Video gamers’ brains wired same as nongamers

By ALISON DRAKE

Video games, which reveal disconnects between a set of young television addicts and their elders, could bridge a generation gap.

While “Mortal Kombat,” “Grand Theft Auto” or “Halo” may be foreign to aging generations, a study out of Washington University and the University of Toronto suggests that video games like these promote a kind of mental “expertise” that could prove to be useful in the nonvirtual world — potentially in reha-

Castel’s research compared 20 college-aged, expert video game players — those who log at least 10, and six to eight hours per week — with nonplayers to determine how video game specializa-

The new nomenclature follows the model of Arts & Sciences, which includes the undergraduate College of Arts & Sciences and the Graduate School of Arts & Sciences.

Jeff Pike, who has served as dean of Art since 1999, will con-

neural circuits. Castel found, in short, that gamers showed a 20 percent reduction in response times as opposed to nonplayers, averaging reactions 100 milliseconds speedier than nonplayers.

Normal visual search habits reflect our intelligence — rather than wait, we anticipate. If we have recently

Neurotransmitters signal aggressive
cancer, offer potential for early diagnosis

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Van Essen elected president of neuroscience society

BY MICHAEL C. PERRY

David Van Essen, Ph.D., the Paul and Storm Lewis Professor of Neurobiology and head of the Department of Anatomy and Neurobiology, has been elected president of the Society for Neuroscience, the world’s largest organization for scientists who study the brain.

Van Essen, a leading investigator of the structure and function of the cerebral cortex in primates, will officially become president-elect at the society’s annual meeting in November in Washington, D.C. He will assume the presidency at the society’s annual meeting in November.

Van Essen is the fourth University of Washington alumnus and third head of the Department of Anatomy and Neurobiology to be elected president of the society. He previously served as secretary of the society for three years.

Founded in 1970, the society has 32,000 members and is the leading community of scientists in the field of neuroscience.

Van Essen’s research interests include the development and refinement of functional brain imaging techniques, the study of the underlying mechanisms of brain function, and the development of new tools for understanding the brain.

Van Essen is also known for his advocacy of open science, having co-founded the Open Science Framework and the Open Science Index, which aim to increase transparency, reproducibility, and collaboration in scientific research.

Van Essen received his Ph.D. in neuroscience from the University of California, San Francisco, and completed his postdoctoral training at the University of Michigan, Ann Arbor.

Van Essen is a member of the National Academy of Sciences and the American Association for the Advancement of Science, and has received numerous awards for his contributions to neuroscience.

Van Essen’s research has been funded by the National Institutes of Health, the National Science Foundation, and numerous other organizations.

Van Essen is also a strong advocate for the open data movement, and has been involved in efforts to make scientific data more accessible and reusable.

Van Essen’s work has been recognized with numerous awards and honors, including the prestigious Albert Lasker Award for Basic Medical Research.

Van Essen’s research has been crucial in understanding the brain's role in learning, memory, and other cognitive functions, and has implications for the treatment of neurological disorders such as Alzheimer’s disease, Parkinson’s disease, and schizophrenia.
**First Loeb teaching fellowships announced**

**By KIM LEYDIG**

The University and the St. Louis Cardinals have appointed Rick Wright as team physician and orthopedic hand and wrist service director.

Wright, who has been an assistant team physician with the Cardinals since 1998 and covers the team physician. Wright's responsibilities also include serving as the Cardinals' team physician.

Wright has been a member of the American Academy of Orthopaedic Surgeons and the American Orthopaedic Hand Society. He is also a member of the Orthopaedic Research Society and the American Academy of Orthopaedic Surgeons.

Wright said that in addition to being a team physician, he will also be working closely with the Cardinals to develop a comprehensive care program for their players.

**Gulf War veterans have more chronic fatigue, fibromyalgia**

**By MICHAEL C. PRIEST**

More than a decade after the first Gulf War in 1991, a detailed comparison of the health of veterans who were deployed to the Persian Gulf region and veterans who were not deployed has found that the health of the two groups is very different.

However, the study also found that Gulf War veterans are more likely to have health problems than in the non-deployed veterans.

The study, funded by the Department of Veterans Affairs, looked at a group of Gulf War veterans who were deployed to the region in 1991 and a group of non-deployed veterans who were not deployed.

The study found that Gulf War veterans were more likely to have health problems than in the non-deployed veterans.

**Other conditions with increased risk of chronic fatigue and fibromyalgia in non-veterans**

These include: chronic fatigue syndrome, fibromyalgia, and post-traumatic stress disorder.

Research has shown that these conditions are more common in non-veterans than in Gulf War veterans.

