Bipolar disorder in children worse than in adults

Child psychiatry researchers report that bipolar disorder, formerly called manic-depressive illness — can occur in children as young as 7 years old and that the illness in young bipolar children resembles the most severe form of bipolar disorder in adults. The findings were presented recently at the Fourth International Conference on Bipolar Disorder. The conference, held in Pittsburgh, Pennsylvania, is the only venue in the world devoted to the illness in young bipolar children.

"Typically, adults with bipolar disorder have episodes of either mania or depression that last a few months and have relatively normal functioning between episodes," said Barbara Geller, Ph.D., associate professor of child psychiatry at the Siteman Cancer Center. "But in manic episodes, individuals feel like an "Energizer bunny," Geller said. "The common notion that children might be less ill than their adult counterparts is not supported by our findings. Geller and her colleagues are studying 93 children with bipolar disorder and ADHD because many parents, teachers and health-care providers might confuse the overlapping symptoms of the two problems and think that these are just hyperactive kids," Geller said. The confusion arises because both mania and ADHD have hyperactivity, irritability and distractibility as symptoms. But only bipolar disorder includes elated mood, such as giggling inappropriately when getting failing grades,grandiosity, such as telling the teacher what to teach in the classroom; flight of ideas, which is jumping; magical thinking about topics; racing thoughts, such as feeling like an "Energizer bunny" is controlling their thoughts; and a decreased need for sleep. In fact, some children may stay up rearranging furniture most of the night. This work was developed to diagnose bipolar disorder in children as young as 7 or 8 years."

"There are researchers who want to build software for lawyers to improve information retrieval, dispose of routine tasks more efficiently, sift through evidence and build a convincing argument to present before a judge and jury," said Loui, an expert in AI, legal reasoning and the philosophy of computing and law. "You have the modern version of the legal code contracts that build and manage expert systems and routinely adapt prior systems to the needs of new clients, and two large retrieval systems, Westlaw and Lexis, that are now subject to pressures to improve their technology. All of this is based partly on AI. Things are definitely changing." The saying is, 'Old lawyers will die, but new lawyers will be made. New formulas better treatment access for women. "This law is wonderful for the health of Missouri women," Eberlein said. According to Loui, AI arguments systems permit a new kind of legal reasoning. Providing a comprehensive argument, combining the result of multiple sources and the result of multiple knowledge sources, is the major advantage of AI argument systems. AI can then add specific research results from the mid-1980s to the present in his paper, "Logical Models of Argument," in ACM Computing Surveys. According to Loui, AI argument systems permit a new kind of reasoning to be embedded in complex programs. He says that the reasoning is so much more natural, more human, more social, even more fair. "The AI community is hammering out logics now for modeling competing arguments, and the result should be software that can actually perform a bit of legal reasoning." — Ronald P. Loui

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BLOOD VESSELS MATURE INTO BONE VESSELS AND CAPILLARIES

***by Tony Fitzpatrick***

University biologist has discovered a mechanism in bone vessels that opens the door for bone in such diseases as rheumatoid arthritis, periodontal disease, osteoporosis, or associated bone loss, or artificial implant loosening.

Patrick Collins-Osoby, Ph.D., research associate professor of biology; Linda Rothe, University research associate professor of biology, both in Arts & Sciences, and Linda Rothe, University research associate, have shown that blood vessels at inflamed sites are capable of signals that lead to eventual bone destruction.

**Blood vessels found to signal chain in bone loss**

"There is a growing appreciation that blood vessels do play a key role in actively regulating bone remodeling and physiology," says Patrick Collins-Osoby.

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Collins-Osoby, Linda Rothe, and Philip A. Osdoby, Ph.D., professor of biology, both in Arts & Sciences, and Linda Rothe, University research associate, have for the first time shown that blood vessels at inflamed sites where bone loss occurs present the first signals that initiate a cascade of events leading to local bone destruction.

Collins-Osoby said the research was published in the June issue of the Journal of Biological Chemistry. The research was supported by the National Institute of Health.

When an area of tissue or a near bone becomes inflamed, key molecules called cytokines are locally produced and increase in the bloodstream. Studying human tissue and cell samples, the Osdoby research group has shown that key cytokines of the body's immune system-the interleukin-1 (IL-1) and tumor necrosis factor (TNF) of the endothelial cells of blood vessels and osteoblasts that line and spread on their surface a molecule called ILK42RANK. RANK is the critical signal that tells the body to make and activate bone-degrading cells called osteoclasts.

