Researchers find carriers of astronomical extinction line in presolar grains

BY TONY FITZPATRICK

A collaborative team of researchers has discovered what turns the lights out from space. Using sophisticated features on a transmission electron microscope, John P. Bradley, Ph.D., director of the Institute for Geophysics and Planetary Physics at Lawrence Livermore National Laboratory, has discovered that the grains contain the dust particles (IDPs) are the carriers of the astronomical extinction line in presolar grains blocking light from stars from reaching Earth. The discovery is supported by data from the National Institute of Standards and Technology (NIST) and the Space Telescope Imaging Spectrograph (STIS) on the Hubble Space Telescope.

Using the NanoSIMS instrument, which allows for the analysis of individual presolar grains, the team discovered that the grains contain a specific isotope of oxygen that is unique to presolar grains. This result suggests that presolar grains are being formed in the interstellar medium and are being incorporated into the dust that is dispersed into the solar system.

The discovery has implications for our understanding of the formation and evolution of the solar system. It also has implications for the study of the chemical composition of the interstellar medium, which is important for understanding the origins of life in the universe.

Bradley and his team continue to analyze presolar grains from other solar system bodies such as asteroids and comets. Their work is helping to build a more complete picture of the processes that shape the solar system and the universe.
Weil: A native St. Louisan, has been actively involved in both the university and greater St. Louis communities. He chaired the university history and archaeology for a total of 10 years and served two terms as a SLAM trustee. In 1999, he was appointed director of the Kemper Art Museum (then the Washington University Gallery of Art) and was named director of the Sam Fox Arts Center at its inception the following year.

Weil’s scholarship and teaching efforts fall into two primary areas: Italian Renaissance and Baroque art history and archaeology.

The festival is dedicated to the students and community at large, who will have the opportunity to celebrate each other and the similarities they share, as well as observing and accepting differences.

The reading is free and open to the public, and will take place in Huston-Tillotson Center, Room 201. A reception and book-signing will follow and copies of Poems from Poets Under 40 will be available for purchase.

March of Dimes WalkAmerica slated for April 30

McDonnell professor of physics Clifford M.Will, Ph.D., makes a presentation at his installation as the Edward L.关lock Professor of Physics in Arts & Sciences April 14 in Holmes Lounge. Will is known worldwide as one of the leading experts in using experimental and observational data to explain Einstein’s general theory of relativity. The McDonnell professorship was established at Washington University in 1966. Its first holder was Robert M. Walker, Ph.D., a renowned leader in the laboratory analysis of materials from interplanetary and interstellar space and the inaugural director of the McDonnell Center for the Space Sciences. 

Seminars on wide range of benefits offered

BY ANDY CLENDENNING

The Office of Human Resources offers a comprehensive program to University faculty and staff, the two anchors being health and insurance eligibility savings plans. However, there are several other important benefits plans which University employees need to be aware of. To help employees become better informed, the human resources office is offering brown- bag seminars to review and discuss the following benefit plans:

• Health Care Flex Spending
• Child Care Flex Spending
• Term Life Insurance
• Variable Universal Life Insurance
• Long Term Disability Insurance
• Long Term Care Insurance
• Tuition Assistance
• MOST Program

Included in the seminars will be covering the eligibility criteria, coverage options, tax savings and special features in these plans. Also, determining whether employees are maximizing their individual rights on the University’s benefits investment is on the agenda.

Thomas W. Lauman, director of benefits, will present sessions from noon-1 p.m. The schedule is:
April 27, Hilltop Campus, Simon Hall, Room 109
April 28, West Campus, Library Conference Center, Room A/B
April 29, Medical Campus, McDonnell Science Building, Burger Auditorium

Reservations are not required; food is not provided; and attendees are encouraged to bring a lunch.

For more information, contact your benefits department.

Poet C.K. Williams to read from his work today

A acclaimed poet C.K. Williams will read from his work at the first William Read program of the Writing Program Spring Reading Series.

