

## THE SCIENCE OF STEM CELLS

*Edwin S. Monuki, M.D., Ph.D.*

Stem cells are unspecialized cells that can generate healthy new cells and tissues. These “master” cells have three general properties: they are young or youthful, they can renew and divide for very long periods of time, and they can differentiate to each of the specialized cells within our bodies. They are unlike any other cell in our body.

In development, stem cells are the cells responsible for transforming into the specialized cells of the body, including brain, blood, pancreas and heart cells. While stem cells work hard to give rise to a variety of specialized cells, they also retain their potential to renew themselves indefinitely. These important characteristics are why stem cell research holds such great promise for improved understanding of disease and the development of new, more effective treatments.

### Stem Cell Research

Stem cells are leading to new treatments that can repair or replace damaged cells, opening up countless new possibilities for healing the body from devastating illnesses and injuries. Diseases that were once incurable could be cured; injuries that now leave permanent disabilities could heal with no lasting damage. This leads to great expectation that unlocking the potential of stem cells will lead to the greatest leap forward in the history of medicine.

Stem cell research has often been called “the new frontier of medicine” because of its potential to advance our understanding of the biological processes that keep our bodies healthy and whole. For example, adult stem cells can help us to understand how our tissues do (or do not) repair themselves after injury. Research using embryonic stem cells can shed light on the molecular mechanisms governing tissue development, and aid the design of safer, more effective drugs. Stem cells can be used – in different ways – to repair or replace tissues damaged by disease. In the years ahead, knowledge gained through stem cell research is expected to improve

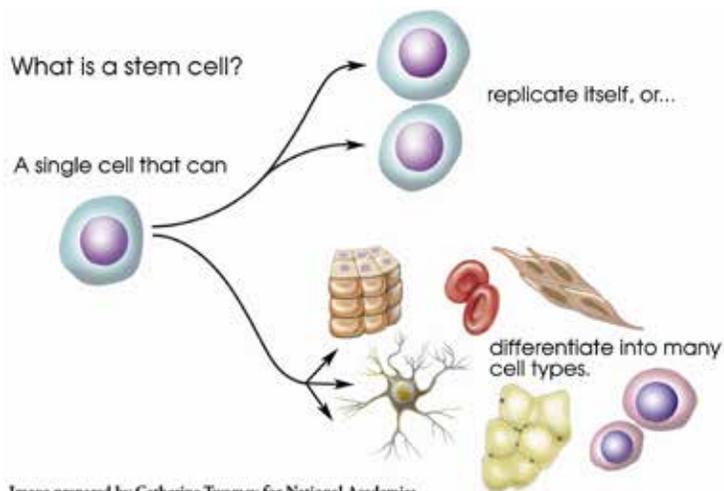


Image prepared by Catherine Twomey for National Academies, *Understanding Stem Cells: An Overview of the Science and Issues*

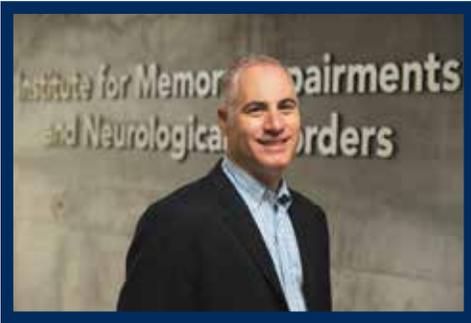
treatment options for a number of currently incurable diseases and injuries, including Alzheimer’s Disease, Huntington’s Disease, Parkinson’s Disease, multiple sclerosis, ALS, spinal cord injury, stroke, heart disease, cancer, diabetes, severe burns, lupus, sickle cell disease, HIV/AIDS, osteoarthritis, rheumatoid arthritis and vision and hearing loss. In addition, stem cells might also provide unique experimental tools that will allow neuroscientists to better understand puzzling brain disorders like Alzheimer’s, autism, and cerebral palsy.

### Types of Stem Cells

Stem cells are often defined by their potency - i.e. by how many different types of cells they can become. As stem cells specialize, they can create fewer and fewer different types of cells. Pluripotent stem cells can become any of the 200 some cells in the human body. Multipotent cells can become many different cells but only of certain tissues. For example, stem cells of the bone marrow can make every type of blood cell. Unipotent cells can only become one type of new cell.

There are several categories of stem cells. In general, scientists categorize stem cells by their tissue of origin. Adult stem cells, which are multipotent or unipotent, are found within

*Continued on page 4*



## Research today brings Hope for Tomorrow

If you have had the opportunity to attend a recent UCI MIND educational event or enjoyed a “Behind the Scenes” tour of the UCI MIND offices and laboratories, then there is a good chance that you’ve heard one or more of our faculty and staff make reference to the phrase, ***Research Today. Hope Tomorrow.***

For the many researchers, faculty and staff of UCI MIND, that phrase represents a great charge that we have been given by the University, the federal and state government, and by the community of Orange County. We have great hope that one day the devastation of dementia caused by Alzheimer’s disease will come to end through preventative measures and effective treatments.