After osteoclasts take bone away, osteoblasts go back in and add new bone.

Normally, this bone remodeling, which is associated with a blood vessel or capillary at such sites, is carefully balanced process. When persons with inflammatory bone disease are studied, osteoclasts outnumber osteoblasts and outwork the bone-forming osteoblasts, leading to weakened bone matrix and increased risk of fracture.

The Osdoby group believe that inflammation affects bone cells to the region and then initiate their development into highly active bone-degrading cells called osteoclasts.

"Also, we discovered that in the biochemical chain of events leading to bone remodeling, one protein molecularly itself becomes an antagonist molecule, osteoprotegerin (OPG), which research is new, that regulates RANKL activity. Although OPG is made in this process, it appears early and and a route to passively deliver nutrients and cells. Our findings show that bone vessels can play a key role in actively regulating bone remodeling and physiology."

"Because we know that blood vessels overgrow and are activated to cause osteoclast formation in inflammatory disorders, research continues to begin to think of damming the formation of new blood vessels or capillaries, RANKL gets the upper hand. This is aided by the fact that RANKL is secreted on the cell surface while OPG is a soluble molecule that can be carried away by the blood stream. Drug companies are interested in RANKL as a target and OPG as a possible therapeutic or preventative molecule to induce a decrease in bone formation and activity. It is the progressive and irreversible loss of bone and cartilage that is the most difficult to control and treat because of a proliferation of cartilage or bone tissue and cartilage. Current anti-inflammatories and chemotherapeutic treatments are inadequate for this purpose. However, OPG injection prevents such bone and cartilage loss that results from bone remodeling and osteoclast activity."

"Many scientists now think that information that blood vessels themselves are initiators of this elaborate process could make drug delivery easier or more efficient. Rather than receiving a local injection, patients may be able to take an oral route or prevent a local injection dose that goes directly into the bloodstream and allows the drug to work immediately in the early stages of RANKL activity. Current anti-inflammatories and chemotherapeutic treatments are inadequate for this purpose. However, OPG injection prevents such bone and cartilage loss that results from bone remodeling and osteoclast activity."

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**Collaborations between the private sector and higher education are commonplace in the surgical oncology field, often the aid of faculty and students to conduct basic research in biology, chemistry, physics and other fields. But in the arts!**

Collins-Osoby, CheckMark Communications, the creative communications arm of the arts-oriented Saint Louis University based pet food giant Ralph Purina, enlisted a group of 16 junior illustration majors from the School of Art to help launch its new line of dog food, which recently began arriving in stores.

"Though a major media rollout is planned for the fall, the company is currently generating buzz through a grassroots-style e-cards campaign," said Central to that initiative are a series of multimedia e-mail packages - conceived and developed by the students art — known as Flash animations. These, which might also be described as short, self-opening loops, range from Rabbit's "Dancing Dog," a cuddly posh who tingles, waltzes and dances, to Melanie, and "Loren's "Shubelot," a receptor who looks for a lower class of gastrointestinal offender.

"The complete set of animations can be viewed on the Web at http://www.sambodog.com/flashviewer.html." Still, deadlines were met, and by the end of the semester Purina had launched an initial trial run, mailing each piece to a sample of about 300 households. When response rates were inadequate for this purpose.

"The students' work is a true reflection of the projects' final development. "They worked really hard together with real cash and blood," said assistant professor Jennifer T. McKendric, who served as technical advisor. "Most of the students were very excited about the project and had a real passion for it, and the students' work was off-the-charts." However, "OPG injection prevents such bone and cartilage loss that results from bone remodeling and osteoclast activity."

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After osteoclasts take bone away, osteoblasts go back in and add new bone. Normally, this bone remodeling, which is associated with a blood vessel or capillary at such sites, is carefully balanced process. When persons with inflammatory bone disease are studied, osteoclasts outnumber osteoblasts and outwork the bone-forming osteoblasts, leading to weakened bone matrix and increased risk of fracture.

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Patrick Collins-Osoby
Copper aids prenatal growth

Researchers have discovered that a protein that escorts copper through cells is essential for the development of certain organs and tissues. Mice lacking this protein at high risk at the birth defects or infant death.

