Assembly Series presents 50th-anniversary season

By Barbara Rea

The 50th-anniversary season of the University’s Assembly Series will begin Jan. 29 with African-American feminist scholar Patricia Hill Collins, the keynote speaker for the annual Chancellor’s Fellowship Conference lecture.

Titled “Feminism, the Black Scholar and the African-American Community,” Collins’ lecture will be held at 11 a.m. in Graham Chapel. She will also participate in a panel discussion from 2:45 p.m. in the Women’s Building.

Collins is the Charles Phelps Taft Professor of Sociology and that department’s chair at the University of Cincinnati. An expert in issues of race, gender and social class primarily relating to African-American women, her fourth book on the subject, Black Sexual Politics, will be published this year.

Her first book, Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment (1990), which received both the Jessie Bernard Award from the American Sociological Association and the C. Wright Mills Award from the Society for the Study of Social Problems, is considered groundbreaking work. This was followed by Race, Class, and Gender: An Anthology (1993), co-edited with Margaret Andersen, and Fighting Words: Black Women and the Search for Justice (1998).

In addition to books, Collins has been widely published in scholarly journals, among them Ethnic and Racial Studies, Signs, Sociological Theory, Social Problems and Black Scholar, and she serves on the editorial boards of Ethnically, Feminist Theory and Ethnic and Racial Studies.

Before teaching at the University of Cincinnati, Collins held faculty positions with a number of universities, including Northern Kentucky and Tufts universities and Boston College.

Collins earned a bachelor’s degree and a doctorate from Brandeis University and a master’s degree from Harvard University.

The annual Chancellor’s Fellowship Conference is part of the Chancellor’s Fellowship Program for African-Americans, established to encourage African-American high academic promise to prepare for careers in higher education.

See Assembly. Page 6

New Center for Security Technologies

Robert E. Morley, D.Sc., professor of electrical engineering, explains Megaprocessor, the University’s object-recognition system used in the authentication process for bank cards, checks and currency, at the Research Review of the new Center for Security Technologies Jan. 12. Held at both Linac A. Whitaker Hall for Biomedical Engineering and Jolley Hall, the review drew scores of industry and civic representatives to learn about the center’s many threats in technology dealing with security threats. The center comprises 40 faculty members across five University schools. Among the areas of immediate applicability of the center’s technology are applications in object verification and recognition, data mining of large text and image databases, fraud of credit cards and other media that use magnetically stored information, security of buildings and facilities and societal infrastructure, information and information systems security and communication security.

Interactive calendar for 150th events is live on Web

By Andy Clendeninn

With the University’s 150th anniversary year coming in 2003-04, celebrations, exhibitions and events will abound.

Instead of trying to keep everything straight in your day planner or PDA, the University has devised a way for you to both keep things straight and make others aware of your events.

A user-friendly, interactive calendar has been set up at the SequenctialWeb site, 150.wustl.edu. By going to the home page and clicking on “Calendar of Events,” you are directed to the official calendar of the celebratory year.

All events broken are broken down into several categories — all audiences, alumni events, exhibits, faculty/staff events, invitation only, parents’ events, St. Louis community events and student events. You can enter information for your department’s events that commemorate 150 years by clicking the “Add Event” button on each category’s calendar.

After a brief approval period, your event will appear in the calendar on the day you selected.

Even if you currently don’t have all the information regarding an event, it is asked that you put in whatever you have as early as possible to alert anyone who might be interested that something is on the horizon.

You can always add to or change your entry at a later time.

This is the official sequenctial- temporal calendar, and as such, entries will be taken from this calendar for a printed copy. It is therefore imperative that anyone who wants an event printed in the hard copy to do it online as soon as possible.

Events will not be included in the printed version if they are not entered online. Deadline for inclusion in the printed version is the end of February.
Tuition rates for 2003-04 announced

For the 2003-04 academic year, undergraduate tuition at the University will total $28,300, a $1,400 (5.2 percent) increase above the 2002-03 academic year. In addition, the required student activities fee will be $230, and the student health fee will be $470.

The announcement was made by Barbara A. Feiner, vice chancellor for finance.

Room-and-board charges for 2003-04 will increase by $606 (6.6 percent) over the current year's charges, to $9,856. Tuition and fee charges for graduate students in the School of Law will be $28,300, an increase of $960 over the current year's charge of $27,340. Tuition for graduate students in the Schools of Business, Arts & Sciences, and Engineering will be $21,000, a $1,000 increase over the current year's charge of $20,000. Tuition for the juris doctor program will be $23,448, a $960 increase over the current charge of $22,488.

George Warren Brown School of Social Work graduate students will be charged $27,600 for the 2003-04 academic year, a $606 increase over the current year's charge of $26,994. The 2003-04 tuition for the juris doctor program for first-year students will be $27,600, and additional students will be charged $29,740. The dean and fee schedules for all juris doctor students is 29,740.