The March of Dimes is a national voluntary health agency whose mission is to improve the health of babies by preventing birth defects and infant death. Founded in 1936, the March of Dimes funds programs of research, community services, education and advocacy to save babies. In 2001, it launched a multi-year campaign to address the issue of premature birth.

For more information or to register for the WalkAmerica, go to www.marchofdimes.org or call Kristin Emalshifar at 664-0049.

Well is known worldwide as one of the leading experts in using experimental and observational data to explain Einstein's general theory of relativity.
Nerve-cell development explained by two theories

BY MICHAEL C. PERET

For many years, two schools of thought have dominated neurobiologists' theories about how early nerve cells develop specialties that allow the assembly of a brain. One theory suggests that master regulators trigger the development of the specialized traits in cells found across wide regions of the brain. The other theory attributes the development of specialized traits to interactions between many local factors.

In a new study of developing fruit fly brain cells, scientists at Washington University in St. Louis and Harvard universities showed that both models are valid and active. Surprisingly, they both appear to operate within single developing brain regions.
**Tibetan monks to bring music, dance to Edison University Events**

**BY LIAM OTTEN**

Monks from Tibet's legendary Dreadful Dressing Monastery will present The Mystical Arts of Tibet: Sacred Music, Sacred Dance at 8 a.m., April 29-30 at Edison Theatre. The monks will also present an all-majors matinee as part of the vapors! for young people series at 11 a.m. April 30.

First launched in 1988, Sacred Music, Sacred Dance is co-sponsored by Richard Gew Publications Inc., with the blessings of the Dalai Lama. It features a dozen monks performing nine pieces believed to generate energies conducive to inner peace and worldly success.

The performance highlights multilingual singing, in which the monks simultaneously intone three notes of a chord, as well as traditional Tibetan instrumental music, such as 10-foot-long drumbang trumpets, drums, bells, cymbals and gong horns. Rich brocade costumes and masked dancers, such as the "Dance of the Sacred Snow Lion," add to the splendor.

The Dreadening Monks have performed at festivals, universities, and in communities around the world, including such prestigious venues as the National Mall in Washington, D.C., and the 1990 Olympics in Atlanta.

The monks have performed with artists such as Paul Simon, Sheryl Crow, Michael Stipe, Patti Smith, Natalie Merchant and the Beastie Boys, as well as in the premiere broadcast presentation of Philip Glass' Academy Award-nominated score for Martin Scorsese's film Kundun (1997).

The Dreadening Monks are also featured on the Golden Globe-nominated soundtrack for Martin Scorsese's film Seven Years in Tibet and in the award-winning documentary Tibet: The Secret Life of the Dalai Lama.

The monks were invited to the Dalai Lama exhibitions in New York City, Los Angeles and San Francisco. Eric P. Newman Education Center. To register: 362-7327.

For more information, call 935-6543.

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**Children's Film Symposium • Evolving the Skeleton • Mind-Body Problem**

**Friday, April 22**

**9:15 a.m. Pedagogic Round Table**

"From Yesterday Today and Tomorrow" Gautam K. Singh, assistant professor, Humanities, 4685 Children's Place. 543-6006.

**Note: Cell Biology & Pharmacology Seminar**

April 24. Kemper Art Museum. 935-5576.

**Mandalas Sand Painting exhibit**

In conjunction with their Edison Theatre performances, the Dreadening Monks will be joined by residence at the St. Louis Art Museum (SLAM) April 26-May 1 for an exhibition/demonstration of "The Mystical Arts of Tibet: Sacred Music, Sacred Dance." The term literally translates as "mandalas of colored powders."

Mandalas Sand Painting: The Architecture of Enlightenment will open with a ceremony at noon April 30 and will continue daily through April 30. A closing ceremony will be held at 2 p.m. May 1.

First view information, call SLAM at 721-4072.

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**Exhibits**


**Film**

**Saturday, April 30**

Note: Film & Media Studies Children's Film Enrichment Program. "Big Movie and The Powerpuff Girls: Millennium Edition" 10:15-11:45 a.m., and noon-1:15 p.m. at the Humanities and the program in ocean sciences, Brown Hall, Rm. 106. 935-6570.

