The Center for the Neurobiology of Learning and Memory would like to introduce a new addition to our team of neurobiologists, Dr. Karina S. Cramer. Dr. Cramer came to UC Irvine in 2002 to join the faculty of the Department of Neurobiology and Behavior. Her research focuses on nervous system development and plasticity, with a focus on auditory pathways.

Karina’s current research looks at the embryonic origin and development of auditory brainstem nuclei and their synaptic connections. She investigates the molecular mechanisms underlying the formation of the precise connections of neurons in the auditory system. Her research also focuses on how these molecular mechanisms of development are related to the processes used by the brain to change and repair itself when connections in the auditory brainstem are altered following injury or other changes in auditory input. These studies provide insight into brain reorganization and contribute to the understanding of how the brain repairs itself. She finds it fascinating that auditory neurons can find the right “partner” neuron to connect with both during development and during repair after the loss of input. How the location and strength of synaptic connections is controlled is a fundamental research question being asked by neuroscientists, including those studying learning and memory. One of Karina’s goals is to figure out how we can take advantage of what we know about development to try to understand brain plasticity. She hopes her research will give help to those who have suffered hearing loss or brain injury.

Karina will add a new perspective to the CNLM, and represents the diversity of research interests in the Center. Her research will help bridge the gap between understanding memory at the neural and systems level. The addition of Karina to the CNLM contributes to the variety of approaches to studying learning and memory on which the Center prides itself.

Karina is very excited to be part of the CNLM. She realizes the possibilities for collaboration are endless. To read more about Karina’s research please visit our website: www.cnlm.uci.edu/faculty.
Meet our Donors
Featuring Dr. Renée Harwick

Dr. Renée Harwick, a friendly face you may have seen at the CNLM, has been a dedicated donor to the Center for many years now. Dr. Harwick has been very supportive of our lectures, awards and renovations. She has endowed two awards at the Center; the first is the Renée Harwick Advanced Graduate Student Award, which is awarded yearly to a graduate student who shows outstanding scientific promise, and the second is the Renée Harwick Visiting Scholars Award which helps provide support for foreign graduate students to visit and work in a CNLM lab. Upon Dr. Craig Stark’s appointment as a new faculty member in 2008, she helped fund the renovation to prepare his laboratory in the CNLM. She is also a long time Friend of the CNLM and a member of the Center’s external steering committee.

Dr. Harwick grew up in New York and moved to California when she was 14. She attended UCLA, majoring in psychology and graduating Phi Beta Kappa. She then received her Ph.D in Neuroendocrinology and worked as a postdoc at the Long Beach VA and the West Los Angeles VA. She also had an adjunct appointment in the Psychiatry Department at UCLA. After moving to Newport Beach, she became an investor which allowed her to contribute to her “first love,” CNS control of learning and memory. She feels that by donating to causes like this it gives others the opportunity to be able to advance in science.

Dr. Harwick is on the advisory board for the Susan Samueli Center for Integrative Medicine at UCI. She has been a docent for 15 years at the Orange County Museum of Art and she belongs to the Philharmonic Society. Also, she is on the Dinner with Scholars committee at the Merage Jewish Community Center, which raises funds for teenage Jewish programs. When she has spare time, she enjoys gardening and playing tennis.
Director’s Corner

Welcome to the latest edition of our newsletter. It comes at the beginning of a new academic year that promises both increased momentum in the research activities of the Center’s Fellows, fuelled by their continuing success in winning grant funding (see the article in this edition), and major challenges posed by the recent drastic cut in State funds to the University and, consequently, to the Center. Unfortunately, we are unable to use money from grants — which are allocated to specific research projects — to replace the general funds no longer available from the University. Therefore we must rely on the combination of internal econo-

The Importance of Grants

The success of research at UCI, as at all major universities, depends upon grant funding. Without grants, most research would cease, and scientific discovery and progress toward new or improved medical treatments would come to a halt. The National Institutes of Health (NIH) is the world’s largest financial supporter of basic research, and is the granting agency that many of our CNLM Fellows depend upon to fund their research. Obtaining funding from the NIH — where all funding decisions are based on the outcome of peer review — is extremely competitive. For example, of the 43,000 applications for funding received by NIH in 2008, only 22% were funded.