Olin School of Business graduate students: The 2003-04 tuition for the master of business administration program will be $31,450, a $1,750 increase over the current year's charge of $29,700.

Graduate Studies: Tuition for 2003-04 for the M.D. degree will be set in late spring.

Evening and summer school tuition rates

Undergraduates: For the entering evening student enrolling in University classes for the first time, tuition rates in the School of Architecture and Urban Planning for the 2003-04 academic year, will be $140 per credit hour, compared with the 2002-03 cost of $125 per credit hour.

Graduate Studies: Depending upon the graduate program in University College in Arts, Science, and Business, tuition ranges from $330 to $630 per credit hour for 2003-04, compared with $302 for the current year's tuition.

Summer School in Arts & Sciences: Summer school in arts classes in the School of Architecture and Urban Planning will be $140 per credit hour during the summer. The summer school rate of $480 per credit hour.

Work, Families and Public Policy seminars

By JESSICA R. ROBERTS

F ebruary is a month of interest with an eye on labor, households, health and family. To that end, the Department of Economics and the Center for Interdisciplinary Research in Social Policy will celebrate their 25th anniversary with a seminar series to be held through March.

Now in its seventh year, the "Work, Families and Public Policy" series consists of five one-hour presentations on current research interests of faculty from across the University and from other local and national universities.

The presentations are held from noon to 1 p.m. in Ellot Hall, Room 300, and are followed by a half-hour discussion period.

Robert A. Pollak, Ph.D, the Herman Distinguished Professor of Economics in Arts & Sciences and the Ohio School of Business, has been the series' lead organizer for the last six years. Pollak will present the series' final talk March 11.

The seminars will feature top scholars in the field of economics, government, and policy, discussing the latest in their soft drinks will be provided. For a full list of speakers and presentations, go online to olin.wustl.edu and click on "Work, Families and Public Policy Workshop link" on the right-hand side.

For more information, contact Pollak (935-4918; pollak@wustl.edu) or Sherraden (935-6691; sherrad@wustl.edu)

Washington University in St. Louis

Children's center, University set sights on agreement

Taking one small step to improve child day-care options, the University and the Children's Center (UCCC) have entered into an innovative arrangement to provide day-care for children of day-care and students.

UCCC's Early Care and Education Center has outgrown its existing facility at 7745 Olive Blvd. in University City, resulting in the utilization of a capital fund drive for development of a new facility.

The University made a significant contribution to the cost of redeveloping the University City Children's Center, and will lease to UCCC a portion of a newly acquired building at 6500 Vernon Ave. in University City. This building is located north of and within walking distance of the Loop and adjacent to Metrolink.

Upon completion of building renovations and turnover, UCCC will relocate its Early Care and Education Center to this new location.

The project is contingent upon UCCC's fund-raising success.

The upcoming proposal of the site includes interior renovations to the existing facility, which includes construction on infant and toddler classrooms, spacious playroom classrooms, discovery centers for children, a physical education area and a library resource room.

The center will cater to the exterior features of the facility include a covered walkway, well-landscaped gardens with paths for children, and various changes to the surface parking and grounds.

Upon relocation of the Early Care and Education Center, target is for the latter part of 2003, University faculty and staff members will receive priority use of a portion of the child-care "slots" available at this new location.
Researchers identify key pathway in pupil's response to light

**By Jim Dryden**

School of Medicine investigators have demonstrated that a particular protein is important for the eye's pupil to respond to light. Transplantation at the School of Medicine, led by Kenneth S. Van Gelder, M.D., Ph.D., assistant professor of ophthalmology and visual sciences and of molecular biology and pharmacology, Research at the center will address two important challenges as the synchronization of the eye's pupil to respond to light.

The discovery may help scientists understand the role of the eye in non-visual functions such as the synchronization of the body's internal, circadian clock. According to National Institutes of Health research, the retina is a thin layer of tissue that lacks the main types of photoreceptor cells in the retina — rods and cones — as well as proteins in the retina called cryptochromes, few and cones. But mice that also lacked cryptochromes had more than 100 times as much light as normal mice to make the pupil constrict.

Peter Van Etten, president and chief executive officer of the Juvenile Diabetes Research Foundation International (JDRF), praised Janet and Bryan Bergman and their granddaughter Danielle Delnight with a plaque announcing the launch of the JDRF-Danielle Delnight Center for Islet Transplantation at a recent luncheon.

Scientists using the Edmonton Protocol have successfully transplanted islets into patients with type 1 diabetes, and more than 100 transplant recipients are currently insulin-independent worldwide.

**Related**

For more in circulation rhythms, see Washington Post, Page 4

**Stoke rehabilitation study seeks volunteers**

**By Michelle Leavitt**

School of Medicine researchers are looking for volunteers to test whether aconsumer-induced movement therapy (CIMT) works as well as traditional rehabilitation to treat arm weakness after stroke.