UCI MIND researchers push forward each day on a wide and varying range of research projects to further understand the causes of Alzheimer’s disease and develop potential treatments. Achieving our vision of a world in which Alzheimer’s disease is but a memory brings with it responsibilities that we strive to fulfill in all we do at UCI MIND. We are committed to adhering to the highest scientific standards. In science, there are no shortcuts, so we move forward diligently, step by step, generating findings that the medical and lay community can rely on, and laying the groundwork for innovations that give us hope for tomorrow.

Finding a cure for Alzheimer’s disease demands new cutting edge efforts, and UCI MIND recently received a two year grant from the National Institute on Aging and additional generous support from HCP, Inc., a healthcare REIT, to develop and study patient-derived stem cell lines as part of our iPS Cell Bank. Few discoveries have as much potential to transform modern medical research as iPS cells and we’re proud that UCI MIND is at the forefront of using this technology in the battle against Alzheimer’s disease. We are also humbled by and grateful for the support and confidence that so many members of the community have entrusted in us, as you’ll read in the pages of this newsletter. So we press forward with research today, knowing that the work we do and the discoveries we make will fuel the hope of tomorrow for a world without Alzheimer’s disease.

### ICTS AWARDS GRANT TO UCI MIND RESEARCHER AND COMMUNITY PARTNER

Viorela Pop, PhD and Tonia Vojtkofsky, PsyD were recently awarded a competitive grant from the UC Irvine Institute for Clinical & Translational Sciences Community Engagement Unit (ICTS CEU)\*. The award for this campus-community program provides funding for the collaborative proposal entitled “Cognitive Exercise May Preserve Memory and Functional Ability in Persons with Mild Cognitive Impairment”. This new pilot study will provide an opportunity for individuals with an MCI diagnosis to participate in a collaborative research project between the UCI MIND ADRC and community partner, Cognitive Care Solutions, during the period of performance starting April 2014 through March 2015. Dr. Pop has a background in neuroscience research and is currently the Senior Clinical Research Coordinator working with the center’s Medical Director, Aimee Pierce, MD who is the faculty sponsor for this study. Cognitive Care Solutions specializes in cognitive therapy for individuals with memory impairment, and both Dr. Vojtkofsky (Founder and President) and Jennifer Mitolo, PsyD (CEO) will engage in this study.



Viorela Pop, Ph.D.



Tonia Vojtkofsky, Psy.D.

\*This material is based on work supported by NIH under Prime Award no. UL1 TR000153 and The Regents of the University of California.



# IN THE NEWS

*Exciting discoveries, achievements, and updates from the Institute for Memory Impairments and Neurological Disorders*

## UCI MIND RECEIVES PROGRAM OF THE YEAR AT 19TH ANNUAL SAGE AWARDS

UCI MIND was the proud recipient of Program of the Year at the 19th Annual SAGE Awards, held on November 20th at the Turnip Rose in Costa Mesa. Initiated in 1995, the SAGE Awards, hosted by the 55+ Housing Council, honor individuals, projects and programs that have made an outstanding contribution to enhancing the quality of life for Southern California [Santa Barbara to San Diego] residents aged 55+.

UCI MIND was recognized for developing an internationally acclaimed site for excellence in Alzheimer's disease and related dementias through its research accomplishments, including clinical research and trials dedicated to investigating the causes of Alzheimer's disease, improving quality of life and promoting successful aging. One of 27 Alzheimer's disease centers supported by the National Institute for Aging, UCI MIND is also one of just 10 California Alzheimer's Disease Centers funded by the California Department of Public Health.



Linda Scheck and  
Frank LaPerla, Ph.D.

## LESLIE THOMPSON NAMED FELLOW OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

UC Irvine neurobiologist Leslie Thompson has been named a fellow of the American Association for the Advancement of Science. Election as an AAAS fellow is an honor bestowed upon association members by their peers. Thompson, a professor of psychiatry & human behavior, biological chemistry and neurobiology & behavior, was selected for her distinguished contributions to the Huntington's disease field, particularly relating to mechanisms underlying the cause of the disease, to medical school teaching and to HD-related professional societies.

Thompson is a research member of Institute for Memory Impairments & Neurological Disorders (UCI MIND), the Sue & Bill Gross Stem Cell Research Center and the Chao Family Comprehensive Cancer Center.



Leslie Thompson, Ph.D.