Gitlin, a professor of radiology in children's hospital, said: "One day cells need copper in the liver or brain. In blenoderma, disease, patients suffer from copper deficiency and often die in the early stages of human testing."

"It's a tide that can change," Gitlin said. "One day when we have a better understanding of how copper moves through the body, we will be able to improve the ability of patients to use this nutrient effectively."
Shakespeare Festival gets WU boost

BY LIAM OTTEN

Hey, even the greats can’t do it alone.

Last month, a dedicated group of University faculty, staff and students joined other local arts advocates and a stellar cast of nationally known theater professionals in launching the new Shakespeare Festival of St. Louis. "Romeo and Juliet," the festival’s inaugural production, played for two weeks to packed houses — or in this case, hurdles — in Forest Park. Directed by PJ Paparelli, resident assistant director of the Shakespeare Theatre in Washington, D.C., the play earned widespread praise from audiences and critics alike.

Organizers hope to make the festival an annual event, and planning for next year is already under way.

"This event has come a very long way in a very short time, but there is a significant audience in St. Louis that is used to coming out in the evenings and seeing theater," said Henry Schvey, Ph.D., professor and chair of the Performing Arts Department in Arts & Sciences.

Schvey worked behind the scenes in several capacities, serving as artistic advisor and — along with Larry Kahn, past chair of the University's Lifelong Learning Institute — as a member of the festival's board of directors.

Schvey added that, for organizers, "the bottom line was quality. And I think that we've had a production that not only exceeded our expectations, but were acting as if they were in the right scenic work, and that's helpful to have walls that serve as backdrop. "It's that sort of cooperation."'

"It ended up being a much bigger project than we had planned, but I think everyone was pretty excited by the direction we found," said Christopher Pickart, artist in residence in the PAD.

"I don't think we showed. St. Louis can deliver the goods and that people will support it," said scene designer Christopher Pickart, artist in residence in the PAD.

"Romeo and Juliet" is traditionally set in the Renaissance, Paparelli had the insight to use a slightly earlier historical epoch — specifically, the transitional period between the Renaissance and the Middle Ages. "It's like setting it in the 1960s, a time when children were ready to move on from their parents were still clinging to established societies," Pickart said.

Still, finding the right scenic tone took some work, and Pickart spent about five months working different ideas and approaches. In the end, he settled on an idea of constructing — complete with ramps, turves and elevated walkways — that opened up in the center, providing a magnificent view of the park receding into the distance.

"This was a really, really hard one," Pickart said with a smile. "It ended up being a much bigger project than we had envisioned, but I think everyone was pretty excited by the direction we found."

To help stay on budget, Pickart borrowed some props and other stage elements from the PAD stockroom.

"On the day that we were the Washington University flats, he said, pointing to the wood-frame-and-plywood walls that serve as backdrop. "It's very helpful to be able to have that sort of cooperation."

That's just one of the things that the acting school is involved in. The students are getting real theater experience and are learning what it's like to work in a professional theater.

"We did a lot of fighting," Kurtz said with a laugh. "Some changes, crowd scenes, things like that."

"We're learning how to do it right," Pickart said. "I'm really excited about the professional actors coming out and performing every night. It's a great experience just to be able to watch them."
Public interest work part of law students' summer

BY ANN NICHOLSON

From whistleblowing cases to criminal defense for indigent clients to environmental advocacy, an increasing number of students seeking the School of Law's summer funding are opting for summer work experiences in public interest fields.

The law school's growing student funded program is helping make possible the vast majority of these internships by contributing to basic living costs for students pursuing otherwise unpaid internships. In large part due to the success of a multiyear matching grant program, 58 students were awarded stipends this summer. That represents 16 more stipends over last year and more than double those offered in 1999.

"The School of Law believes that the public interest obligation of lawyers is committed to offering increased opportunities for students in this area," said Joel Seligman, J.D., dean of the School of Law and the Elihu A.H. Shepley University Professor.

"The summer stipend program is a terrific opportunity for students to intern themselves in legal issues they feel passionate about while providing valuable service to low-income clients, community organizations and employers in public agencies.

"The numbers range from positions with the Missouri State Public Defender (MSPD) Office to the Foundation for Sustainable Development, the National Wildlife Federation's Center and the International Institute for Human Rights in Nepal.