Some stroke survivors focus on developing and strengthening the unaffected limb to compensate for the affected limb. In contrast, CIMT involves resistors in the stronger hand in a padded glove to encourage use of the weaker hand in everyday activities. Researchers will determine if use of the affected limb will help the brain relearn movements.

If successful, this approach might change how people with stroke are treated, said principal investigator Alexander Dromerick, M.D., associate professor of neurology.

**Pristed speakers**

(From left) William Bergman, M.D., associate dean and head of the Office of Diversity Programs; introduces journalist Jan Williams; William Bergman, M.D., associate dean for medical affairs and dean of the School of Medicine, and Chancellor Mark S. Wrighton at the Martin Luther King Celebration Luncheon Jan. 20 at the School. Williams recently wrote a book, Eyes on the Prize: America's Civil Rights Years, 1954-1965 — spoke on pressing racial issues in America. University Libraries houses the film archives of alumnus Henry Hampton, who created a 14-part documentary titled Eyes on the Prize, in collaboration with Williams' book. Hampton, aSt. Louis native, was an internationally respected filmmaker.
Umbilical Brothers hit Edison with a THWAK

By Lisa Ottam

Like a funhouse mirror sprung from pop culture aplomb and near telepathic with the voice of the New York Daily News, "Their "siblings," each attempting to outdo the other like some comic book duel between Daisy Duck and Jackie Chan. Dundas, the vocal mimic, provides the soundtrack to Collins' lunatic stunts, recreating everything from cartooning cars and Star Light stand-ins using styrofoam and an exploding invisible dog (an artificial exploding invisible dog, they assure us). In "The Two" episode, the pair displays pop culture and near telepathic communication while having fisticuffs delivered just to the next. They battle fluffy hand puppets while recreating their Australian version of Star Search and produced a TV show, Two Coins and a Hatted Friend. Their 1994 follow-up, Don't Explain, toured Australia, Spain, the United Kingdom, New Zealand, and Canada, while 1995's Heaven Sent was a Critics' Choice Award and a Cannes Film Festival screening. In 1999 they were selected as two of the "100 Most Creative People in Entertainment" by Time magazine. For more information about The Umbilical Brothers, go online to umbilicalbrothers.com.

Tickets for the University performance are $27 — $22 for WUSTL faculty and staff; $18 for all other St. Louis metro area and all MetroTix outlets. Performances are made possible through the support of the Missouri Arts Council, a state agency of the Region Arts Council, St. Louis. For more information, call 935-6543.

Australians David Collins (left) and Shane Dundas, aka The Umbilical Brothers, will bring THWAK, their first American show, to Edison Theatre Jan. 24-26.

Music

Saturday, Jan. 25

Sunday, Jan. 26
8 a.m. Calligraphy Seminar. "The Art of Calligraphy". Dmitry MacLean, prof. of anthropology and philosophy. 4950 Children's Place. 362-1016.

Music

Friday, Jan. 3

7:45 p.m. "The Umbilical Brothers," "Sibling Rivalry," each attempting to outdo the other like some comic book duel between Daisy Duck and Jackie Chan. Collins' lunatic stunts, recreating everything from cartooning cars and Star Light stand-ins using styrofoam and an exploding invisible dog (an artificial exploding invisible dog, they assure us). In "The Two" episode, the pair displays pop culture and near telepathic communication while having fisticuffs delivered just to the next. They battle fluffy hand puppets while recreating their Australian version of Star Search and produced a TV show, Two Coins and a Hatted Friend. Their 1994 follow-up, Don't Explain, toured Australia, Spain, the United Kingdom, New Zealand, and Canada, while 1995's Heaven Sent was a Critics' Choice Award and a Cannes Film Festival screening. In 1999 they were selected as two of the "100 Most Creative People in Entertainment" by Time magazine. For more information about The Umbilical Brothers, go online to umbilicalbrothers.com.

Tickets for the University performance are $27 — $22 for WUSTL faculty and staff; $18 for all other St. Louis metro area and all MetroTix outlets. Performances are made possible through the support of the Missouri Arts Council, a state agency of the Regional Arts Council, St. Louis. For more information, call 935-6543.

Australians David Collins (left) and Shane Dundas, aka The Umbilical Brothers, will bring THWAK, their first American show, to Edison Theatre Jan. 24-26.

Music

Saturday, Jan. 25

Sunday, Jan. 26
8 a.m. Calligraphy Seminar. "The Art of Calligraphy". Dmitry MacLean, prof. of anthropology and philosophy. 4950 Children's Place. 362-1016.

