

HSC WEEKLY

Published for the students and employees of the USC Health Sciences Campus

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USC surgeons perform world's first living-related bloodless liver transplant

William Jennings, 44, a Jehovah's Witness, has made medical history as the recipient of a living-related liver transplant done without the transfusion of blood or blood products. He received the right liver lobe from his brother, Scott Jennings, 40, and both have recovered well from the surgery.

Randy Henderson, coordinator of USC University Hospital's Transfusion-Free Medicine program, said the June 15 operation was the first of its kind anywhere.

The donor was released from the hospital within a week of the operation — his brother a few weeks later. And both appeared before the media at USC University Hospital July 19 alongside hepatologist Jacob Korula and surgical team Rick Selby, Nicolas Jabbour and Yuri Genyk.

Jennings was suffering from primary sclerosing cholangitis — an acute problem associated with a narrowing and inflammation of the bile ducts. The decision to use the living-related

option was based on the fact that his condition had not deteriorated to the extent that a cadaver liver would be offered him. On the other hand, if allowed to deteriorate to such an extent, successful transplantation cannot be performed on Jehovah's Witness patients due to their belief in not transferring blood products from one person to another. "The Bible commands us to abstain from blood. We take it quite literally," Jennings said. "It doesn't say anything about organs."

Under these circumstances, the doctors decided to perform the transplant when William Jennings' blood counts could still be enhanced. The only choice was to use a lobe of his brother's liver as well as delicate surgical techniques that would prevent the loss of blood.

Since liver transplants often require multiple units of blood, plasma, and platelets, the operation is rare among Jehovah's Witnesses. And the intricacy of living-related transplants makes them unheard of — until now.

The transplant operation lasted a marathon 14 hours because of the special circumstances surrounding the procedure. Although living transplants usually involve simultaneous operations on recipients and donors, the surgeons made the decision to operate on William Jennings first — clamping off blood vessels and salvaging any spilled blood before removing the right half of Scott Jennings' liver. Because of that, the procedure took twice as long as the 6 or 7 hours liver transplants normally take. If William had started to bleed to death, "we would have allowed him to expire," Selby said. In that situation, there would have been no need to proceed with Scott's surgery.

Fortunately, that didn't happen, and the prognosis is excellent for both brothers.

"Since the liver has the unique property of regeneration, both liver halves will grow to become normal-sized healthy livers within six to eight weeks



William Jennings made medical history on June 15 as the recipient of a living-related liver transplant done without the transfusion of blood or blood products. The transplant operation lasted a marathon 14 hours

of the operation," said Selby.

"Dr. Selby said I'll feel like I'm 30 again," said William Jennings. "I said that's great. Because I didn't feel 30 when I was 30," he added to a chorus of laughter from the assembled media crews.

Jennings lives with his wife and two children in Big River, Calif. He told reporters he did not fear dying in surgery because he was convinced he would "wake up in paradise. I view death differently than a lot of people." The USC Abdominal Organ Transplant Team performs living-related transplantation in adult and pediatric patients. They have now defined the selection criteria and management strategy for living-related transplantation without the transfusion of blood products and envision similar transplants in the future as part of their overall adult and pediatric living-related program in liver and kidney transplantation.

—Paul Dingsdale

Announcement of Keck gift sparks major media coverage

The July 29 announcement of the \$110 million gift to the School of Medicine from the W.M. Keck Foundation received extensive local and national media coverage.

An article appeared in the July 29 *Los Angeles Times*, on the front page, "above the fold."

Reporter Ken Weiss noted that the grant is part of \$ 1.5 billion that USC expects to be invested in the Health Sciences Campus over the next decade, including \$ 818 million from Los Angeles County to replace the aging LAC+USC Medical Center.

The first \$20 million from Keck will go toward building a \$40 million research center in neurogenetics — "a hot field of study involving genetics and the workings of the human brain," Weiss wrote.

The article concluded by noting that USC President Steven B. Sample attributes his success to two things: "A huge run-up in the stock market, and the increasing attitude of a large number of people that it may not be in the best interest of their kids to leave them with too much money."