**Other conditions with increased risk of chronic fatigue and fibromyalgia in veterans**

These include: chronic fatigue syndrome, fibromyalgia, and post-traumatic stress disorder.

Research has shown that these conditions are more common in veterans than in non-veterans.
Service First: More than 1,000 students to volunteer their time

**By Neil Schoenherz**

Fresh off a summer of pool parties and video games, students at Washington University in St. Louis will be stepping onto campus with a new commitment. More than 1,000 students, mainly newly arrived freshmen, will volunteer their time Sept. 3 to paint, landscape, clean and beautify 11 St. Louis schools we are able to help. Upon returning to the University after a day of work, students will participate in a Community Service Fair and tour more than 30 student-run organizations that focus on community service. It allows students to learn more about opportunities in which they get involved during their time at college.

Service First was co-sponsored this year by Sherwin-Williams, The Western's Society of Washington University, Student Union, Consort of the South 49 and St. Louis Public Schools, among others. Service First began in 1999 with about 600 student volunteers helping to clean and beautify schools every year since.

The project's goals for this year are Adams, Bryan Hill, Clark and Euclid. Cote Brilliante, Dewey, Farragut, Hickey, Humboldt, Madison/Waring, Roosevelt and Washington/Flusid. For more information, call Kurtzman at 935-5996.

University Events

**Plate Tectonics Cardiology Update**

"University Events" offers a portion of the activities taking place Aug. 12-Sept. 9 at Washington University. The Web site for expanded calendars for the flagship Campus (calendar.wustl.edu) and the School of Medicine is (medicine.wustl.edu/calendar.html). (Continues on previous page)

**Lectures**

**By NEIL SCHOENHERR**

Friday, Aug. 12


Tuesday, Aug. 16


Friday, Aug. 26


**Campus Watch**

The following incidents were reported to University Police July 25-Aug. 2.

**Aug. 4**

5:22 p.m. — A person reported that someone entered his Prado Hall office in the previous three weeks and stole a computer. There were no signs of forced entry and an investigation is continuing.

Additionally, University Police expanded to five instances, all involving parking violations, three trespasses, two auto accidents, two break-ins and one report each of a motor vehicle theft, receiving stolen property, suspicious person, property damage.

News Analysis

Richards: Ideological disagreements aside, long confirmation fight would be a mistake

By JESSICA MARTIN

President Bush’s nomination of John Roberts to fill the Supreme Court vacancy created by Sandra Day O’Connor’s retirement has the potential to spark a messy confirmation process, said Neil Richards, J.D., former law clerk for Chief Justice William Rehnquist and associate professor in the School of Law.

"I think that both sides have been preparing for a war that seems inevitable regardless of who was nominated," Richards said. "The president was always likely to select a jurist whose ideological position on the ubiquitous 'shortlists,' and I think for many of those names, a stiff fight would have been warranted," he said. "But I think the Roberts nomination changes the equation somewhat.

"Certainly, a vigorous discussion of his qualifications and judicial philosophy is not an interesting discussion for either side, and I think that both sides should really like and support his nomination," Richards said.

"On a personal level, I know John fairly well and really like him. I’d imagine that he and I would probably agree on many basic ideological and interpretive questions of law, but he’s very smart and a very decent human being who has the right sort of person-ality to do the job in a collegial and effective manner.

"So I strongly support his nomination, especially when I consider some of the other names that have been proposed. When I consider some of the other names that have been proposed," Richards said.
Volleyball wins team academic award

The volleyball team earned the NCAA Division III Tournament field earned the award, including Emory University, New York University, WUSTL, Williams College, University of Wisconsin-La Crosse and Gettysburg College. The Brewers finished the 2004 season with a 32-7 record and advanced to the national championship for the 11th time in school history and third straight year. This season, the Brewers finished ranked No. 2 in the country.

WUSTL finishes 6th in NCAA power rankings

The National Collegiate Scouting Association has released their third annual Collegiate Power Rankings, and WUSTL finished fourth on the list of the top academic and athletic colleges in the country at the NCAA Division III level. Williams College was the top school, followed in second place with Amherst College, Middlebury College, WUSTL and Williams was tied for fifth with Danbury rounding out the D-III top five.

WUSTL placed sixth in the overall College Power Rankings, which compare all schools at the Division I, II and III levels. Williams also finished first in the overall standings.

"It is refreshing to know our student-athletes prepared and ready to take on the classroom and on the field of play," said John Scarl, WUSTL's director of athletic communications. "We are proud of their achievements.