Music

Friday, Jan. 3

7:45 p.m. "The Umbilical Brothers," "Sibling Rivalry," each attempting to outdo the other like some comic book duel between Daisy Duck and Jackie Chan. Collins' lunatic stunts, recreating everything from cartooning cars and Star Light stand-ins using styrofoam and an exploding invisible dog (an artificial exploding invisible dog, they assure us). In "The Two" episode, the pair displays pop culture and near telepathic communication while having fisticuffs delivered just to the next. They battle fluffy hand puppets while recreating their Australian version of Star Search and produced a TV show, Two Coins and a Hatted Friend. Their 1994 follow-up, Don't Explain, toured Australia, Spain, the United Kingdom, New Zealand, and Canada, while 1995's Heaven Sent was a Critics' Choice Award and a Cannes Film Festival screening. In 1999 they were selected as two of the "100 Most Creative People in Entertainment" by Time magazine. For more information about The Umbilical Brothers, go online to umbilicalbrothers.com.

Tickets for the University performance are $27 — $22 for WUSTL faculty and staff; $18 for all other St. Louis metro area and all MetroTix outlets. Performances are made possible through the support of the Missouri Arts Council, a state agency of the Regional Arts Council, St. Louis. For more information, call 935-6543.

Australians David Collins (left) and Shane Dundas, aka The Umbilical Brothers, will bring THWAK, their first American show, to Edison Theatre Jan. 24-26.
Students examined a range of pressing issues, from transportation, environmental impact and sustainability to finding ways to combine existing infrastructure with new space for retail and even agricultural uses.

For example, one proposal focuses on the "big box" urban farm, including greenhouses, a farmer's market and community gardens, which would recognize the area's distinctive character and history while positively impacting the local economy. Some papers focus on a new civic center encompassing a democratic forum, a library, a university office, a police station, a park and a community arts center, a small theater, a day-care center and even a movie theater.

L.B. Ayoub offers an ambitious scheme for a light rail system that would incorporate retail shops, a movie theater, condominiums and other amenities.

Minghai Blair and Wen-Chi Wu, meanwhile, both focused on minimizing the negative effects of "urban farming." Citing the damage that new developments frequently cause through poor water management, Blair designed a program to use rainwater runoff to power the microstructure of the farm. Wu, on the other hand, envisions the local creek system as a source of water for urban agriculture and natural water supplies.

The exhibition is open to the public free of charge through April 20.

The screening begins at 7 p.m. Jan. 31 at the Gallery of Art in Steinberg Hall.

The No. 1-ranked men's basketball team moved to 14-0 after winning its first four games to begin the season-18 points as she led The Bearshammered Case Western Reserve University in Cleveland last Wednesday. The Bears won the second half with a 21-4 run by hitting seven of their last nine shots, while 18 points to set the leading mark in both the University Athletic Association and NCAA Division III. The mark also questioned from 1:30-2:30 p.m.

The Art of Steinberg Hall.

The exhibition features conceptual development plans - creative and visionary ideas that some land and something with whom another developer does something next to that, and someone else does something next to that," Friedman said. "Nobody has a larger stake in this than you." Friedman, with current MUD candidate Julie Villa, recently curated Imagining a Place: Eight Proposals for a MetroLink station in Richmond (also Jan. 28, 11 a.m.-4 p.m., Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.

The exhibition features conceptual development plans - creative and visionary ideas that some land and something with whom another developer does something next to that, and someone else does something next to that," Friedman said. "Nobody has a larger stake in this than you." Friedman, with current MUD candidate Julie Villa, recently curated Imagining a Place: Eight Proposals for a MetroLink station in Richmond (also Jan. 28, 11 a.m.-4 p.m., Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.

The exhibition features conceptual development plans - creative and visionary ideas that some land and something with whom another developer does something next to that, and someone else does something next to that," Friedman said. "Nobody has a larger stake in this than you." Friedman, with current MUD candidate Julie Villa, recently curated Imagining a Place: Eight Proposals for a MetroLink station in Richmond (also Jan. 28, 11 a.m.-4 p.m., Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.

The exhibition features conceptual development plans - creative and visionary ideas that some land and something with whom another developer does something next to that, and someone else does something next to that," Friedman said. "Nobody has a larger stake in this than you." Friedman, with current MUD candidate Julie Villa, recently curated Imagining a Place: Eight Proposals for a MetroLink station in Richmond (also Jan. 28, 11 a.m.-4 p.m., Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.

The exhibition features conceptual development plans - creative and visionary ideas that some land and something with whom another developer does something next to that, and someone else does something next to that," Friedman said. "Nobody has a larger stake in this than you." Friedman, with current MUD candidate Julie Villa, recently curated Imagining a Place: Eight Proposals for a MetroLink station in Richmond (also Jan. 28, 11 a.m.-4 p.m., Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.

The exhibition features conceptual development plans - creative and visionary ideas that some land and something with whom another developer does something next to that, and someone else does something next to that," Friedman said. "Nobody has a larger stake in this than you." Friedman, with current MUD candidate Julie Villa, recently curated Imagining a Place: Eight Proposals for a MetroLink station in Richmond (also Jan. 28, 11 a.m.-4 p.m., Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.) Mallinckrodt Student Center, The Student Life Lounge.
**Campus Watch**

The following incidents were reported to University Police Jan. 18-21. Students with information about these incidents should report it to the University Police at 935-6821.