The July 29 press conference for the official announcement was attended by KCBS-TV ch. 2, KTLA-TV ch. 5, KABC-TV ch. 7, KTTV-TV ch. 11, KNX-AM news radio, KFI-AM radio, the *Los Angeles Times*, and *Good News LA*.

"We think that Los Angeles needs to have world-



Wearing Keck School of Medicine coats for the cameras are: (from left) President Steven Sample, Brian Henderson, Virginia Ramo, Robert Day, Simon Ramo and Keck School of Medicine Dean Stephen Ryan. The photo above right shows members of the media covering the press conference.

class medical centers," Robert A. Day, Keck's grandson, who runs the foundation, told the assembled media.

Simon Ramo, a board member on the Keck Foundation, explained how he had pushed for a financial "booster rocket" to propel USC's medical school to the top. The school, he said, impressed foundation members with its progress over recent years.

"We are going to build this new research building and fill it with some of the brightest minds in the world," said President Sample.

"With this money, we'll be able to pay them healthy salaries, pay their expenses and allow



them to bring a couple of postdoc researchers with them." he added.

Brian Henderson, director of the new Neurogenetics Institute, said the funds would help assemble a top-notch group of researchers to enhance USC's reputation as "a first-rate medical school. We're going to steal from the best."

The Keck gift was also covered by National Public Radio's "Morning Edition," KFWB-AM news radio, KNX-AM news radio and KROQ-FM radio.

The following publications also covered the announcement: Chronicle of Higher Education, Nature magazine, Science magazine, Nature Medicine magazine, The Scientist, The San Diego Union-Tribune, The Fresno Bee, United Press International and USA Today

—Paul Dingsdale

IGM honors million-dollar trust donors

The Institute for Genetic Medicine honored Sara and Miner Harkness at a July 15 dedication of the Sara V. and Miner Y. Harkness Assembly. The \$1 million trust will be used to establish an endowed professorship at the IGM.

"Endowments are the real heartbeat of the university," said Laurence Kedes, director of the IGM. "They provide the long term support for maintaining a superior faculty—and the quality of its faculty is what really makes a medical school tick" Dedicating the Assembly to the Harknesses, said Kedes, seemed the perfect way to thank them for their gift. "This is the physical nerve center of the institute," he noted. "It's where students, faculty and distinguished visitors discuss the latest knowledge in genetics and molecular medicine. That's why it's so appropriate that it be named in their honor."

Miner Harkness owned his own insurance business; Sara Harkness is an ICU nurse at USC University Hospital. At the dedication ceremony, the couple was presented with a plaque commemorating the renaming of the Assembly. In addition, said Kedes, "we will be putting up some significant signage in the Assembly itself."

"The Institute is on the cutting edge of genetic research around the world," said Joseph Van Der Meulen, vice president for health affairs. "I can think of no better way to celebrate the success of the IGM than with this magnificent gift from Sara and Miner."



From left, Laurence Kedes, director of the IGM, donors Sara and Miner Harkness, and Joseph Van Der Meulen, vice president for health affairs, meet to commemorate the \$1 million Harkness gift.

The best things in life—like research grants— are free to those who apply themselves

Aflurry of research grants and scholarships has become available in the last few months, for which many USC investigators may be eligible. Among the awards whose deadlines are looming:

Dana Clinical Hypotheses in Neuroscience Research Program

The Charles A. Dana Foundation is seeking applications for the Dana Clinical Hypothesis in Neuroscience Research Program in Imaging, a three-year program that provides up to \$100,000 to aid the development of brain disease research and therapies.

The program is designed to enable investigators to obtain pilot data on innovative clinical uses of neuroscience research.

Complete applications are to be submitted to Richard Lolley, associate dean for research, KAM 110, by August 19. For questions or a copy of the guidelines, contact the Office of Development at 442-2358.

Scleroderma Foundation

The Scleroderma Foundation is offering grants of up to \$50,000 annually for basic research grants related to scleroderma.

Studies may be carried out at the molecular, cellular, animal, or patient level in relevant scientific disciplines. All grants will be reviewed for the scientific merit and relevance.