**Lectures**

**Friday, April 22**

9:15 a.m. Pedagogic Round Table**

"From Yesterday Today and Tomorrow" Gautam K. Singh, assistant professor, Humanities, 4685 Children's Place. 543-6006.

**Note: Cell Biology & Pharmacology Seminar**

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First view information, call SLAM at 721-4072.
Music department concert
to dedicate new grand piano

BY ANDREW LINDENBERG

A claimed author and bibliophile Nicholas Basbanes will be a Bard Bountiful! Among the items on Bard's shopping list is his book, Gentle Madmen at 7:30 p.m. today in Quintus Cafe in Olney Library. Basbanes' passion for books, his engaging investigations into the history of book-collecting, and his insights on the challenges facing the book in the 21st century are sure to delight those who are interested in the history of book-collecting and the intellectual and cultural history of the book of the 17th century. His first book, A Gentle Madmen: Bibliophiles, Bibliomaniacs, and the Eternal Passion for Books, was a finalist for the 1995 National Book Critics Circle Award in nonfiction and a New York Times Notable Book of the Year. His newest book, A Splendor of Books (Houghton Mifflin, 1993), which recounts his long friendship with the famous writer, His memoir, King of the Hill, which recounts growing up in St. Louis, was made into a feature film in 1992.

April 13

10:01 AM. A lecture in the Art School reported his digital camera digital camera taken from a student's cabinet in Robby Hall. The camera was a silver Canon Powershot. The theft occurred between 9:22 AM and 10:22 AM on March 28.

Crime alert

Oshieill University Police issued the following alert:

On campus, the University Police reported a theft of a digital camera taken from a student's cabinet in Robby Hall. The camera was a silver Canon Powershot. The theft occurred between 3:17 AM and 4:17 AM on March 28.

Precautions: Report suspicious persons or activity immediately to the police at 911 or go to the nearest emergency telephone. If you hear a voice alarm, contact police immediately. Do not attempt to track or read any information from the device.

Additionally, University Police responded to several incidents, including three larcenies, two reports of damaged property, and one report each of judicial violation, auto accident and disturbance.
**WILLIAMSON IN ST. LOUIS**

**Award**

Fox received honorary law doctorate in 2002 — from Page 1

commissioners. Fox, a 1953 WUSTL business school graduate, is chairman and chief executive officer of Harbour Group International, a New York City-based holding company he founded in 1976. Harbour has enjoyed tremendous success and now has more than 10,000 employees worldwide.

A native Missourian, Fox came to St. Louis to attend the University, and he stayed. Like his fellow honoree, Fox has helped guide the University as a member of the Board of Trustees for many years.

Formerly a vice chair and currently a Life Trustee, he has been actively involved in his alma mater in many leadership roles, among them serving on the University’s Development Committee to recommend a capital campaign; heading the Eliot Society that serves as a recruiting arm of the Olin School of Business National Endowment.

Fox and his wife, Marilyn, are Life Danforth Circle members. He and his wife have been president of the Board of Commissioners of the Saint Louis Art Museum and president of the Greater St. Louis Council of Boy Scouts of America, and has served in key leadership roles in many other St. Louis organizations.

In 2003, he served as chairman of the St. Louis Urban Way campaign that is named in honor of Senator竞价, a former member of the Board of Governors of the University. He also has served on the Board of Trustees for the University of Michigan in Ann Arbor, Michigan. He is a director of the St. Louis Art Museum and serves as chairman of the Museum’s Board of Trustees.

Fox received an honorary doctor of laws degree from the University in 2002. He has been a member of the Lindy Boggs Center for Social Responsibility in Business and has served as an inspiration to thousands of dedicated volunteers, staff and donors. We could not have accomplished the meeting’s goals without John and Sam at the helm.

MARK S. WRIGHTON

**Impulses**

—from Page 1

Potassium channels are among the ion-selective transmembrane proteins that control the passage of potassium ions, which are essential components of cell signaling systems. Like a meter that measures charge 

transmission electron microscope equipped with a monochromator and a high-resolution electron energy loss spectrometer, allowing him to analyze in the 2175 A range, to get exactly the same type of absorption feature in these different materials. The interesting thing is that Bradley and his colleagues found the absorption feature in exactly the same places in the DPs that we have identified as presolar in origin," Stadermann said. "That is a good indication that what the astrophysicists have been observing for the last 40 years is the same thing we observe in these DPs."