**Jan. 15**

9:48 a.m. — A student stated that a subject described as a Asian male, 20s, 6-feet tall, 200 pounds, with a white hooded sweatshirt took her wallet from a table in the Student Union.

10:35 a.m. — A student reported that someone had stolen his bike. Total loss is estimated at $300.

**Jan. 16**

1:22 p.m. — A person reported that he parked and secured his bicycle near the southeast side of Cupples II Hall on Jan. 15. When they later returned, they uncovered that an unknown person had stolen his bike. Total loss is estimated at $125.

**Jan. 17**

2:42 p.m. — A fire was reported inside the South Campus Fire Station. The building was evacuated, and Clayson, University Police, responded. Total loss is estimated at $141.

**Jan. 21**

7:41 a.m. — An unknown person stole two Dell desktop computer systems and two Dell computer monitors from Olden Library.

8:30 a.m. — A student reported that someone had stolen his bike. Total loss is estimated at $100.

**Jan. 22**

7:10 p.m. — A fire was reported in the southeast side of Cupples II Hall. Total loss is estimated at $150.

**Jan. 23**

3:45 p.m. — A student reported that someone had stolen his bike. Total loss is estimated at $150.

**Additional Incidents**

University Police continues to investigate property damage, there reports of large objects, possibly miles in height, which made the property theft more difficult to detect.

**Jan. 26**

3:05 a.m. — A fire was reported in the southeast side of Cupples II Hall. The building was evacuated, and Clayson, University Police, responded. Total loss is estimated at $141.

**Jan. 27**

8:15 a.m. — A student reported that someone had stolen his bike. Total loss is estimated at $100.

**Jan. 28**

4:19 a.m. — A fire was reported in the southeast side of Cupples II Hall. Total loss is estimated at $141.

**Jan. 29**

3:05 a.m. — A fire was reported in the southeast side of Cupples II Hall. Total loss is estimated at $141.

**Jan. 30**

2:42 p.m. — A fire was reported in the southeast side of Cupples II Hall. Total loss is estimated at $141.

**Jan. 31**

2:42 p.m. — A fire was reported in the southeast side of Cupples II Hall. Total loss is estimated at $141.

**Additional Incidents**

University Police continues to investigate property damage, there reports of large objects, possibly miles in height, which made the property theft more difficult to detect.

**Jan. 31**

3:05 a.m. — A fire was reported in the southeast side of Cupples II Hall. Total loss is estimated at $141.

**Additional Incidents**

University Police continues to investigate property damage, there reports of large objects, possibly miles in height, which made the property theft more difficult to detect.

**Jan. 31**

3:05 a.m. — A fire was reported in the southeast side of Cupples II Hall. Total loss is estimated at $141.
Arts & Sciences, has received a one-year, $61,000 grant from the ... Parallel Molecular Simulations of Nanoporous Materials: Formation and Collapse Dynamics.”

Michelle Potenza, Ph.D., assistant professor of psychology in Social Work, has received a two-year, $100,000 grant from the Gerontology Society of America for research titled “Expanding into Coalition building in the Disability Services Network: Are the Needs of Persons with Aging Disabilities.”

Bomin Khomami, Ph.D., the Francis F. Ahmann Professor of Chemical Engineering in Arts & Sciences, has received a two-year, $80,000 grant from the American Chemical Society for research titled “Complex Flow Simulation of Polymeric Fluids: A Molecularly Based Multi-Scale Approach.”

Jack Zemec, Ph.D., the Sidney W. Souers Professor of Physics and chair of that department in Arts & Sciences, has received a one-year, $166,948 grant from the National Science Foundation for research titled “Acquisition of an Ellipsometer to Enhance the Reach of Non-Toxic, Anti-Fouling Coatings Developed Under NSF Grant N0014-02-1-0326.”

Karen L. Wooley, Ph.D., professor of chemistry in Arts & Sciences, has received a one-year, $37,010 grant from the Geographic Navos Research for research titled “Organic Compounds in Hydrothermal Systems: A Framework for Investigating Heterotrophy at High Temperature.”

Jonathan B. Lossos, Ph.D., professor of biology in Arts & Sciences, has received a two-year, $10,000 grant from the National Science Foundation for research titled “Ecology and Population Structure: Are Species Converging?”

Radhakrishna Seshukumar, Ph.D., assistant professor of chemical engineering in the School of Engineering & Applied Science, has received a three-year, $99,999 grant from the American Chemical Society for research titled “Acoustically Controlled Coupling and Extending AS(3)E(2) Fields in Viscoelastic Media.”

Rebecca A. Trelaim, Ph.D., the Wayne and Ilse Hills Baker Professor of Child Developmental Psychologist, has received a one-year, $97,075 grant from the National Science Foundation for research titled “Statistical Baseline of Reading and Speech.”