The Scleroderma Foundation anticipates funding up to ten (10) one-year grants and ten (10) two-year grants depending upon the quality of grants received. Three special focus grants will be awarded. These are one-year grants with budgets up to, but not exceeding \$50,000. One grant will be awarded in each of the following special interest areas:

- A one-year grant for research directly related to lung disease in scleroderma.
- A one-year grant for research directly related to children with scleroderma.
- A one-year grant for research specific to scleroderma submitted by an investigator outside the United States or Canada.

The application deadline is September 15. For questions or a copy of the guidelines, contact the Office of Development at 442-2358.

CPAC Third RFP Announcement

The California Program on Access to Care (CPAC has issued a request for proposals for the 1999-2000 fiscal year.

University faculty and researchers, and researchers from non-profit research organizations, are invited to submit proposals to analyze significant health policy issues facing California's low-income populations. Investigators who receive grants will report their findings to state govern-

Pew Scholarships of up to \$200,000 available

Pew Scholarships of up to \$200,000 are now available to outstanding young investigators in basic and clinical sciences relevant to the advancement of human health.

Eligibility is restricted to current junior members of the faculty who will not have been members of the full time faculty for more than three years as of July 1, 2000.

Each recipient will receive \$50,000 in support each year for four years. Recipients may not simultaneously be supported by similar private scholar awards during the first two years of the Pew Scholarship. It is the philosophy of the Pew Program that such private support be as widely distributed as possible.

An institution—including its medical school, graduate school, and all affiliated hospitals or research institutes may nominate one candidate. Complete applications are to be submitted to Richard Lolley, associate dean for research, KAM 110, by September 20. The candidate chosen to go forward will be notified on September 24.

For a copy of the guidelines, call the Office of Development 442-2358. For scientific or academic-related questions, contact Lolley at 442-1607 or by e-mail at *lolley@hsc.usc.edu*.

ment officials and others interested in California health policy through written reports and public briefings.

A minimum of \$500,000 in University funds are available for this competition. About 15 projects are expected to be funded, each to be completed within six months. CPAC will also consider concept paper awards in the \$5,000 to \$10,000 range. Concept papers enable faculty to analyze and synthesize findings from completed research, and to consider the implications of their findings for state policy related to health care access.

CPAC will primarily support work that applies research expertise to specific California policy issues related to health care access, rather than major new empirical projects.

Applicants are asked to conduct secondary data analysis or seek a grant to obtain supplemental funding for ongoing projects. The deadline for grant proposals for this competition is September 20. Prior to the completion of their application, researchers are asked to transmit in writing or via e-mail a notification of their intent to submit a proposal. Application forms can be requested by phone, e-mail, or obtained from CPAC's web site (http://www.ucop.edu/cprc/cpac.html). It must be signed by the institutional Contracts and Grants officer and accompany the proposal. For questions or a copy of the guidelines, contact the Office of Development at 442-2358.

Cancer Research Program

Pursuant to the legislation establishing CRP, the Program is to provide funding for research applications that best address "the cause and prevention, cure, diagnosis, and treatment of cancer, including, but not limited to, intramural and extramural research in the fields of biomedical science and engineering, economics, epidemiology, diet and lifestyle, public health, and technology development and translation, with emphasis on non invasive treatment."

CRP priorities for funding of research are primarily aimed at fostering research on gender-specific cancers such as prostate and ovarian cancers. The program is particularly interested in funding meritorious applications that propose to apply innovative approaches to the prevention, detection, and treatment of these cancers, i.e., cancer control.

The anticipated total program funding level for this cycle will be approximately \$23 million dollars. The amount available is subject to adequate legislative appropriations and expenditure authority. The deadlines is 4 p.m., Sept. 12.

If you have any questions or need a copy of the guidelines, please contact the Office of Development at 442-2358.

Cure Autism Now (CAN)

The Cure Autism Now (CAN) foundation has announced the establishment of research grants for biomedical research relation to the cause and treatment of autism and autistic spectrum disorders.

The proposed awards are designed to encourage innovative approaches toward understanding causes, prevention and appropriate therapy of autism. Investigators whose focus has been outside the field of autism as well as innovative investigators from within the field are encouraged to apply.

Areas of interest include: animal models, developmental neurobiology genetics, epidemiology,

microbiology, molecular biology, neuroimaging, neuroimmunology, systems neuroscience.