In the 2004-05 athletic year, the University garnered a school-record seven NCAA, UAA championships, while 108 WUSTL student-athletes earned conference honors, including second in volleyball, third in women's basketball and fifth in women's soccer.

The NCAA power rankings are calculated for each school at the NCAA Division I, II and III levels by drawing on WUSTL's New Era World Report ranking, the U.S. Sports Academy Directors' Cup ranking and the student-athlete graduation rate of each school. WUSTL ranked fifth in the U.S. News & World Report ranking, third in the final Division III Directors' Cup ranking and seventh among Division III universities for percentages of student-athlete graduation rates.

Two All-Americans lead volleyball squad

In addition to finishing fourth in national championship, the volleyball squad had a solid year of development as a key component to a successful 2004 season. Granted, improving to 16-10 overall for the Bears' last season to Junior Elise Bennington.

WUSTL Sports Information Office

"We think it's very important for our officers to give them the skills necessary to handle these situations and the information they need to make sure the person gets the best help possible," said Stremlau. "We're very excited to begin the training program in November and have all 26 University officers certified.

The training is provided in cooperation with the National Alliance of the Mentally Ill, the Mental Health Association of Greater St. Louis, Behavioral Health Response, BJC Behavioral Health and others.

Police officers complete crisis intervention training

The training is intended to help law enforcement agencies increase the number of WUSTL police officers who have completed the training in the past.

Police Chief Don Strom said he feels the training is a necessary experience for his officers.

"When a person is going through a mental health crisis, it takes special skills to interact with them and assure them you want to work in their best interest," said Strom, who has completed the training himself.

Stremlau said the department's commitment to expand the tool box available to its officers gives them the skills necessary to handle these situations and the information they need to make sure the person gets the best help possible.

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The Sam Fox School of Design & Visual Arts is constructing two new buildings, the Mildred Lane Kemper Art Museum and Earl E. and Myrtle E. Walker Hall, both designed by Pritzker Prize-winning architect Fumihiko Maki. When completed in fall 2006, the new buildings will be integrated with Bixby, Steinberg and Givens halls to form a comprehensive, five-building arts campus.

School

Will incorporate nearly 750 students — from Page 1

The Sam Fox School will allow Washington University to strengthen ties between its outstanding design and visual arts areas. It will create a larger-scale academic enterprise with greater resources and flexibility, one that will enhance the quality, viability and impact of our programs both on campus and throughout the academic and professional worlds.

MARK S. WRIGHTON

Previously, Art and Architecture were the smallest of the University's units, with fewer than 400 students apiece. The combined Sam Fox School will total almost 750 students, comprising approximately 350 undergraduate and 25 graduate students in Art as well as 200 undergraduate and 175 graduate and professional students in Architecture.

Formation of the Sam Fox School is designed to create a $100 million campaign to improve the University's facilities. The new campus buildings include two new buildings — one under construction and another scheduled to open in fall 2006 — designed by Pritzker Prize-winning architect Fumihiko Maki, as well as extensive renovations to the adjacent, Bixby, Steinberg and Givens halls.

The Sam Fox School will strengthen ties between our outstanding design and visual arts areas, Wrighton said. "It will create a larger-scale academic enterprise with greater resources and flexibility, one that will enhance the quality, viability and impact of our programs both on campus and throughout the academic and professional worlds.

MARK S. WRIGHTON

"We are able to examine not just genes, not just proteins, but the chemistry that underlies diseased tissues.

Computational, experimental and instrumental tools are now available to tackle metabolomics and then translate lessons learned at the laboratory bench to the patient's bedside, as called for by the University's BioMed 21 initiative.

JEFFREY L. GORDON

metabolism was going on in these abnormal cells compared to their normal counterparts, and used new, powerful metabolite detectors to verify that these compounds were actually being made.

We then took information gained from the mouse and asked whether the same human genes are expressed in poor prognosis human tumors. We found that the human genes that rise to the key enzymes required to produce these metabolites were invariably switched on the poor prognosis but not the good prognosis tumor groups."

Gordon added, "Most people understand the revolution in medicine to be a DNA-centered search for mutations in genes that cause diseases. This study illustrates another layer of the revolution — understanding how certain diseases, in this case cancer, are linked to abnormalities in cellular metabolism — an area called 'metabolomics.'"

"We've described a unique tumor-associated pattern that we hope will provide new ways to diagnose and treat poor prognosis cancers earlier and to implement more appropriate therapies for each disease.

The researchers believe that metabolic neoadjuvant tumor cells use GABA signaling processes to communicate with each other and with their environment. Although carefully planned clinical trials, we may be able to evaluate the therapeutic potential of already available drugs that affect GABA signaling to treat these aggressive types of cancer," Ippolito said.