Douglas A. Wiens, Ph.D., professor of earth and planetary science in Arts & Sciences, has received a three-year, $96,999 grant from the National Science Foundation for research titled “Acquisition of a New Geological Sample.”

John C. Wall, Ph.D., the Worthington Crow Professor of Physics and chair of that department in Arts & Sciences, has received a one-year, $93,605 grant from the National Science Foundation for research titled “Experimental Study of Thermal Conductivity and Electronic Transport in Wide Gap Semiconductors.”

Michael J. Wysokinski, Ph.D., associate professor of earth and planetary sciences in Arts & Sciences, has received a one-year, $98,285 grant from the Department of the Air Force for research titled “Mapping Small-Scale Structure Above the Core-Mantle Boundary.”

Brian D. Carpenter, Ph.D., assistant professor of psychology in Arts & Sciences, has received a two-year, $92,000 grant from the National Science Foundation for research titled “Family Decision Making”.

T. Joseph Kappock, Ph.D., assistant professor of music in Arts & Sciences, has received a four-year, $300,000 grant from the Herman Franck Foundation for research titled “Biochemical Investigation of an Industrially Useful Stress Response in Brachionus Plicatilis.”

Helena M. Scottland, M.D., assistant professor of neurology and neurosurgery, has received a two-year, $99,999 grant from the National Institutes of Health for research titled “Structure of Proteins in Cell Walls by FIBER NMR.”

Deborah J. Frank, Ph.D., National Institutes of Health research fellow in biology in Arts & Sciences, has received a one-year, $83,550 grant from the National Institutes of Health for research titled “Acetoxin Microtubule Interacting-Myosin VI and B-CLIP-106.”

Karen L. Wooley, Ph.D., professor of chemistry in Arts & Sciences, has received a one-year, $37,010 grant from the Geographic Navos Research for research titled “Organic Compounds in Hydrothermal Systems: A Framework for Investigating Heterotrophy at High Temperature.”

Jan P. Amend, Ph.D., assistant professor of earth and planetary sciences in Arts & Sciences, has received a one-year, $120,369 grant from the Russell Sage Foundation for Visiting Scholar.”

Jaimes L. Gibson, Ph.D., the Walter B. Proctor Professor of Government in political sciences in Arts & Sciences, has received a one-year, $78,907 grant from the National Science Foundation for research titled “Cost Effectiveness” (CICE).

Jonathan B. Lossos, Ph.D., professor of biology in Arts & Sciences, has received a two-year, $10,000 grant from the National Science Foundation for research titled “Ecology and Population Structure: Are Species Converging?”

Radhakrishna Seshukumar, Ph.D., assistant professor of chemical engineering in the School of Engineering & Applied Science, has received a three-year, $99,999 grant from the American Chemical Society for research titled “Acoustically Controlled Coupling and Extending AS(3)E(2) Fields in Viscoelastic Media.”

Rebecca A. Trelaim, Ph.D., the Wayne and Ilse Hills Baker Professor of Child Developmental Psychologist, has received a one-year, $97,075 grant from the National Science Foundation for research titled “Statistical Baseline of Reading and Speech.”

Douglas A. Wiens, Ph.D., professor of earth and planetary science in Arts & Sciences, has received a three-year, $96,999 grant from the National Science Foundation for research titled “Acquisition of a New Geological Sample.”

John C. Wall, Ph.D., the Worthington Crow Professor of Physics and chair of that department in Arts & Sciences, has received a one-year, $93,605 grant from the National Science Foundation for research titled “Experimental Study of Thermal Conductivity and Electronic Transport in Wide Gap Semiconductors.”

Michael J. Wysokinski, Ph.D., associate professor of earth and planetary sciences in Arts & Sciences, has received a one-year, $98,285 grant from the Department of the Air Force for research titled “Mapping Small-Scale Structure Above the Core-Mantle Boundary.”

Brian D. Carpenter, Ph.D., assistant professor of psychology in Arts & Sciences, has received a two-year, $92,000 grant from the National Science Foundation for research titled “Family Decision Making.”

T. Joseph Kappock, Ph.D., assistant professor of music in Arts & Sciences, has received a four-year, $300,000 grant from the Herman Franck Foundation for research titled “Biochemical Investigation of an Industrially Useful Stress Response in Brachionus Plicatilis.”

Helena M. Scottland, M.D., assistant professor of neurology and neurosurgery, has received a two-year, $99,999 grant from the National Institutes of Health for research titled “Structure of Proteins in Cell Walls by FIBER NMR.”

Deborah J. Frank, Ph.D., National Institutes of Health research fellow in biology in Arts & Sciences, has received a one-year, $83,550 grant from the National Institutes of Health for research titled “Acetoxin Microtubule Interacting-Myosin VI and B-CLIP-106.”