CAN Young Investigator Awards provide funding for outstanding candidates for work to be carried out under the supervision of an established investigator. The investigator need not be directly involved in autism research but must provide an environment in which the CAN Fellow can pursue a project with relevance to autism or related disorder. These postdoctoral training awards allow a salary stipend of \$35,000 and a \$1,000 travel (conference) allowance per year for two years.

Pilot Research Projects will provide funding for investigators at any stage in their career to work on innovative pilot projects. Preference will be given to projects that have the potential for grant support from federal or other agencies once pilot studies are completed. Projects may be funded up to \$40,000 per year, for one to two years.

The application deadline is Oct. 1.

For more information, contact CAN officials at 5225 Wilshire Boulevard, Suite 226, Los Angeles, CA 90036 or by phone at 549-0500. They can also be reached by e-mail and through the web at: CANrsch@primenet.com and http://www.can foundation.org.

HSC Weekly

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Editor: Jon Nalick Executive Director of Public Relations: Brenda Maceo Vice President, University Public Relations: Martha Harris

Contributors: Paul Dingsdale, Alicia Di Rado, Alfred Kildow, Brenda Maceo, Eric Mankin, Jon Nalick, Lori Oliwenstein, LaCarol Pratt, Richard Stone, Mary Ellen Stumpfl, Carol Varma and Cindy Wallace

> 323/442-2830 FAX: 323/442-2832 hscwkly@hsc.usc.edu http://www.usc.edu/hsc/info/pr/

Norris Foundation funds lab of Pharmacy's Brinton

Roberta Diaz Brinton's laboratory in the School of Pharmacy is now the Kenneth T. and Eileen L. Norris Foundation Laboratory in Neuroscience Research, thanks to a generous gift from the foundation.

Brinton, an associate professor of molecular pharmacology and toxicology, carries on an active research program in neuroscience.

One research thrust involves the role of the hormone estrogen in maintaining brain function in peri- and postmenopausal women. She is also studying possible hormonal interventions to prevent Alzheimer's disease in older women.

Another active area is developing a drug therapy that may help children with learning disabilities frequently associated with pediatric diabetes insipidus, which is caused by a congenital inability to manufacture the hormone vasopressin.

The learning problems are believed to be caused when brain receptors for the hormone become desensitized by the vasopressin that is given as part of treatment for the disease.

Finally, Brinton has attracted international attention for her work culturing nerve cells on silicon chips for study and eventual possible use in neuroelectronic brain prostheses. She has carried on this work as part of an intercampus collaboration with Theodore Berger of the School of Engineering's Department of Biomedical Engineering.

Brinton has also been involved for 11 years as director of the STAR (Science, Technology and Research) program. STAR offers high school juniors and seniors — most of them from HSCadjacent Francisco Bravo Medical Magnet School — the opportunity to participate in responsible roles in real scientific research over an extended period of time. More than 300 students have participated during the years; many of them have entered college as listed authors on scientific papers.

Program alumni include Paola Barrientos, now in the USC BA-MD program; and Martha Melendez, who received her M.D. from UC. Irvine medi-



Roberta Diaz Brinton (center) joins Ron Barnes, chair and president of Kenneth Norris Enterprises, and Harlyne Norris at the lab's renaming ceremony.

cal school and has gone on to specialize in women's health, among many

At a June 24 dedication ceremony, Brinton thanked her benefactors and spoke about the phenomenon of memory, which ties together many of her research interests:

"It is a distinct honor to be associated with the Norris Foundation," she said, "whose hallmark is a dedication to excellence in serving humankind through science education and community service.

Through the vision of the Norris Foundation trustees, particularly that

of Harlyne Norris and Ron Barnes in supporting the research of my laboratory, the goals of the Norris Foundation are uniquely brought to life.

"When one looks behind and beyond my basic science research focusing on memory and dementia, what one sees is the essence of oneself and our relationship to our world.

"...It is memory that remembers our favorite songs, our favorite times with loved ones, that remembers our successes and the failures that make us stronger. It is memory that records which experiments worked and which didn't.... So as we continue to discover the mechanisms of memory and those strategies for maintaining memory in the Norris Foundation Laboratory for Neuroscience Research, know that each day the Norris Foundation and particularly you, Harlyne and Ron, are remembered with gratitude for your vision and commitment to creating a community in which we all can remember who we are and who we can

—Eric Mankin

Researcher seeks ways to alleviate complications of gestational diabetes

Thomas Buchanan is finding ways to help mothers and their children avoid the effects of a potentially deadly

No, it's not AIDS, and it's not breast cancer. It's diabetes, and it strikes down more Americans a year than either of those two illnesses.