Law students also are working for the Immigration and Naturalization Service (INS), U.S. Attorney's Office, American Civil Liberties Union, Legal Aid Societies in various states, Missouri Coalition Against Domestic Violence and the law school's Interdisciplinary Environmental Clinic.

Law student Carrie Johnson, who is interning with the INS office in Denver, has been assisting at a variety of hearings for people seeking asylum, refugee status or other means of remaining in the United States. She also has been learning firsthand about the plight of aliens through interviews at a detention center.

"My experience has shown me that immigration law and international law," Johnson said. "I have assisted the lawyers in researching areas of the case and first, chaired their meetings so far. I also speak freely with the immigration judges about issues and hear their viewpoints everyday. The INS attorneys and judges truly care. The goal is not to deport everyone, but to give everyone a chance.

Sanjay Sola is interning with the National Wildlife Whistleblower Center in Washington, D.C., which focuses on both whistleblowing cases and related public policy issues.

"My internship has exposed me to fascinating legal issues and a tremendous learning experience," Sola said. "One of my most challenging projects has been writing a 60-page appeal brief for a major whistleblowing case. I've learned a lot about the power of advocacy and how a good whistleblowing case can provide for significant social and environmental changes in organizations such as the FBN and the industries involved.

Through his internship with the MSPD's juvenile division, Lopez hopes to be able to help turn the youth's lives around. "Children make mistakes," Perkins said. "I grew up in a home that was very similar, so I can relate to that. But I've seen the positive side of the system, and can make a positive change for others."

"It's hands-on court experience," Khazaeli said. "I'm learning what it really means to be a lawyer. I'm working with real clients, not just reading about them in books. I'm learning to see that experience on a resume."

Perkins and Khazaeli are among 23 University students, including two undergraduates, who have summer applications with MSPD. While some of these positions, such as Perkins', are paid directly through MSPD, the majority are supported through the law school's stipend program.

Marty Robinson, director of the MSPD, said the students not only provide quality legal work for the department but also gain insight into the need for and rewards of public interest work.

"It's exciting to see young people with such a strong desire to learn about the law. They're learning to become powerful advocates for the indigent," Robinson said. "It's very encouraging to see them gain the experience that will make them more rounded individuals and better attorneys."

New fellowship provides international students a chance to see America

BY NEIL KOTENBACH

The University international students are traveling the United States this summer as part of a new in the public interest fellowship program.

The Fischlowitz Travel Fellowship Program will provide $5,000 to each of its 11 participants, 10 international students, an undergraduate and one graduate, as well as two former exchange students.

The students were chosen based on their contributions to society and their potential to bring something new to the United States.

"Mr. Fischlowitz wanted these fellowship positions to be increased in number," said Mary Laurita, Ph.D., assistant professor of law and director of the law school's stipend program.

"They really enriched his experience here at the University," added. "They really enriched his experience here at the University, and he wanted to give something back."

"The University is pleased to offer this program and add to their already active international programs," she said.

"It's our hope that this fellowship program and add to their already active international programs," she said.

"We're really excited about this program and add to their already active international programs," she said.

"With the team's expertise, we've been successful in repairing the balloon, eliminating time to ship it back to its manufacturer, Cameron Balloons Ltd. of Bristol, England, thus making possible another launch this season," said Steve Fossett.

Fossett will have many of the same team members from his last attempt assisting him again later this month, including Project Manager Mary Lanzetta, Chief Meteorologist Bob Rice and Mission Control Director Joe Ritchie.

"The University is pleased to continue our role as Mission Control for Steve Fossett's attempt to make the first Solo Balloon Flight Round The World," Chancellor Mark S. Wrighton said.

Fossett earned an MBA from John M. Olin School of Business. His daring balloon flight over the oceans of the Southern Hemisphere may take 15-18 days.

"All the students and staff participating in this project were so disappointed when Steve's balloon was torn during the infiltration process last month," Wrighton said. "We are very happy that Solo Spirit could be repaired in time to go as still to see parts of United States they might not normally be able to see. We're really excited about it and eager to see the students' reactions once they get back."

"My experience has thrown me into the legal system," Johnson said. "I'm working with real clients, not just reading about them in books. I'm learning to see that experience on a resume."

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"Follow the flight

Steve Fossett's solo balloon flight will be visible online and on the Web satellipel.wustl.edu. The site also features links to several resources and background information on ballooning. For more information on Fossett and his other recent-breaking adventures.