## KIM GREEN AWARDED 5 YEAR RESEARCH GRANT TO STUDY ALZHEIMER'S BY THE NIH

Dr. Kim Green has recently been awarded a 5-year R01 grant from the National Institutes of Health to study the potential benefits of microglial repopulation to both age-related cognitive decline and Alzheimer's disease. Microglia are the primary immune cell of the brain and function to protect our brains from infection. When an infection is detected in the brain our microglia respond to them by producing toxic chemicals to kill the invading pathogen, and then eat up the remains. Once the infection is cleared the microglia return to a resting state. However, in both normal aging and Alzheimer's disease our microglia become abnormal and begin to produce these same toxic chemicals even though there is no infection present. These chemicals are harmful to our neurons and contribute to the pathology seen in the Alzheimer's disease brain, as well as to age-related cognitive decline.



Kim Green, Ph.D.

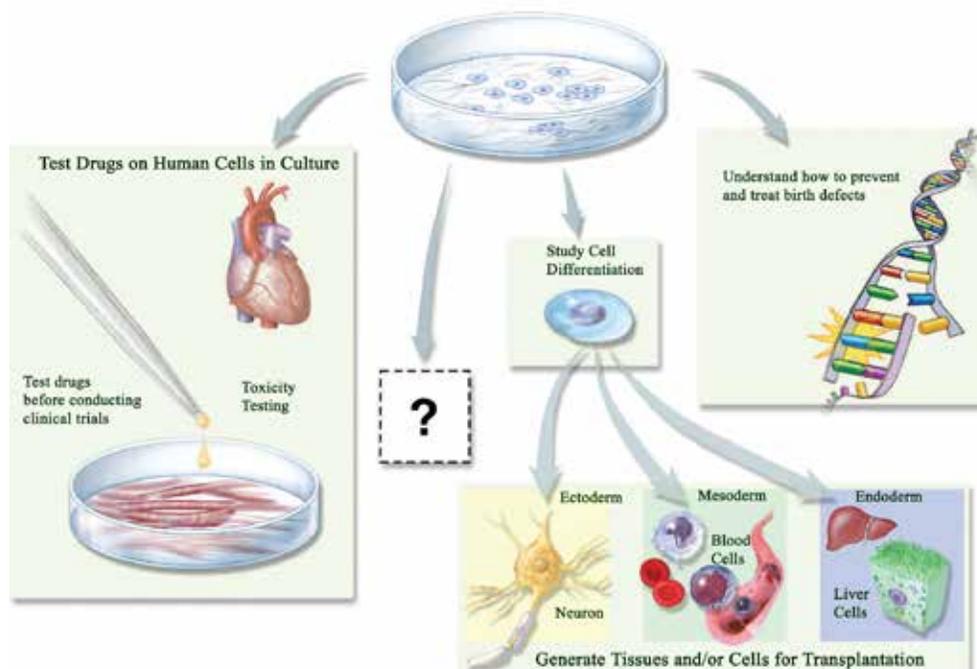
Dr. Green's group has discovered a way to eliminate all the microglia from the brain, using drugs normally used for the treatment of cancer, thus allowing them to remove all these harmful microglia in either the aged- or Alzheimer's diseased- brain. His group has further discovered the presence of a new microglial-stem cell in the brain, which they can then stimulate to become new microglia and repopulate the entire brain. This grant will study the possibility of removing all the "old" and "bad" microglia from the brain and then allowing for repopulation with "new" microglia derived from these stem cells, and whether this would be beneficial for either aging or preventing/treating Alzheimer's disease.

specific body tissues and typically generate only the cells of that tissue. For example, brain stem cells can only become the specialized cells of the brain. Umbilical cord blood stem cells are a kind of blood-forming adult stem cell. Embryonic stem cells, or ESCs, are pluripotent cells that can transform into virtually any type of cell found in the body. Unlike adult stem cells, ESCs can become any other cell in the body. They aren't limited to one specific cell or type of tissue. Not only does this flexibility allow researchers to treat a multitude of different diseases with one type of cell, it also allows them to treat tissues where adult stem cells are rare, such as the brain and spinal cord. ESCs also show nearly unlimited ability to self-renew under the right conditions, whereas adult stem cells often more limited in their self-renewal capabilities. Researchers can potentially generate a nearly unlimited supply of stem cells from even the smallest sample of ESCs. A third type of stem cell is called an induced pluripotent stem cell, or iPSC. iPSCs are created by taking a regular adult cell, such as a skin cell, and "reprogramming" it into a stem cell very similar to an ESC. With iPSCs, researchers can get the benefits of ESCs, without requiring any embryos. In addition, iPSC technology (as well as another, known as somatic cell nuclear transfer) provides the potential for making "patient-specific" cells that will not be rejected after transplantation. ADRC and other UC Irvine researchers are blazing new trails in the development of ESCs and iPSCs.