Buchanan, professor of medicine, obstetrics and gynecology and physiology and biophysics, has focused on diabetes—more specifically, diabetes and pregnancy—for more than 15

His outstanding contributions as a researcher in the field earned him a spot as the Norbert Freinkel Lecturer at the American Diabetes Association's scientific meeting in San Diego in June.

A believer in the marriage of medicine and research, Buchanan talked about new techniques he and his colleagues—Siri Kjos, associate professor of obstetrics and gynecology, Ruth Peters, professor of preventive medicine, and Anny Xiang, assistant professor of preventive medicine—are studying to reduce the risk to babies born of mothers who have gestational diabetes. They are also studying ways to predict and prevent diabetes in mothers after

Some women who get gestational diabetes-higher-than-normal blood sugar brought on by pregnancy—run into serious complications during childbirth. Buchanan's group is suggesting a new strategy for finding out in advance which mothers are most likely to have those complications, and treat them appropriately to prevent

"We're getting more and more calls about the idea," Buchanan said enthusiastically. "It's a concept that's catching on.'

When a woman develops higherthan-normal blood sugar during pregnancy, the sugar richly nourishes her fetus. That sounds good, but it isn't.

"The worst complication is essentially the overfeeding of a baby," Buchanan said. That means babies get fat in the womb, especially around their shoulders and abdomen, causing them to get stuck during childbirth. In turn, that raises the risks for birth trauma to the baby from 2-3 percent in a normal birth to 5-6% percent in a birth involving gestational diabetes.

Under the new strategy, Buchanan suggested, doctors would screen expectant moms for a higher likelihood of complications using two tools: blood sugar tests and ultrasound.

A woman with slightly higher-thannormal blood sugar could simply be monitored carefully by doctors and manage the diabetes nutritionally. A woman with very high blood sugar would be given insulin.

But women in between would get a second screening test. Around the 30th week of pregnancy, doctors would look at the size of a baby's belly through ultrasound. "If a baby's size is below the 70th percentile for normal babies, the chances it'll be too big at birth will be about nil," Buchanan said. "But if it's above the 70th percentile, then they're in the at-risk category, and that gives us enough time to treat the

mother with insulin before birth."

Buchanan, who directs the General Clinical Research Center, hopes to pursue a multi-center trial to look at the relationship between blood sugar and the size of babies in the womb.

He also talked about predicting and preventing diabetes in mothers after they give birth, the topic of a current National Institutes of Health-funded study he's working on with Kjos, Peters and Xiang.

Women who get diabetes during pregnancy often see it go away right after birth. But in a previous study by Buchanan and colleagues of Latina mothers with gestational diabetes, 50 percent of those moms developed type II diabetes (the prevalent form of the disease) by five years after having a baby—a much higher proportion than the rest of the population.

Buchanan is looking for the reasons why. "What we understand is these are women who have weak beta cells in the pancreas," he said. Beta cells produce insulin, which helps blood sugar get into the body's cells, where it's needed.

"If the cells have to work hard, like in pregnancy, they appear to wear out faster than other people's cells," he

His lab is running a prevention trial using a drug meant to keep those beta cells from failing. Trial results are expected in December of next year. If the trial is successful, it will be possible for the first time to prevent diabetes in very high-risk women.

Take traffic tips from those who know

Quick tips and reminders from the Department of Transportation Services:

• Several local governments offer additional public transportation incentives that can benefit commuters who use Metrolink or MTA: Diamond bar. La Verne, Temple City, West Covina and Riverside and San Bernardino counties. For information, visit the Transportation Services office, KAM 120.

• The American Public Transit Association offers a free brochure that gives information on tax benefits available for transit riders. For more information, call 1-800-898-4000 or visit their web site at www.apta.org.

- Rideshare Week is Oct. 4-8 this year.
- For details about rail and bus lines and other regional transit options, visit www.socalcommute.org and www.

transit-rider.com.