"The resulting information will significantly advance diagnosis and treatment options."

"We used a way to cross from basic sequence information in genomes to information about the substances likely to arise in tumors," Ippolito said.

The researchers first analyzed the activity of genes in the mouse tumors using GeneChip microprocessors that analyzed purified arrays of gene sequences in the chemical structures likely to arise in tumors, to obtain information about how active each gene in tumors is. They compared the mouse data with parallel data from 182 human tumors. Then, the gene activity data was fed into sophisticated software that supplied the researchers with predictions about which metabolic processes were rewiring the tumors and which were slowing the tumors.

"This led us to see that in a variety of cancer types, there are some common themes in the signaling pathways and metabolic processes. This suggests that we may be able to develop drugs that target the metabolism and hence the cancer."

"Our results provide a new understanding of cancer cell metabolism that may guide the development of new therapeutic strategies. In the future, we hope to continue to extend this approach to additional tumors, and ultimately to patients," Ippolito said.
of note

John R. Bowen, Ph.D., the Dunbar-Val Cleve Professor of Cultural Anthropology, was recently presented with a Carnegie Corporation of New York Carnegie Scholars Program award to work on his book Stopping French Islam. Bowen's book will examine how French Muslims strive to build a base for their religious lives in a society that views these perspectives as incompatible with national values. Scholars receive up to $100,000 over a two-year period, to pursue research.

William Lowery, Ph.D., professor of political science in Arts & Sciences, has been named the Fulbright Van Cleve Professor of Sociology, which was held at the University of Chicago. He has published four books and numerous articles on natural resources and environmental politics.