Different stem cell types harbor different characteristics, and scientists are only beginning to fully understand the stem cell characteristics needed to cure or treat specific diseases. Depending on the disease, ESCs, iPSCs, or adult stem cells may be best. Importantly, knowledge gained about ESCs and iPSCs will complement studies of adult stem cells, and vice versa. That's why most scientists believe that they can best work toward therapy advances by responsibly investigating all aspects of stem cell biology.

## Ethics

Strict ethical safeguards govern stem cell work at UCI. UCI abides by all Federal and California statutes governing the donation of biological materials for research (including embryos) in order to protect the health, safety and privacy of donors. Chief among these are standards requiring that donors give their informed consent, and that these donations are free of coercion or financial incentive. For example, ESCs are derived from blastocysts that are produced during fertility treatment, then donated for research purposes after treatment concludes. In many cases, these surplus blastocysts would be stored frozen indefinitely or discarded as medical waste. Donors must give their informed consent prior to donation. UCI has established an Embryonic Stem Cell Research Oversight (ESCRO) Committee to monitor adherence to these safeguards, as well as to ensure that research involving stem cells serves important research aims and is conducted according to the highest ethical standards.



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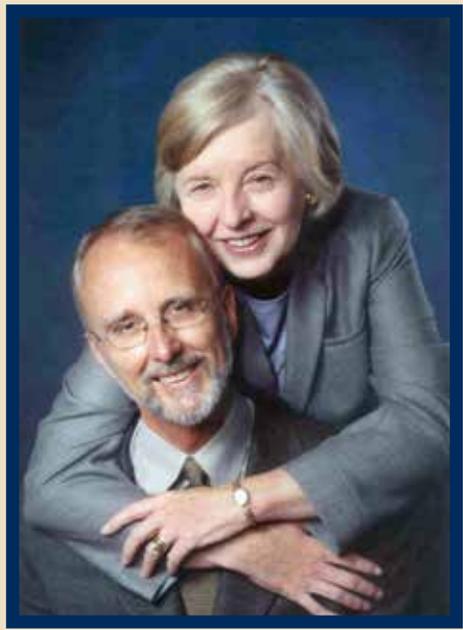
# THE KEITH SWAYNE FAMILY CHALLENGE IN HONOR OF JUDY SWAYNE THE UCI MIND iPS CELL BANK INITIATIVE

In honor of his wife, Judy Swayne, who is battling Alzheimer’s disease, Keith Swayne and his family have issued a challenge to raise \$150,000 for the establishment and expansion of an iPS cell bank at UCI MIND.

The Swayne Family will generously match every dollar that is raised (up to \$150,000) for the unique cell bank.

Stem cell therapy receives considerable attention, particularly since UCI MIND investigators have pioneered this avenue of research specifically for Alzheimer’s disease. Stem cells are both controversial and exciting. The controversy is based on when the cells are harvested, with many people ethically objecting to the use of human embryos. UCI MIND investigators do not use embryonic stem cells in their research.

It is vital to point out that many stem cells can be directly obtained from adults, thereby bypassing any ethical concerns.



## What are iPS Cells?

Few discoveries have as great a transformative potential for altering modern medical research as induced pluripotent stem (iPS) cells. These cells are special in that they can enhance our ability to study and understand the impact of disease in human cells in ways not previously possible. Pluripotent cells are capable of giving rise to every cell type in the human body and allowing unprecedented resource sharing among scientists. It is notable that iPS cells can be derived from skin samples. Anyone, even older adults, can easily donate the skin cells needed to develop iPS cells. Additionally, by harvesting iPS cells from the patient, science has minimized the incidence of rejection by the body that can be associated with traditional stem cell research and therapies.

## Why the iPS Cell Bank is Necessary?

UCI MIND received a grant from the National Institute on Aging, NIA, to establish the first National Alzheimer’s Disease iPS Cell Bank. This will be a valuable resource for the entire Alzheimer’s research community and fits with our pioneering role in stem cell research. The award was granted to UCI MIND despite the current fiscal climate and the federal spending sequester because of the very high score it received and, also due to the value of such research at this time in history.

Because we can predict that federal funding for research will continue to decline as the number of Alzheimer’s patients rapidly increases, philanthropic support is vital for the advancement of Alzheimer’s research in UCI MIND.

A predictable funding source greatly enhances our faculty and graduate students’ groundbreaking and transformative research to make memories last a lifetime. Research requires a commitment of time as well as funding, and we ask that the community help us invest in discovery.