Karen L. Wooley, Ph.D., professor of chemistry in Arts & Sciences, has received a one-year, $37,010 grant from the Geographic Navos Research for research titled “Organic Compounds in Hydrothermal Systems: A Framework for Investigating Heterotrophy at High Temperature.”

Jan P. Amend, Ph.D., assistant professor of earth and planetary sciences in Arts & Sciences, has received a one-year, $120,369 grant from the Russell Sage Foundation for Visiting Scholar.”

Jaimes L. Gibson, Ph.D., the Walter B. Proctor Professor of Government in political sciences in Arts & Sciences, has received a one-year, $78,907 grant from the National Science Foundation for research titled “Cost Effectiveness” (CICE).

Jonathan B. Lossos, Ph.D., professor of biology in Arts & Sciences, has received a two-year, $10,000 grant from the National Science Foundation for research titled “Ecology and Population Structure: Are Species Converging?”

Radhakrishna Seshukumar, Ph.D., assistant professor of chemical engineering in the School of Engineering & Applied Science, has received a three-year, $99,999 grant from the American Chemical Society for research titled “Acoustically Controlled Coupling and Extending AS(3)E(2) Fields in Viscoelastic Media.”

Rebecca A. Trelaim, Ph.D., the Wayne and Ilse Hills Baker Professor of Child Developmental Psychologist, has received a one-year, $97,075 grant from the National Science Foundation for research titled “Statistical Baseline of Reading and Speech.”

Douglas A. Wiens, Ph.D., professor of earth and planetary science in Arts & Sciences, has received a three-year, $96,999 grant from the National Science Foundation for research titled “Acquisition of a New Geological Sample.”

John C. Wall, Ph.D., the Worthington Crow Professor of Physics and chair of that department in Arts & Sciences, has received a one-year, $93,605 grant from the National Science Foundation for research titled “Experimental Study of Thermal Conductivity and Electronic Transport in Wide Gap Semiconductors.”

Michael J. Wysokinski, Ph.D., associate professor of earth and planetary sciences in Arts & Sciences, has received a one-year, $98,285 grant from the Department of the Air Force for research titled “Mapping Small-Scale Structure Above the Core-Mantle Boundary.”

Brian D. Carpenter, Ph.D., assistant professor of psychology in Arts & Sciences, has received a two-year, $92,000 grant from the National Science Foundation for research titled “Family Decision Making.”

T. Joseph Kappock, Ph.D., assistant professor of music in Arts & Sciences, has received a four-year, $300,000 grant from the Herman Franck Foundation for research titled “Biochemical Investigation of an Industrially Useful Stress Response in Brachionus Plicatilis.”

Helena M. Scottland, M.D., assistant professor of neurology and neurosurgery, has received a two-year, $99,999 grant from the Agency for Healthcare Research and Quality for research titled “Helping to Educate an Educational Initiative for Sleep Apnea.”

Michael R. DeBaun, M.D., assistant professor of pediatrics, has received a five-year, $987,649 grant from the National Institute of Diabetes and Digestive and Kidney Diseases for research titled “Increasing Blood and Minority-owned firms, so they can have the cash flow and capital to be able to operate more effectively.”

Washington University’s capital construction projects, and the strategies used to bring them to fruition, are under budget and with a high degree of safety.

Washington University’s capital construction projects, and the strategies used to bring them to fruition, are under budget and with a high degree of safety.

Washington University’s capital construction projects, and the strategies used to bring them to fruition, are under budget and with a high degree of safety.

Washington University’s capital construction projects, and the strategies used to bring them to fruition, are under budget and with a high degree of safety.

Washington University’s capital construction projects, and the strategies used to bring them to fruition, are under budget and with a high degree of safety.

Washington University’s capital construction projects, and the strategies used to bring them to fruition, are under budget and with a high degree of safety.

Washington University’s capital construction projects, and the strategies used to bring them to fruition, are under budget and with a high degree of safety.

Washington University’s capital construction projects, and the strategies used to bring them to fruition, are under budget and with a high degree of safety.


Washington People

Erik Herzog and Ph.D.  
Family: Wife, Mary Bergeron, son, Max, 9; daughter, Eliza, 7
Hobbies: Biking, hiking, traveling
Most unusual job: Herzing was in charge of maintaining an underwater rubber curtain that divided a Wisconsin lake in half. The project was testing the effects of increased acid levels and oxygen in one side of the lake, but the local不利于s liked to chase the curtain. Herzig denoted his scuba gear daily and patched the curtain. He's a terrific companion to have in the field.

Erik Herzog is game for just about anything in the name of science. As a graduate student studying the neural basis of vision, he volunteered to be blindfolded in the cramped (6-foot diameter) Alvin capsule. His was the main timekeeper for the brain just above the roof of the mouth, the SCN comprises two groups of 10,000 cells each. As a result of his graduate-school work, Herzog became interested in the cellular basis of circadian rhythms. As a postdoctoral researcher at the University of Virginia, Herzog was focused on the SCN. He developed a way to get individual neurons of the SCN to grow onto an electrode, thereby allowing him to record their electrical activity for days and even weeks. He found that SCN neurons, separated from each other, remained rhythmic — with a circadian rhythm. Furthermore, even after more than a month in a petri dish, these cells' intrinsic rhythms still varied slightly, ranging between 23 and 25 hours.