Fluss said that Bradley's discovery is significant because it shows that organic carbon and amorphous silica are abundant in interstellar dust clouds, and although they are not carriers we are able to account for the fact that the 2.175 A feature is so commonly observed by astronomers.

The WUSTL contribution is important because the NanoSIMS ion microprobe used at WUSTL is the only instrument that can resolve particles as small as 100 nanometers to 500 nanometers.

**Space**

—from Page 1

researchers from the University of California, David; Lawrence Berkeley National Laboratory; and NASA Ames Research Center.

"Interstellar dust, for some reason, seems to be a key player in this frequency," Stadermann said, "and it has been difficult to pin down the source of the absorption. It is strange to think that this feature is what we observed in different dust clouds and the peak width and position vary, but the center of the peak was always exactly at 2175 A. People have been looking for this material for years, but the center of the peak was always exactly at 2175 A. People have been looking for this material for years, but it has been difficult to pinpoint what the source of the absorption is."

"If we want to find it, a con- nection exists between dietary fat, the absorption of palmitate to proteins and health," Fluss said. "In obesity or in cellular aging, excessive saturated fatty acids can lead to an increase in alterations like palmitate attachment, not only in k1, but also in dozens or even hundreds of other proteins. That possibly explains some of the many types of dam- age that result from having too high a fatty acid burden."
The School of Law to present alumni awards

BY JESSICA MARTIN

The School of Law to present alumni awards

School of Law to present alumni awards

Association of Women Faculty bestows awards

BY ANDY CLENDENEN

The Association of Women Faculty presented its annual Grad-
duation Awards Dinner and presented alumni awards. The aw-
s were designed to recognize women students in law and legal education.

American Indian Awareness Week

ABOVE: Winnebago Tribe member John Snowball performs at the 2005 American Indian Awareness Week. The event featured presentations by some of the nation's top minds in memory research by expanding the cognitive area of study.

Obituary

Popkin, professor emeritus of philosophy

Richard H. Popkin, Ph.D., professor emeritus of philosophy in Arts & Sciences, died Thursday, April 14, 2005 in Santa Monica, Calif., of emphysema complications. He was 81.

Popkin was appointed as a visiting professor at the University of California, Berkeley in 1971 and became a regular member of the Department of Philosophy in 1973. He earned a doctorate from Columbia University in 1950 with a dissertation titled "The Neo-Irrationalist Theory of Mathematical Logic." Among his many honors, Popkin was the Clark Professor at the University of California, Berkeley, New York, and an international conference on the origins of skepticism that revolutionized modern philosophy and science. Popkin was author of Philosophy and the Human Spirit with Ar- sentium, The History of Skepti-

Shapleigh is being honored for his outstanding professional achievements in law and real estate.

Rodgerd honored by Purdue with "Roddyfest"

It might sound like a wrestling match, but when Purdue University recently honored a conference called "Roddyfest" some of the nation's top minds were in attendance.

Rodgerd's research interests include such topics as how people can suffer memory illusions and false memories (remembering events differently from the way they happened or remembering events that never happened at all), implicit memory (when past events affect ongoing behavior without one's awareness) and, increasingly, applying technology to improving learning in educational settings.

Rodgerd received his Ph.D. in psychology from the Georgia Institute of Technology in 1985 and is a professor of psychology and director of the Memory and Cognition Laboratory at the University of California, Berkeley. He has published over 150 research papers and is the author of the book "The Science of Memory." He has also served as editor of the journal "Memory and Cognition."
When he's not caring for patients, Riew loves to spend time with his family; wife, Mary, and kids, (from left) Bradley, Julia and Grant.

Dan Riew, M.D., associate professor of orthopaedic surgery and chief of cervical spine surgery, discusses a case with an orthopaedic surgeon and cervical spine surgeon, Dr. Rich Gelberman, M.D., and a fellow surgeon. Gelberman described Riew as the most effective fellow he had ever trained.