- Student parking permits are valid as of August 23 for the Fall/Spring se-
- Faculty/Staff parking permit issuance will be conducted this month and all completed applications will be needed by Sept 3. Home department coordinators will provide information to their respective areas.

Lincoln Park once housed lions, tigers and bears (oh my)

Continuing our occasional series on local history:

In 1909, Colonel William Selig, a traveling magician turned film producer, purchased 32 acres of land adjoining today's Lincoln Park. On the property he established the Selig Zoo, which doubled as a home for the animals he used in his movies and rented out to other producers.

The first Tarzan movie was filmed at the private zoo, and for many years, it was the only zoo south of San Fran-

In time, it became the largest collection of wild animals in the world, with 700 different animal species.

In the 1920s, financial problems and a flood spelled the end of the zoo, which was located on what are now the tennis courts in Lincoln Park. The surviving animals were donated to the city, forming the nucleus of the Los Angeles Zoo.

—Alicia Di Rado

USC/Norris' second annual Grand Rounds highlights HSC's top talent

Showcasing the best and brightest of the students and fellows conducting cancer research on the Health Sciences Campus, the Second Annual USC/ Norris Comprehensive Cancer Center Grand Rounds & Poster Session was held on July 13.

The competition was sponsored by the Cancer Center Grand Rounds & Poster Session Steering Committee, which is made up of Master's, Ph.D. and M.D./Ph.D. students and Post-Doctoral Fellows working in laboratories affiliated with the Cancer Center; Raymond Mosteller, associate professor biochemistry and molecular biology, acted as moderator.

The committee considered 47 abstracts for inclusion in the poster ses-

sion. Of the students who put forth these submissions, 29 also competed to be a speaker at Grand Rounds. Four speakers and three posters were chosen by a panel of 13 volunteer judges, all of whom were members of the Steering Committee, said Isabel Markl, a graduate student member of that committee. The choice was based on the clarity, content, context, conformation and verbal presentation of the research.

The four Grand Rounds speakers chosen by the committee were:

• Postdoctoral student Sandra Johnson from the Department of Molecular Pharmacology, School of Pharmacy, for her presentation on "Regulation of the Human TATA-Binding Protein (TBP) Promoter by Hepatitis B Virus (HBV) Protein X and Ras Cellular Signaling," Debbie Johnson, principle investigator

- Ph.D. student Michelle Luo from the Department of Pathology, USC/ Norris, for her presentation on "Menstrual Cycle Hormones Alter Growth and Signal Transduction in Benign Ovarian Epithelial Tumors," Louis Dubeau, principle investigator
- Ph.D. student Chung Shum from the Department of Pathology, Childrens Hospital Los Angeles, for his presentation on "Downstream Targets of the Ewing's Sarcoma EWS/Fli-1 Fusion Gene," Tim Triche, principle investigator
- M.D./Ph.D. student Jinha Park from the Department of Pathology,

USC/Norris, for his presentation on "HER-2/neu Receptor Recruitment of Protein Tyrosine Phosphatase-1-D to Focal Contacts Leads to Loss of Integrin-Mediated Cell Adhesion," Michael Press, principle investigator

The top three posters:

- FIRST PLACE: postdoctoral fellow Robert Tracy from the Department of Pathology, USC/Norris, for a poster on "Inducible and Stable RNA/DNA Hybrids in the Mammalian Genome: Essential Intermediates for Class Switch Recombination," Michael Lieber, principle investigator
- SECOND PLACE: postdoctoral fellow Rini Verma from the Department of Microbiology & Immunology, USC/Norris, for a poster on "Identification"

of Two Differently Expressed Genes in Morphologically Transformed C3H10T1/2 Cl 8 Mouse Cell Lines Induced by Carcinogenic Nickel Compounds," Joseph Landolph, principle investigator

• THIRD PLACE: Ph.D. student Ryan Irvine from the Department of Pathology, USC/Norris, for a poster on "Androgen Receptor Coactivation and Prostate Cancer Risk," Gerhard Coetzee, principle investigator.

Each of the selected speakers received honoraria of \$150; the presenters of the top three posters received \$150, \$100 and \$75, respectively. Funds for the honoraria and prizes came from the Cancer Center, said Markl.