Your support will impact generations to come. Alzheimer’s should not be our reward for living a long life. You can move UCI MIND closer to our vision of bringing an end to the scourge of this disease.

*Invest in discovery today to fund the fight against Alzheimer’s disease by making a donation to the Keith Swayne Family Challenge iPS Cell Bank Fund using the attached envelope.*

## Student led group, ReMIND hosts 5th Annual Emerging Scientists Symposium

On February 20, 2014, the students of ReMIND hosted their 5th Annual Emerging Scientists Symposium on Neurological Disorders. The all day conference brought together over 100 undergraduate and graduate students as well as faculty and staff to listen to 15 different graduate student presenters discuss their latest research findings. Keynote speaker, Valina Dawson of Johns Hopkins University, presented the final lecture, followed by the awarding of the top two presenters of the day, Monica Elmore and Joseph Ochaba, with special recognition.



### MONICA ELMORE

Microglia are the primary immune cells in the brain, protecting the central nervous system (CNS) from injury and infection. We have discovered that microglia are physiologically dependent upon Colony Stimulating Factor 1 Receptor (CSF1R) for their survival and that we can

eliminate ~99% of all cells within just days using a CSF1R inhibitor, providing an opportunity to study microglia in a way that has not been possible before. Mice depleted of microglia for extended periods of time show no behavioral, motor, or cognitive impairments, which demonstrates that we can use this inhibitor as a therapeutic tool without negative side effects. In addition, mice lacking microglia show a dampened response to an immune challenge (lipopolysaccharide, LPS), confirming the role of these cells in immunity. Future studies will ascertain the role of microglia in the healthy and diseased brain, which is important for understanding and treating many diseases and disorders, including traumatic brain injury and Alzheimer's disease.



### JOSEPH OCHABA

Huntington's disease (HD) is caused by a repeat in the HD gene leading to expanded polyglutamines in the huntingtin protein. Joseph's work has been examining the role that a specific protein modification 'enhancer,' PIAS1, plays in altering a protein modification of huntingtin called SUMOylation

and the accumulation of a pathological marker in HD: the accumulation of an insoluble huntingtin species. The work he presented showed that delivery of a virus which 'silences' PIAS1 in the brain region known to be affected in HD (the striatum), significantly improves the behavior and reduces pathological markers in an animal modeling the disease. The findings indicate that PIAS1 displays specificity and may act as a hub for regulating several pathways that are dysfunctional in HD. Overall, the pathways identified here in the context of HD and targeting specific regulators such as PIAS1 may represent novel and selective cytokine and immune-based therapeutic strategies that impact mutant huntingtin levels and provide insight into mechanisms underlying HD.



UNIVERSITY of CALIFORNIA • IRVINE

### Alzheimer's Disease Research Center

Learn about your memory while advancing knowledge of memory and aging

Volunteers with **mild memory or thinking problems** are needed for a study on aging

#### Eligible participants will benefit from:

- Free comprehensive annual evaluations with feedback and recommendations from experts
- Opportunities to participate in additional studies (e.g., imaging, biomarkers, prevention, and clinical drug trials)
- The gratification of helping advance knowledge of aging and how to better treat Mild Cognitive Impairment, Alzheimer's disease, and other cognitive disorders

To participate, you must be 65 or older, have mild memory or thinking difficulties, and have an adult child, spouse or friend willing to answer questions about your everyday activities. If you would like to participate, or want further information, please contact Dr. Viorela Pop at 949-824-2382, Option 3, or [vpop@uci.edu](mailto:vpop@uci.edu).

## In Memoriam

### Marguerite Cheri Portillo Hayes

JANUARY 22, 1970 – FEBRUARY 7, 2014

On February 7, 2014, Margie, Marguerite Cheri Portillo Hayes passed away after a 15 year battle with Huntington's disease. Margie was the daughter of Hector Portillo and Frances Saldana - the founder of UCI MIND's affiliated HD-CARE organization. Margie was the wife of Craig Hayes and mother of two children, Keelan and Angelique.

Margie attended Fountain Valley High School and the John Robert Powers School of Modeling. After high school Margie moved to Los Angeles and attended L.A. City College, where she studied cinematography. While she lived and studied in Los Angeles, she worked in Hollywood. Her work included being an extra in TV shows such as "Beverly Hills 90210", and in films such as "The Doors" and "Funny About Love".



In spite of the challenges that came with the onset of Huntington's Disease, it was common for her to confront her day with courage, boldness, and faith. During her 30's, Margie became dedicated to Huntington's disease advocacy. She attended many events in support of HD research: HD Team Hope Walks, Strike Out HD Bowl-a-Thons, and the National HDSA Conventions. Even though she was already symptomatic, she spoke before the California Institute for Regenerative Medicine's (CIRM) Review Board in 2007, among many other public forums in support of HD research.