We are pleased to say that our Fellows continue to be very successful in winning funding from NIH. Just in the past six months, nearly $9 million has been awarded to CNLM faculty at UC Irvine. In addition to equipment and materials, these grants provide support for the majority of our graduate students and postdoctoral scientists, the people who will become the next generation of biomedical research scientists.

Like other scientists who depend on federal funding to support their research, we hope that Congress will approve increases in the annual appropriation to the NIH and other research agencies such as the National Science Foundation. It is important to stress to Congress that research funding is the key to the discovery of treatments that will prevent or lessen the impact of devastating disorders such as Alzheimer’s disease, depression, post-traumatic stress disorder, and addiction. We hope that you will contact your representatives and let them know that you support biomedical research and consider it a funding priority.

In Remembrance

Carol Joyce Becker McGaugh

Carol Joyce Becker McGaugh, known to everyone as Becky, passed away peacefully on June 19th after a long battle with Parkinson’s Disease. She will be deeply missed by so many who were graced by her love. She is survived by her husband James (Jim), the CNLM’s founding director, her son Douglas McGaugh and his wife Lynne, her daughter Janice Morrow and her husband Bill, and her daughter Linda Alva, as well as her seven grandchildren. A celebration of her life was held on July 15th at UCI’s University Club. Known as the First Lady of the CNLM, Becky was always an enthusiastic and proud supporter of our institute. We will miss her.

Kathleen “Kay” Fortescue Russell

Kathleen “Kay” Fortescue Russell passed away July 25, 2009 from complications of a massive stroke. Kay was the wife of CNLM Fellow Roger Russell who passed away 11 years ago on the same date. Kay was always thrilled to travel to the CNLM every year from her home in Atlanta to present students with the Roger Russell Scholars Award. The award was established in 1998 to honor students who possessed the same fine qualities as Dr. Russell. Kay is survived by her devoted family, Jon and Kathi Russell, Gillian, Justina and Johnny Mason and many friends.

Mark Rosenzweig

The science world is feeling a little empty with the passing of Dr. Mark Rosenzweig on July 20, 2009. Dr. Rosenzweig, a research psychologist at UC Berkeley, was an active CNLM Fellow in the early years of the institute. He pioneered studies in animals showing that the brain reshapes itself in response to experience, in adulthood as well as in early childhood. In addition, his earlier research into auditory perception also laid the groundwork for modern, noninvasive hearing tests. His wife of 61 years, the former Janine Chappat, died last year. He is survived by two daughters, Anne Janine Rosenzweig and Suzanne Jacqueline Washburn; a son, Philip Mark Rosenzweig; a sister, Patty Epstein; six grandchildren; and two great-grandchildren.
Special Events

The 16th UCI Distinguished Lecture Series on Brain, Learning and Memory

All lectures are held at the Irvine Barclay Theatre
4242 Campus Drive

Tuesday, February 2
Dr. Denise C. Park,
University of Texas, Dallas

Tuesday, March 16
Dr. Steven C. Cramer
University of California, Irvine

Ways you can become involved...

* Join our Friends
* Become a tour docent
* Buy a brick on Memory Lane
* Support the CNLM operations
* Attend a scientific colloquium or public lecture
* Name a garden bench
* Visit our website:
  http://www.cnlm.uci.edu

Dr. Frank LaFerla, CNLM Fellow and Director of the Institute for Memory Impairments and Neurological Disorders (MIND) had an open house celebration on September 15. A lecture was given by Dr. Claudia Kawas, CNLM Fellow, and tours were offered through their new laboratory space in the new building, Biological Sciences III. An artwork exhibit painted by Alzheimer’s patients was also on display. The artwork will be on a long term loan to UCI MIND so please stop by the third floor to view them.