"Ballonists

Steve Fossett sits in the gondola of Solo Spirit, in which he will attempt to complete the First Solo Balloon Flight Round The World.

"With the team's expertise, we've been successful in repairing the balloon, eliminating time to ship it back to its manufacturer, Cameron Balloons Ltd. of Bristol, England, thus making possible another launch this season," said Steve Fossett.
AI

"New math" could change legal profession — from Page 1

don't type, well, new lawyers come to grips with the "new math." There is a cultural shift. The legal profession realizes it is in the information business, not just the people business.

Louis since the mid-1940s, the expert-systems community actively explored problems and questions surrounding the theory that systems had to be built upon indices and classifications, the two logical forms that were to build a world.

Too many people are taught that deductive reasoning is the most useful. A well-formed step-by-step logical argument is necessary. But then, students don't even think of the reasoning because they were taught about it through artificial intelligence.

"Mathematics and deductive and inductive forces because the former is logic, the latter probability. But they haven't argued about it because the logic is taught through artificial intelligence.

The cybercafe is just the beginning of the changes on the third level. The library entrance will be moved to the south side of the building. The new space will be a large curbed service desk that brings together the library's main service areas — collection, reference, reservois, interlibrary loan, technical services, and a convenient location, rather than having them in separate rooms of the library, as they currently are. The periodicals area will be expanded, and a large reading room will be on the east side of the building. Special Collections — currently located on Level Five — will relocate to Level Three as early as spring of 2003, increasing visibility for many of the library's treasured and borrowing visitors to view exhibits even when that department is closed. The fourth level will house group study areas for faculty members and graduate students. Additional windows will be added to Level Four and the old study carrels will be removed, bringing in more natural light during daylight hours, as well as affording more seats with views of the St. Louis skyline. The library maintains a Web site for students, faculty, and staff. www.library.wustl.edu/renovation

— that includes general information, floor plans for the renovated areas, FAQs, a timeline and photographs of the progress to date, as well as a means of submitting questions or comments about the renovation.

Olin

30-month improvement process has begun — from Page 1

Our will be reduced. More grad students will be added, and sprinklers will be installed. Compact shelving will replace more traditional fixed shelves to greatly increase storage capacity. Level One will provide crucial "surge space," and allow the library to be cleaned out for renovation.

On Level Two, both faculty and graduate student areas will be renovated and updated to include the latest in network technology. The building will also house an expanded media space that will include a combination of both old and new electronic technology. Space will also be available for faculty to bring students for digital assignments.

The most dramatic changes will be on Level Three, the library's highest level. The entire level will be expanded outward by 12 feet, with the west end of the building. A cybercafe and 24-hour study space will occupy an atrium surrounding the southeast corner of the ground level. It will fulfill students' long-held desire for a convenient, quiet study space that is available around the clock. The atrium will stretch up through two levels of the building. It will be a 2.8 million square foot space, with a curtain wall surrounding it, in addition to providing some food service.

A cybercafe will house a number of public-access computer workstations and provide the stability of a full-time librarian.

Late-night entry to this study area opens

Olin Library renovation timeline

Please note that all dates are tentative and subject to change.

Summer 2001

• Construction barriers erected • Exterior decoration begins • Administration office moves to temporary Level Three space • Full term 2001 • Installation of new exterior curtain wall • Construction begins on Level Three Special Collections

Spring term 2002

• Level Five books close • Level Five books and Harris collection move to Level One • Renovated Level One reopens with temporary collections • Library entrance moves from east side to south side of building • Circulation desk and interlibrary loan move to temporary space • Special Collections moves to renovated Level Three space • Construction begins for Level Four staff areas

Summer 2002

• Collection development and circulation staff move to temporary cybercafe space • New book display opens • Reference move to Level Three

Fall term 2002/Early 2003

• New book display opens • Level Four spaces and new special collections move to renovated Level Five space • Level Four stacks close • Level Five Move to renovated Level One • Construction begins for Level Two multimedia center

Spring term 2003

• Level Two multimedia center opens • Current periodicals popular literature and reference move to Level Four • Level Four book display opening • Near east collection, reserve and government document moves to Level Four

Summer 2003

• Office moves to renovated Level Five space • Administration office moves to temporary Level Three space • Special Collections moves to renovated Level Three space • New book display opens • Reference move to Level Three • Level Four staff moves to renovated Level Three

Fall term 2003

• New book display opens • Level Four staff moves to renovated Level Three

Olin fire call

The Clayton Fire Department was called to the Olin Library on Monday in response to an electrical short in a junction box in a classroom on the first floor of the Library. The incident occurred around 6 p.m. and was caused by a short in the electrical connection, according to fire officials. The fire department was called to the library at 6:16 p.m. and arrived on the scene at 6:20 p.m. No injuries were reported.