Margie left a lasting and powerful impact and she inspired some of the most brilliant researchers in the world. She was relentlessly hopeful for a cure in time for the next generation. Her legacy will be remembered at UCI MIND's Huntington's Disease Exhibit, which is now available for anyone to visit.

HD-CARE is an institutional partner of UCI MIND with the primary goals of funding Huntington's disease research and supporting the HD clinic at UC Irvine.

## UCI MIND Matters Club



Club member, Virginia Naeve

Are you interested in learning more about recent discoveries in Alzheimer's research at UCI MIND and elsewhere? Would you like to meet experts in the field of cognitive fitness? Are you interested in promoting your own cognitive health as you support research at UCI MIND?

The MIND Matters Club is the club for you. It is a group of individuals committed to supporting UCI MIND, expanding our understanding of Alzheimer's disease and other neurodegenerative disorders through research, education and service to the community.

Members of the MIND Matters Club receive unique benefits including quarterly private receptions featuring expert speakers on cognitive fitness and current research; a quarterly news brief highlighting recent discoveries; an annual appreciation event hosted by Director, Frank LaFerla, Ph.D., offering an opportunity to "meet and greet" UCI MIND researchers; and, if desired, a confidential annual memory screening and personalized brain health consultation, including a review of your risk factors.

The MIND Matters Club is a donor support group and recognizes donors who contribute \*\$1,906 or more annually to UCI MIND. Contact Linda Scheck, Director of Development and Donor Stewardship at 949-824-3251 or [lscheck@uci.edu](mailto:lscheck@uci.edu) to discuss this very special and personal donor club supporting Alzheimer's research at UCI MIND.

\*The year 1906 was when Dr. Alzheimer discovered the disease that bears his name today.



# GIVING AT UCI MIND

*Helping UCI MIND Research Ways to Make Memories Last a Lifetime*

## RUTH AND ROGER MILLER MAKE \$1 MILLION ESTATE GIFT TO UCI MIND

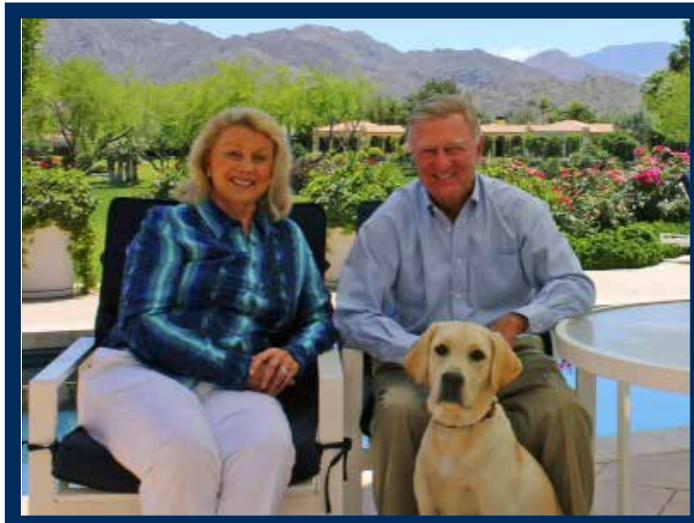
Linda Scheck, (949) 824-3251, lscheck@uci.edu

Ruth and Roger Miller had a personal interest in the research, education and community outreach efforts taking place at the University of California, Irvine's Institute for Memory Impairments and Neurological Disorders (UCI MIND). They just didn't know it yet. But their good friend Tom Tierney did. When the Millers asked Tom, a UCI Foundation trustee and long-time university supporter, if he was aware of any organizations working to understand, prevent and treat neurological disorders like Alzheimer's and Parkinson's diseases, Tom recommended UCI and contacted Andy DiNuzzo, Major Gifts Officer in the UCI School of Biological Sciences.

Andy gathered specifics on UCI MIND's academic research on neurological disorders; educational programming like UCI MIND's student society ReMIND (Research and Education in Memory Impairments and Neurological Disorders), and community outreach efforts, including Ask the Doc forums. He also provided information on the university's Office of Planned Giving and any additional details that the Millers and their attorney might find helpful.

Once the proposal was prepared, Dr. Frank LaFerla, UCI MIND director and Linda Scheck, UCI MIND director of development and donor stewardship added their knowledge and expertise. Upon completion, the information was provided to Tom Tierney to share with the Millers. Up to this point, the UCI team did not know the identity of the interested couple. Tom served as liaison between the Millers and UCI.

Ruth and Roger were intrigued with what they read and what Tom told them about UCI MIND and the ground-breaking work taking place there every day. They were also impressed by the level of attention and urgency demonstrated by the UCI team. As a result, the Millers were ready to be introduced and a teleconference was arranged for Andy, Roland Ho - UCI's director of planned giving, Ruth and Roger, and their attorney.