Although the individual neurons have slightly different rhythms when they are placed close enough to communicate, they somehow synchronize themselves. How do these cells synchronize with each other and to the environment? Are some cells leaders and others followers? To form a democracy or an aristocracy? This is the basis of Herzog's current research.

Herzog and his colleagues have additionally determined that other tissues outside the SCN also can mark the 24-hour cycle, but that they lose their rhythmicity within hours after being isolated from the SCN. It's as if the SCN is the atom's clock and the other tissues are pocket watches that must be periodically reset to the central time. Many advances in biological understanding have come directly from new technologies that allow researchers to see, measure or track things they never could before. One such technology is the ability to bind a bioluminescent protein to a molecule of interest. Herzog and his colleagues have recently adapted this technique to bind a glow-in-the-dark marker called luciferase ("the stuff from these labeled animals, Herzog can determine when the cells are oscillating or off, bringing him a step closer to understanding the complex interactions within the SCN.

Ultimately, Herzog would like to be able to monitor how the individual nerve cells communicate with one another. The fact that the various neurons produce different neuropeptides (proteins that help cells communicate with one another) suggests that SCN cells are not all the same, but can play different, but interconnected, roles in a complex circuitry that involves the SCN and other parts of the brain.

Herzing does his own share of communicating. As a new faculty member, he created the Clocks Club, a journal club that pulls together University researchers who are interested in circadian rhythms. Other members come from such diverse departments as ophthalmology, anatomy and neurobiology, and pediatrics. This interdisciplinary nature of circadian rhythms is one of the things Herzog loves most about the field.

"It's one of the few fields where people study fungus and people who study people show up in the same meetings. And I'm not exaggerating!"

Erik Herzog

---

Circadian rhythm, that is, and the mysteries of these internal clocks are the focus of Erik D. Herzog's research.

**You've got the rhythm**

By Deb Aronson

Herzog's research. The neural basis of vision, vol- uminous work he's helped to document in a cramped (6-foot diameter) Alvin deep-sea submersible. He was one of the leading neurobiologists for two years to test a theory that why creatures living 4,000 meters below sea level in a pitch black environment still have eyes.

The theory was the hydrother- mal vents on the ocean floor give off enough light for these crea- tures to see. Herzog then gauged pig to see if the human eye could detect that light.

Although Herzog couldn't see light, others have subsequently measured dim light emissions from the vents and predicted that the resident worm shrimp have eyes sensitive enough to find the vents instead.

Herzog's graduate work at Syracuse University focused on vision in horseshoe crabs. The large cells in their eyes, big enough to separate a sensitivity- ing glass, originally attracted H. Ketter Hardline to do his Nobel Prize-winning work on how individual nerve cells communicate with each other.

What intrigued Herzog, how- ever, was his realization that horseshoe crabs could see equally well on a sunny day or starlit night. That told him that some mechanism was driving a "mil- lion-fold" change in light sensitiv- ity and that mechanism had to be connected with circadian rhythms.

The term "circadian" (from "circa" for "about" and "dies" for "a day") refers to the daily cycles in our bodies and behavior, such as waking/sleeping, blood pressure, our bodies and behavior, such as waking/sleeping, blood pressure, body temperature, activity level and alertness.

Researchers have known for some time, that in mammals, the suprachiasmatic nucleus (SCN) really caught the committee's attention. Herzog's gusto for life is infec- tious. When visiting speakers come to town, Herzog has been known to whip them off to show Ashcraft and Groves for a blues concert in the country rather than stay in town for more conven- ient restaurant dinners.

"Erik is a pleasure to talk to. He's a terrific companion to have around," says close friend and col- league Russell N. Van Gelder, M.D., Ph.D., assistant professor of ophthalmology and visual sci- ences and of molecular biology and pharmacology. "He has a real sense of adventure."

Herzog even brings that sense of adventure to his daily com- mutes to the University — he rides his bicycle from his Webster Groves, Mo., home every day and it takes 22 minutes to have no park- ing hassles and it means his family can function with a single car.

St. Louis is downbeat bullying occasions in the field. Herzog worked in various projects that have developed a sense of adventure.

It appears that, no matter what the obstacles, Herzog will perse- verce, thanks to his boundless energy, passion and enthusiasm.

---

The student Sara J. Aitken works in a lab with Erik D. Herzog, Ph.D., assistant professor of biology in Arts & Sciences, Herzog and his colleagues use mice and rats to aid their research of circadian rhythms.

"Erik's letters were just glowing, not just about his intellect, but as a person," Stein says. "He