The cause of the fire was determined to be an electrical short, according to fire officials. The fire department was called to the library at 6:16 p.m. and arrived on the scene at 6:20 p.m. No injuries were reported.

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Seek and find high school students participated in a scavenger hunt throughout the Hilltop Campus as part of the fourth annual College Horizons program held at the University last month. College Horizons, co-sponsored by the American Indian Science and Engineering Society, Winds of Change Magazine, St. John's College's and Washington University, is a five-day course to help American Indians prepare for college. Fifteen rising seniors and juniors from around the country met with admissions officers from more than 20 colleges and attended workshops on filling out winning college applications and writing college essays.

Notables

During his ambassadorship. He presented his credentials to King Albert II June 12. University Life Trustee Lee M. Liberman, chairman emeritus of Laclede Gas, was recently elected president of Forest Park Forever.

Robert D. Schehrer, Ph.D., the Alumni Professor of Pathology and Immunology and professor of molecular microbiology at the School of Medicine, has received the 2001 William B. Coley Award for Distinguished Research in Basic and Tumor Immunology from the Cancer Research Institute. He was recognized for his work on the role of the immune system in tumor formation.

H. Mitchell Perry Jr., M.D., professor emeritus of medicine, has been named the 2001 winner of the C.S.E.C.H. Lifetime Achievement Award, given by the Conservatorium for Southern Baptists' Education Control to recognize a scientist whose work has resulted in major advances in the understanding of the cardiovascular system and high blood pressure.

Campus Watch

The following incidents were reported to University Police June 9-7 July. Readers with information that could assist in investigating these incidents are urged to call 935-5555. This information is provided as a public service to promote safety awareness and is available on the University Police Web site at "Campus Watch." No entry to the room was gained.

June 13
8:05 p.m. — An unknown person entered Crow Hall and stole a Toshiba laptop computer and a Koss portable compact disc player. The items were removed from the desk of a physics graduate student between 3:30 and 8:05 p.m. Total loss is valued at $1,530.

June 14
9:25 a.m. — The director of photographic services at the Alumni House reported that an unknown person attempted to pry off the face of the bolt lock on the door to Room 39 on the east end of the building's lower level. No entry to the room was gained.

July 3
7:54 p.m. — The director of the College Horizons program stated that two of her high school students were missing. The students were located at the Athletic Complex a short time later and returned to their counselor.

July 2
8:16 a.m. — A foreman for LaClair reported that an unknown person(s) gained entry into Alpha Epsilon Pi and Sigma Phi Epsilon fraternities and damaged various rooms that had just been remodeled. The damage appeared to be made by a chisel or similar object. No forged entry was found. The damage occurred between 3:30 p.m. June 29 and 7 a.m. July 2. No damage estimate was available.

July 13, 2001

WASHINGTON UNIVERSITY IN ST. LOUIS

13

Notables

Speaking of

At the request of the Federal Trade Commission, Michael M. Greenfield, J.D., the Walter D. Cohn Professor of Law, made a presentation on credit cards and other payment systems used for cross-border and Internet transactions at a roundtable of the Organization for Economic Cooperation and Development in Berlin.

John C. Morris, M.D., the Harvey A. & Dorisima Hacker Friedman Professor of Neurology and co-director of the Alzheimer’s Disease Research Center at Washington University School of Medicine, was a guest July 6 on National Public Radio’s Talk of the Nation: Science Friday. Morris was interviewed by host Ira Flatow on the latest findings concerning the clinical diagnosis and treatment of Alzheimer’s disease. The program can be heard on the Talk of the Nation Web site at http://www.npr.org/pr/programs/ci/i/..