That initial conference call marked the beginning of the Millers' relationship with UC Irvine. Their remarkable generosity and the ongoing commitment to collaboration from the Millers, their attorney, Christine C. Weiner, Esq., UCI Trustee, Tom Tierney, and the UCI team, resulted in their transformational gift that offers inspiration to the dedicated scientists and clinicians, research participant volunteers, their families and the entire community.

Dr. LaFerla had the opportunity to visit the Millers at their winter home in the California desert to thank them personally for their extraordinary support of UCI MIND. "The Millers have invested in discovery, giving hope to the 5.4 million people in the United States who suffer from Alzheimer's disease," said Dr. LaFerla. "The price is just too high for us to remain idle and ignore the growing epidemic of Alzheimer's disease, with a new case developing every 67 seconds. If we do nothing, this disease will bankrupt our country both financially and emotionally. Research today is the only hope for tomorrow."

It is the goal of UCI MIND to research ways to make memories last a lifetime. The generosity of Ruth and Roger Miller moves us closer to reaching that goal.

# DONATIONS *from November 2013 - February 2014*

## Honoraria

*In Honor of Mrs. Betty Abrams*  
Dr. and Mrs. Marvin Abrams

*In Honor of Anita and Howard Austin's 70th Birthdays*

Mr. and Mrs. Victor Landsberg  
Dr. and Mrs. Leslie S. Malo

*In Honor of Malcolm Dick*

Dr. Donald Hansen

*In Honor of Jacqueline Dupont*

Ms. Alison Hahn and  
Ms. Catherine Beaumont

*In Honor of Dan and Emily Flynn*

Mr. and Mrs. Charles Quilter

*In Honor of Paul and June Hunter*

Mr. Paul E. Hunter

*In Honor of Linda Scheck*

Dr. Donald Hansen

*In Honor of Helen S. Simpson*

Mr. and Mrs. Robert Naeve

*In Honor of Your Birthday!*

Ms. Barbara Stroup

## Memorials

*In Memory of Virginia Barry*

Mr. and Mrs. Mike Hablitzel

*In Memory of Marie Belonge Bell*

Ms. Kristina M. Belonge  
Mr. and Mrs. Robert Kolb  
Mr. and Mrs. Rick Meyers

*In Memory of Judy Berman*

Ms. Aylene Koverly and Phil Moser  
Ms. Eileen Lafferty

*In Memory of John Briones*

Mr. and Mrs. Mark DeBono

*In Memory of Doris Chou*

Ms. Yohko Arnett  
Mr. and Mrs. John Coker  
Jacqueline Dupont and Marc Carlson  
Mr. Eric Fujimoto  
Mr. and Mrs. Steve Fujimoto

## Memorials Continued

Mr. and Mrs. Michael Gray  
Mr. and Mrs. Shu Huei Hsu  
Mr. and Mrs. Albert K. Huang  
Mr. and Mrs. Robert Joseph  
Mr. Gilbert Karp  
Mr. and Mrs. H. Kitagawa  
Danny, Joan and Ken Ko  
Gong Wen and Ya Ya Hsu Lin  
Mr. and Mrs. Louis Luk  
Ms. Judy Lynn Sagami  
Ms. Gloria San Angelo  
Bing and Sandia Tang  
Ms. Linda Scheck

*In Memory of Mr. and Mrs. William W. Drewry*

Mr. Richard Rockwell

*In Memory of Roger Eichmeier*

Mr. and Mrs. Ralph Harris  
Mr. and Mrs. Patrick Hulls  
Mr. and Mrs. Richard Larson  
Mr. and Mrs. Mark Thomas

*In Memory of Betty Enez*

Ms. Burri, Boyd Coffee Company

*In Memory of John R. Feehan*

Ms. Kathleen Malinski and  
Ms. Dorothy Feehan

*In Memory of Donald Geib*

Ms. Mary Geib

*In Memory of Leon Gibson*

Ms. Suzanne Sonnenberg

*In Memory of Bryan Hsiung*

Ms. Victoria Hsiung

*In Memory of Dr. Marion Jabczynski*

Mr. and Mrs. David Emery

*In Memory of Paolo La Ferla*

Mr. and Mrs. Hsin Liu  
Drs. Stephanie and James Moore  
Mrs. Linda Scheck

*In Memory of Rebecca Yasuko Larsen*

Ms. Gillian Bradshaw

*In Memory of Ruth Mary Light*

Ms. Thelma Bettancourt

*In Memory of Mr. K. L. Liu (and In Honor of Luter Liu)*

Mrs. Linda Scheck

*In Memory of Douglas Maron*

Ms. Shari L. Maron

*In Memory of Donald F. McAllister*

Ms. Elinor Bratton  
Ms. Evelyn Dashiell  
Ms. Gladys Halpin  
Mr. and Mrs. Mel Johnson  
Mr. and Mrs. Albert Knight  
Mr. and Mrs. Telford Lodden  
Ms. Betty Snider