"Dan was described by his mentor as the most effective fellow he had ever trained. He is an amazing technical surgeon, easily in the top 1 percent of surgeons I've ever been associated with." — RICHARD H. GELBERMAN

Inherent clinical judgment and compassionate patient care define Dan Riew as an orthopaedic surgeon

By REYDEN NICHOLSON

After medical school, he did an internship in internal medicine and completed an orthopaedic medi- cine residency and cardiology research fellowship at Cornell Medical Center. He was planning to continue that research at Har- vard Medical School when he realized he didn't want to be a cardiologist. "I had this epiphany," Riew recalls. "I suddenly knew I should have gone into orthopaedics and done what I loved first. At first I thought it was too late, but then I started thinking that I had another five years of research and training ahead in cardiology, which was about the same length of time as an orthopaedic surgery residency."

In retrospect, he says his training in both specialties has made him a better doctor. One of his friends, Ken Yamaguchi, M.D., a shoulder and elbow specialist and associate professor of orthopaedic surgery at Washington University, agrees.

"Dan is perhaps the finest physi- cian I have ever met," says Yama- guchi, who was an orthopaedic surgery resident with Riew at George Washington University. "He has a unique combination of book smarts, inherent clinical judgment, surgical ability and compassion that allow him to excel in caring for patients."

To complete his training, Riew did a fellowship in spine surgery with renowned spine specialist Henry Boldman, M.D., at the University Hospitals of Cleveland. About the same time, Richard H. Gelberman, M.D., the Fred C. Reynolds Professor and head of orthopaedic surgery at Washing- ton University, was trying to re-

A

Although he was born in

the Far East, Dan Riew

grew up in the Midwest.

He lived in Korea until

he was 7, when his parents

brought their family to the

United States because they felt it would be a

better place to get an education.

"When we first came, it was
difficult because we couldn't com-
municate with anybody," he says.

"Fortunately, it doesn't take long to learn the language when you're a kid, but when we got off the plane, none of us knew any

English," Riew's parents put a great

value on education, actually moving the

family thousands of miles in pur-

suit of educational opportunities.

He believes American parents and

educators place a greater emphasis

on creating a well-rounded per-

son, whereas the focus in Korea

back then was on getting the best

grades and making it into the best

colleges.

Riew did well in that depart-

ment. He got into Harvard Uni-

versity. The lifestyle at Harvard in

Cambridge, Mass., was much dif-

ferent than life in the town of

Akroo, Ohio, where Riew lived.

"There were lots of people

from big cities like Chicago, Los

An amazing medical ability

Inherent clinical judgment and compassionate patient care define Dan Riew as an orthopaedic surgeon

from Los Angeles and New York, who

had probably learned as much from

other students as I did from my
classmates," Riew says. "Science,

as a profession, was a great profes-

sion to pursue. And that may have something
to do with his family. Although he didn't decide to study medicine until he was in college, Riew had a positive image of what it meant to be a doctor. His maternal

grandfather had been a pediatri-
cian and general practitioner in

Korea.

"In the late 1950s and early

'60s, there were a lot of very poor

people in Korea," he recalls. "At

first, Riew wasn't sure what he wanted to be. He thought about becoming a trial lawyer and took pre-law courses, but though the grading was somewhat subjective,

he reasoned, would offer a more objective approach,

and he also took pre-med courses.

Now as an associate professor of

orthopaedic surgery, he says he's

learned that science and music

aren't necessarily clear-cut, either.

But he's never regretted his deci-

sion to pursue medicine.

And that may have something
to do with his family. Although he didn't decide to study medicine until he was in college, Riew had a positive image of what it meant to be a doctor. His maternal grandfather had been a pediatrician and general practitioner in Korea.

"In the late 1950s and early 1960s, there was a lot of very poor people in Korea," he recalls. "As a kid I can remember people bring-
ing him gifts because they didn't have any money. He was a very kind man, and he taught me that medicine was a great profession."