Stephen Legowski, J.D., D.Phil., the Nobel Professor of International Law and director of the Institute for Global Legal Studies, gave presentations in April and May at the Center for Migration Studies in Washington on the subject of dual nationality; at the annual conference of the International Studies Association in Chicago on the theory of dual nationality; at a workshop in Berlin for German Members of Parliament and others on European asylum policies, and at a conference in Moscow on cross-border and Internet other payment systems used for credit cards and other payment methods.

Of note

Carlos A. Perez, M.D., professor of radiology and director of the Radiation Oncology Center at the School of Medicine, received The National Children’s Cancer Society Legacy Award 2001 for his distinguished leadership in the Radiation Oncology Center at the School of Medicine, and was selected as the 2001 Radiation Oncology Teacher of the Year, making him a three-time recipient of the award (1991, 1995). The radiation oncology residents select the award recipient each year, recognizing and voting for the faculty member who makes a significant contribution to radiation oncology resident education during the academic year.

Michael J. Holtzman, M.D., was presented with a Recognition Award for Scientific Accomplishment from the American Thoracic Society (ATS) at the group’s 97th International Conference in San Francisco in May. The award is given to individuals for distinguished contributions to the understanding, prevention, and treatment of lung disease.

Rudolph B. Hassel, Ph.D., professor of mechanical engineering, has received a one-year, $75,000 supplement to his current research award, “Ozone and particulate matter air quality analysis in support of public needs.”

David A. Peters, Ph.D., the McDonnell Douglas Professor of Physics and chair of mechanical engineering, will attend the First National Conference of the American Society of Mechani- cal Engineering’s Conference on Engineering/Design Sept. 17-20 at the University of Patras in Greece. The conference focuses on recent advances in mechanical engineering, and it is a memorial conference for the late Andrew D. Dimmogenes, formerly Palm Professor of Mechanical Engineering at Washington University and a native of Greece.

Da-Ren Chen, Ph.D., assistant professor of mechanical engineering, is co-principal investigator with a colleague at the University of Minnesota on filtration research. The research is funded by a Minnesota-based industrial consortium at nearly $600,000 and will be funded until April 30, 2003....

Elliot J. Elson, Ph.D., professor of biochemistry and molecular biophysics, and George I. Zahalak, Ph.D., professor of mechanical engineering, have received a $1.3 million grant from the National Institutes of Health for their project, “Reconstituted Tissue Mechanics.” The project is expected to run until 2006. The U.S. Senate recently confirmed President George W. Bush’s nomination of Stephen F. Bussier as U.S. ambassador to Belgium. Brauer has served as a trustee since 1991 and will continue in that role during his ambassadorship. He presented his credentials to King Albert II June 12. University Life Trustee Lee M. Liberman, chairman emeritus of Laclede Gas, was recently elected president of Forest Park Forever...

Robert D. Schehrer, Ph.D., the Alumni Professor of Pathology and Immunology and professor of molecular microbiology at the School of Medicine, has received the 2001 William B. Coley Award for Distinguished Research in Basic and Tumor Immunology from the Cancer Research Institute. He was recognized for his work on the role of the immune system in tumor formation.

H. Mitchell Perry Jr., M.D., professor emeritus of medicine, has been named the 2001 winner of the C.S.E.C.H. Lifetime Achievement Award, given by the Conservatorium for Southern Baptists' Education Control to recognize a scientist whose work has resulted in major advances in the understanding of the cardiovascular system and high blood pressure.

Obituary

John Berry, 80

John W. Berry, M.D., assistant professor of clinical medicine at the School of Medicine from 1961-87, died of complications of Alzheimer’s disease Friday, June 29, 2001, at Encor Senior Village in Green Acres, Fla. He was 80.

Working toward the curb Above right, more than 31,000 people, including 1,100 on the Alvin J. Siteman Cancer Center team, flooded the streets of downtown St. Louis last month for the St. Louis Race for the Cure. The Siteman Cancer Center was a platinum sponsor of the event, which raised more than $100,000 to fight breast cancer. Above left, (from left) School of Medicine Department of Surgery employees Jamie L. Sauerburger, executive director, walks with Mary K. Amann, business director, and daughter Brittany K. Amann.
Sandra Hale, Ph.D., can help make our lives a lot easier, especially since we’re not getting any younger.

Hale, associate professor of psychology in Arts & Sciences, has contributed significantly to understanding how our brains process information and how this changes across the life span.

“Sandy’s research is of fundamental importance in understanding how conscious mental activity is affected by the process of aging,” said Henry L. Roediger, Ph.D., chair and James S. McDonnell Distinguished University Professor in the Department of Psychology.