—Lori Oliwenstein

HSC research awards for June 1999

			-	
Principal Investigator(s)	Department	Sponsor	Title	Total Awarde
Jonathan D. Buckley	Preventive Medicine	National Childhood Cancer Foundation	Clinical Cooperative Oncology Program	\$13,008
Enrique Cadenas	Pharmacy	U.S. Army Medical Research and Development Committee	Plant Estrogens: Effects on Cell Cycle Progression in Breast Cancer Cells	\$336,511
Richard J. Cote	Pathology	National Cancer Institute	Molecular/Cellular Pathways of Bladder Cancer Progression	\$285,035
Parkash S. Gill	Medicine	National Cancer Institute	VEGF and Related Proteins in AIDS-Related Kaposis Sarcoma	\$1,525,385
Parkash S. Gill	Medicine	Baker Norton Pharmaceuticals, Inc.	Effect of Paxene in Kaposis Sarcoma Cell Lines	\$60,000
Sue Ann Ingles	Preventive Medicine	U.S. Army Medical Research and Development Committee	Genetic Determinants of Aromatase Expression and Susceptibility	
			to Postmenopausal Breast Cancer	\$423,022
Thomas M. Mack, Giske Ursin	Preventive Medicine	University of California, Regents	Radiographic Density, Cancer, Inheritance and Acquired Risk in Twins	\$442,032
Jeffrey S. McCombs	Pharmacy	Eli Lilly & Company	Antipsychotic Medications for Treating Patients with Schizophrenia in	
			the California Medicaid (MEDI-CAL) Program	\$139,681
Michael B. Nichol	Pharmacy	Allergan	1999 Allergan Summer Internship	\$12,000
Andrew Stolz	Medicine	University of California, Davis	Molecular Epidemiology of 3a-HSD in Prostate Cancer	\$54,118
Daniel O. Stram	Preventive Medicine	Centers for Disease Control	Occupational Radiation and Energy-Related Health Research Grants	\$165,357
J.P. Van Der Meulen, Thomas	Medicine	National Center for Research Resources	General Clinical Research Center	\$30,602,098
Buchanan, John T. Nicoloff				
Anna H. Wu, Mimi Yu,	Preventive Medicine	University of California, Regents	Gene-Diet/Tobacco Interactions in Breast Cancer in Asians	\$267,978
Louis Dubeau				

Remember this: volunteers sought for memory study

The Laboratory of Memory and Memory Disorders in the Department of Neurology seeks volunteers for a short-term study on the effects of estrogen therapy on learning and memory, related to both normal aging and Alzheimer's disease.

Eligible participants must be English-speaking women between ages 50 and 84 who have gone through meno-

pause. Potential participants are either in good health or have been diagnosed with mild to moderate Alzheimer's disease.

Participants also should have not used estrogen at least three months before the study enrollment.

Study participants will get a brief medical and gynecological exam before starting the study.

Participants in the study will take estrogen pills or a placebo for a month and then receive testing on thinking processes.

To volunteer or for more information, call Barbara Cherry, research associate professor in the Department of Occupational Therapy, at (323) 442-2810 or Barbara Agee, registered nurse, at (323) 442-5983.

Calendar

Friday, Aug. 20

 $11\ a.m.$ Hematology Conference. "Hematologic Manifestations of HIV," Alexandra Levine, USC. GNH 7441. Info: 865-3913

Friday, Aug. 27

11 a.m. Hematology Conference. "NHL: Updates," Alexandra Levine, USC. GNH 7441.

Etcetera

The USC Medical Faculty Women's Association Research Fund has a limited number of research "mini-grants" available to women faculty of the Health Sciences Campus.

The maximum award is \$3,000.

Proposals are currently being accepted for seed money for preliminary work on new ideas, short-term interim funding and — under special circumstances — attendance at a research workshop or course.

The deadline for submission of a pro-

posal is August 20. Application forms may be obtained from the Office for Women, Keith Administration building (KAM), Room 100F (442-2554) and from the Norris Medical library, MFWA Reserve Box #32.

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USC Health Sciences Public Relations 1450 San Pablo Street DEI 2510 Los Angeles, CA 90033

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