseling and Psychotherapy: Issues, Problems, and Possibilities." At the first conference of the American Library Association's Black Caucus (CLA) in 1967, African-American librarians emphasized the need for new black studies courses and the integration of all courses.

The American Library Association's Black Caucus (CLA) in 1967, African-American librarians emphasized the need for new black studies courses and the integration of all courses.

John L. Kardos

John L. Kardos, Ph.D., professor and chair of the Chemical Engineering Department, was awarded the Senior Honor Award from the American Chemical Society (ACS) in 1991. Other consortium members estimate that as many as 3,000 new jobs could be created in the region by reshaping the existing technology of composites, which are lightweight synthetic materials composed of two or more individual substances that together provide greater strength than each alone can. The composites are lightweight synthetic materials composed of two or more individual substances that together provide greater strength than each alone can. The composites are lightweight synthetic materials composed of two or more individual substances that together provide greater strength than each alone can.
Coordinator of Judicial Affairs 930028. Student Affairs. Requirements: Bachelor's degree required; master's degree in a relevant discipline preferred. Experience working with college students or adolescents required. Good written and verbal skills; ability to handle multiple tasks; clerical and organizational skills; flexibility and availability; three letters of recommendation required.

Technical Sales Specialist 930031. Campus Stores. Requirements: Minimum two years of college required; bachelor's degree preferred; knowledge of personal computers and popular software; experience working with microcomputer peripherals, such as printers; must be physically able to lift 100 lb. system components; must be able to work evenings and Saturdays. Resume and three letters of recommendation required.

Cashier/Clerical Assistant 930035. Applied Research Lab. Requirements: Bachelor's degree; typing 50 wpm with accuracy; good command of English; ability to handle multiple projects, general office experience and organizational skills; must be able to handle balance and funds and to work quickly and accurately under pressure. Clerical testing and three letters of recommendation required.

Administrative Assistant 930045. Alumni and Development. Requirements: Bachelor's degree from a school of architecture, and a broad understanding of leadership in private and public sectors; must have a minimum of three years of experience in building services operations; experience with word processing, five years of office experience, including work with budget figures and reports; ability to deal effectively and sensitively with senior administrators, faculty, alumni, parents and prospective students; maintain confidentiality; excellent attendance record; good command of English; ability to handle multiple project-oriented tasks with strict deadlines requiring a high degree of organization and thought; available to work over-time as needed, familiarity with data management equipment and data base management preferred; experience with Macintosh computer proficient in Microsoft Word, desktop publishing and spreadsheet software. Clerical testing and three letters of recommendation required.

Medical school openings

The following is a list of positions available on the Hilltop Campus. Information regarding these and other positions may be obtained in the Office of Human Resources, 4408 Clayton Ave. Applications for the general public are Monday through Wednesday from 9 a.m. to 2 p.m. Applicants are encouraged to pick up an application and make an appointment to speak with one of the recruiters.

Medical School openings

The above listing includes only those positions available on the Hilltop Campus. Plans are underway to include School of Medicine job vacancies in the Recruiting Today publication and on a new network of school-specific computerized employment availability databases. Three letters of recommendation are required.

Employee open enrollment to begin Oct. 1

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