Two aspects of normal everyday thinking are central to Hale’s research: speed of processing — how quickly we process basic information from our environment; and working memory — the ability to retain information, such as the amount of a restaurant bill, for a brief time and then to manipulate this information, such as calculating the proper tip.

Speed-of-processing and working-memory investigations at Hale’s lab have shown that differences between younger and older adults are a matter of degree.

“Older adults may take longer to process the same information and make more errors, but we see no evidence that older adults are doing things differently than younger adults,” Hale said. “Our research suggests that normal aging does not result in qualitative changes in thinking, which is a finding that we hope people find reassuring.”

Hale and her colleagues have also found that our ability to convert verbal cognition to a much lesser extent than spatial cognition. For speed of processing, Hale designed experiments to measure the amount of time needed to complete both verbal and spatial tasks. A verbal task involves deciding words, such as determining whether two words are from the same category. A spatial task involves decisions about shapes and/or locations. Examples include visual search tasks where subjects search for a red circle (the target) among a field of red squares and blue circles.

The results of these processing speed studies show that as we age, although there is both verbal and spatial slowing, spatial processing is affected to a much greater extent. Using working memory tasks that require subjects to either recall a list of letters or recall locations of X’s in a grid, Hale has found that age also affects spatial working memory to a greater extent than verbal working memory.

“Tasks of aging appears to be a cascade of effects beginning with the general slowing of processing speed,” Hale said. “As we get older, we slow down.” Hale said. “Getting slower reduces our working memory capacity, and we tend to jumble things up more frequently. This, in turn, affects our higher-level reasoning and intellectual abilities, especially in the spatial domain.”

The good news, Hale points out, is much of our daily life depends on processing verbal information, and this domain is the least affected by aging.

Hale’s findings have important implications for the development of some aspect of human behavior, that they will be able to say, “Oh, I know what this is about.” And then proceed to expand their knowledge.”

Hale is an advocate for the use of technology in teaching. She has recently put her course content on the Web, providing students with relevant concepts and visual images to be viewed in upcoming lectures. By making those materials available on the Web, she said, students are better able to grasp what’s important.

“Students ask questions more readily and they don’t have to suffer while I draw lamp pictures of experimental procedures on the board — many students couldn’t even see a dog’s head in my drawings,” Hale said. “But she doesn’t reproduce her course notes on the Web because she believes students remember material better when they encode it in different ways (seeing it, hearing it and writing it down).”

Toward safer research

Hale has been chair of the Hilltop Human Studies Committee (HHSC), an institutional review board.

“We aim to educate people about how human participants should be treated in research,” Hale said.

In addition to making research safer for both scientists and human volunteers, Hale has helped streamline the process by spearheading the development of a Web site, updating necessary forms and keeping up with policy changes.

“I take my postdoc letter to her for what she’s done with the HHSC,” said Martha Storandt, Ph.D., professor of psychology and director of the Aging and Development Program at the University. “She’s done more to protect the subject used in scientific research on the Hilltop Campus than anyone else. At the same time, she’s made it much more efficient for the experimenter studies involving humans.”

Since 1992, Hale has also been involved in the recruitment of new freshmen, giving general questions about psychology and psychology research opportunities for undergraduates in the social sciences. In addition to postdoctoral researchers and graduate students, Hale has two or three undergraduates working in her lab each year. Eighty percent of the undergraduates working in Hale’s lab have published their results in scientific journals.

“I think the chance to participate in research is one of Washington University’s greatest strengths for undergraduates,” Hale said.

In 1998, the New York Academy of Sciences recognized Hale as an outstanding mentor when her graduate student, Astrid Fry, won the prestigious James McKee Cattell award for the year’s outstanding presentation in psychology. The dissertation focused on the role of speed of processing and working memory in higher-reasoning abilities in children. The results provided evidence for a development-critical shift in these processes observed in Hale’s studies of older adults.

Hale and her husband always assumed that getting bored was the worst thing that could happen to a person. So in addition to her research, teaching and University service, she’s been making jewelry — bracelets, earrings and necklaces — in her spare time for the past seven years.

“I love my work, but you have to have some art to balance out all that analytical science,” she said. “I like patterns and repeating themes, and my jewelry-making is a great way to express these.”