*In Memory of Modena J. McFarlane*

Mr. Harlan Leonard

*In Memory of Carol (Becky) McGaugh*

Ms. Audrey M. Schneiderman

*In Memory of Grace Pinto*

Mr. and Mrs. Anthony Zingale

*In Memory of James W. Robertson*

Ms. Darlene Robertson

*In Memory of Carmen Ruiz*

Dr. Elsie Hidalgo  
Dr. Lynn Hunt  
Ms. Alison Jones

*In Memory of Mr. Isadore (Irv) Schreilberg*

Mr. Doug Herzog  
Ms. Jacquelyn Haddox

*In Memory of Garrett Sidler*

Mr. and Mrs. Clark Leonard  
Ms. Penny Cunard  
Ms. Jennifer Deitsch  
Mr. and Mrs. Chuck Elliot  
Mr. Doug Elliot  
Ms. Pamela Garcia  
Ms. Judy Michael  
Col. and Mrs. Charles Smillie Jr.

*In Memory of Dr. Stanley and Gerda Siegel*

Mr. Benjamin Tani

*Continued on next page*

## Memorials Continued

### *In Memory of Joe Sieger*

Drs. Berkelhamer and Bennett

### *In Memory of Helen S. Simpson*

Mrs. Edith Kingsley

### *In Memory of Gordon Smale*

Ms. Roswitha Smale

### *In Memory of Lou Steele*

Mr. Boyd Steele

### *In Memory of Einar Stefferud*

Mr. and Mrs. Jerry Sweet

### *In Memory of Anthony Ugolini*

Ms. Geni Ugolini

### *In Memory of Edna West*

Ms. Joyce Bragg

### *In Memory of Dallis Widick*

Mr. Randy Bohart and Mr. Ron Widick

### *In Memory of Zola Williams*

Ms. Jennifer DeCoursey

### *In Memory of Robert Wold and Phyllis Green*

Dr. Jacque DuPont

### *In Memory of Walter Wood*

Ms. May Aoyagi

Ms. Jacqueline Bell Dowling and Yahnke, LLC

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Joyce and David Greatbanks

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William and Karen Rameson

Ms. Suzi See

Ms. Margaret Sloan

Ms. Deborah Swift

Mr. and Mrs. Richard Tobin

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Ms. Denise Ballester

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Ms. Barbara J. Bean

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A Memorial Donation is a wonderful way to commemorate a loved one and to help support Alzheimer's disease research. Many families choose to make a lasting donation in memory of a friend or loved one in lieu of flowers. Once the memorial donations have been received, a thank you acknowledgment is sent to the donor.

As requested by the donor, we notify the family or other appropriate individual of the gift. All donors are recognized in the Mind Matters newsletter, unless the donation is designated as anonymous.

## 2 Simple Steps to Save on Taxes

Even though taxes have risen, there are a few simple steps that you can take to reduce your overall tax bill this year. Contact us to learn more!

### 1. Reduce investment taxes

The 3.8% Medicare surtax applies to almost any money you earn from investments. Lower your taxable investment income by shifting some of it to family and to charity, such as:

- A child who is not subject to the 3.8% surcharge
- A charity—such as UCI MIND Research and receive an income tax deduction this year

### 2. Reduce overall income to a lower bracket

Ideally, if you can lower your income below the healthcare tax threshold (\$200,000 for individuals and \$250,000 for married couples) you will avoid the 3.8% surtax. Reduce income by:

- Making a gift of income producing property to family or charity
- Transferring your income producing property to a charitable remainder trust that can help you control your income.

For more information about supporting Alzheimer's Research at UCI MIND, contact Roland Ho, UC Irvine, Office of Planned Giving. [Roland.Ho@UCI.Edu](mailto:Roland.Ho@UCI.Edu) or 949-824-6454.

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*Editor and Layout: Marcelo Soares, Director of Communications and Special Projects, UCI MIND*

# SAVE THE DATE

Saturday, May 31, 2014

5:30 - 11:00 pm

Lyon Air Museum

19300 Ike Jones Road, Santa Ana, CA 92707

## TIME OF YOUR LIFE



# 2014

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To inquire about sponsorship or tickets, please contact Linda Scheck at 949-824-3251 or [lscheck@uci.edu](mailto:lscheck@uci.edu)