Enola Proctor, Ph.D., the first Bruno Professor of Social Work Research and associate dean for research in social work, has received a five-year, $3,275,266 grant from the National Institute of Mental Health for the project titled "George Warren Brown Mental Health Service Research Training." Richard Rogenski, Ph.D., assistant professor of radiation oncology, has received a four-year, $720,000 grant from the American Society for research titled "Treatment of Hormone-Refractory Prostate Cancer with Radiola- belled Peptides." At the annual meeting for the Center for the Study of American Society of Plant Biologists, which was held at the Du- navel Institute for Science and Technology in Miami, Kian Ankus won the award for "Best Undergraduate Pre- sentation" for her work titled "Arabidopsis Chlorophyllase Revisits a Connexion to the Carbohydrate Trans- ferase Module in Arabidopsis." To engage major in Arts & Sciences, Victoria May, director of science communication, received $4,571,220 from the Monsanto Fund for "Science on the Move," a mobile science van program.... Rebecca Rogers, Ph.D., assistant professor of education in Arts & Sciences, was recently awarded the Early Career Award by the National Reading Conference. Given annually to the outstanding new scholar who has made significant contributions to literacy research and education early in their career, Theodore J. Clere, Ph.D., vice chancellor for research and associate vice chancellor/associate dean at the School of Medicine, is one of four new members to be elected to the Oak Ridge Associated University (ORAU) Board of Regi- sctors. ORAU is a university league leveraging the scientific strengths of its associate universities, research institutions to advance science and technology by partnering with national laboratories, government agencies, and private industry.... Barbara J. Nortons, Ph.D., associate director for professional standards for the Program in Physi- cal Therapy, and David Sincure, Ph.D., associate professor in the Department of Medicine and in the Program in Physical Therapy, have been named Catherine Worthington Fellows of the Ameri- can Physical Therapy Association. Norton was recognized primarily for her research in two areas, an ob- jective measurement of spasticity and of impairments related to stroke back pain. Sincure was hon- ored for his research on the man- agement of diabetic foot ulcers and the systemic effects of exercise in older adults.... Rajendra S. Apte, M.D., Ph.D., assistant professor of oph- thalmology and visual science, has received a four-year, $220,000 Career Development Award from Research to Prevent Blindness for the "Mechanistic Analysis of Wheat Senescence," one of four primary areas of research that is age-related macular degeneration, one of the leading causes of blindness in North America .... Richard Fried, Ph.D., associate profes- sor of mechanical and aerospace engineering and 2004 winner of two-year, $1,381,998 grant from the U.S. Department of Energy for his work on "Continuum Mechanical and Computational Aspects of Material Behavior." John T. Giesner, Ph.D., associate profes- sor of chemical engineering, has received a three-year, $302,489 grant from the National Science Foundation for research titled "Collaborative Research: Flow Transitions and Turbulence in the Taylor-Couette Flow of Dielectric Polymer Solutions." Franklin Yin, Ph.D., chair and the Stephen F. and Camilla T. Boswell Professor of Biomedical Engineering, has received a two-year, $143,900 grant from the National Institute of Mental Health for research titled "Responses of Endothelial Cells to Multiple Mechanical Stimuli." Sophie S. Hays, Ph.D., assistant profes- sor of chemistry in Arts & Sciences, has received a two-year, $119,074 grant from the American Chemical Society for her work titled "Inorganic Multimodal Photoactivatable Materials: Quantum Dots as Acidic Phosphorescent NMR Probes in Solid-State NMR."With its St. Louis roots, Charles Hohenberg, Ph.D., professor of physics in Arts & Sciences, has been named the Robert Shanti K. Zayas became associate dean of faculty 1 July 1; Auslander will be- come director of the Ph.D. program Sept. 1; Zayas' primary academic inter- ests are in clinical practice with adolescents and families and in training clinical practitioners. His special interests span 20 years of work on children, adolescents, adults and families in the area of mental health and psycho- pathic pediatric rehabilitation and community-based pri- mary care medicine. Zayas also is a professor of psy- chology in School of Medicine. His research has examined child and adolescent mental health, maternal mental health in pregnancy, parent-child relations, cross-cultural factors in child- rearing behavior, family functioning, psychiatric diagnosis, alcohol use among Latino men and psy- chosocial interventions in com- munity-based primary care health centers. Zayas received the 2005 Out- standing Faculty Mentor Award at the School of Social Work. "Professor Zayas is a model of faculty leadership at the school," Lawlor said. "He is a distin- guished scholar, an outstanding teacher and a tireless contributor to the community inside and outside the School of Social Work. We are so fortunate to have him in this formal faculty leadership role." Zayas replaces Nancy Murray-Molden, Ph.D., the Ralph and Murple Pumphrey Professor of Social Work. Zayas' work focuses on health care and health behaviors, evaluation of interventions, disease prevention and research, AIDS prevention among teen- agers, minority health and health promotion, family functioning and chronic illness. The National Institutes of Health has funded several of her research projects on lifestyle change and health promotion for African-American women, cop- ing for juveniles with diabetes and their families, AIDS preven- tion among teens and smoking cessation among African- Americans. She is a recipient of the Social Service Project Award sponsored by Lily Lilly & Co. and the Ameri- can Association of Diabetes Edu- cators. Auslander has served on the editorial boards of the Journal of Early Adolescence, Health and Social Work and The Diabetes Educator. "Professor Auslander brings extraordinary vision and value to the role of this program," Law- lor said. "We owe a great debt to Nancy and to the University for her term as chair of the doctoral program. Nancy brought high standards, thoughtfulness and compassion for students to this program — exactly what we want in our academic leadership of doctoral education....
Lynn A. Cornelius, M.D., loves being on the ‘front lines of diagnosis’

BY KIM LEITIOG

Passionate about patients

Lynn A. Cornelius loves being on the ‘front lines of diagnosis’

Lynn A. Cornelius, M.D., treats Peter Tocco for skin-related problems. Tocco has seen Cornelius for various skin problems over the past decade, and has referred at least 150 patients to her. "She has an amazing personality and is very approachable," he says. "She always makes you feel great. She's a really sweet person and an incredible doctor."

"We're often the first ones to read about the skin-related cancer accounts for significant morbidity, and even mortality, in these transplant patients. "Transplant patients may feel so overwhelmed by managing other aspects of their disease that the scheme of things, continued unprotected sun exposure doesn't seem to pose an important risk," she says. "This is where we need to do a better job in educating patients and working with the transplant team to emphasize prevention.""

"She's an extraordinary clinician but she's also a wonderful role model as a physician-scientist. "She has the chance to develop and make a major contribution to the academic dermatology programs have expanded substantially and the division is now on very firm footing," Polonsky says. "She has also made some outstanding research contributions and these faculty contribute to the academic strength of the division.""

Cornelius explains that the greatest advantage of being in a position of leadership is that she has the chance to develop and be a mentor to aspiring female physicians. "As a leader you can facilitate the recruitment and these faculty made some outstanding research contributions to the faculty and working with the transplant team to emphasize prevention."

"Some studies have even cited that skin cancer accounts for significant morbidity, and even mortality, in these transplant patients. "Transplant patients may feel so overwhelmed by managing other aspects of their disease that the scheme of things, continued unprotected sun exposure doesn't seem to pose an important risk," she says. "This is where we need to do a better job in educating patients and working with the transplant team to emphasize prevention.""

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