Department of Psychological & Brain Sciences UCSB

Spring 2012 Volume 8



Leda Cosmides named Faculty Research Lecturer

The faculty of UC Santa Barbara has bestowed its highest honor on Leda Cosmides and John Tooby, professors of psychology and anthropology, respectively. Internationally recognized as the founders of the influential field of evolutionary psychology, Cosmides and Tooby have been named joint recipients of the Faculty Research Lecturer Award for 2012. The Faculty Research Lectureship was established in 1955, and Cosmides and Tooby share the 57th award.

In announcing the award, the UCSB Academic Senate noted that the scholars are credited with creating and shaping the modern framework for evolutionary psychology, which, according to one colleague, represented nothing less than a "scientific revolution" within the field of psychology. Their evolutionary approach to cognition culture is viewed as one of the most important new perspectives in the cognitive sciences in the past 50 years. Furthermore, their sustained rate of high-quality theoretical and empirical research continues to both lead and underpin the field.

"I was delighted to hear that Professor Cosmides and Professor Tooby were chosen as the 2012 recipients of our Faculty Research Lecturer Award," said UCSB Chancellor Henry T. Yang. "This very special recognition is a testament to the high regard our campus holds *continued p. 8*



Leda Cosmides and John Tooby, UCSB Faculty Research Lecturers, 2012

Department Likes Facebook

On the day before Facebook's Initial Public Offering, the UCSB Department of Psychological & Brain Sciences launched its own Facebook page, a place where we can communicate and celebrate news about departmental people and events. Like us at www.facebook.com/UCSBpsych



Jerry Jacobs wins the 2012 Edgar D. Tillyer Award



Jerry Jacobs

Jerry Jacobs, Research Professor in the Department of Psychological & Brain Sciences, is the 2012 recipient of the Edgar D. Tillyer Award from the Optical Society of America.

The Tillyer Award was established in 1953 through an endowment from the American Optical Company. The prestigious award is presented once every two years to a person who has performed distinguished work in the field of vision, including (but not limited to) the optics, physiology, anatomy or psychology of the visual system.

Jacobs was recognized for his contributions to the fundamental understanding of the biological mechanisms underlying color vision, and for pioneering comparative studies that revealed the nature, variations, and evolution of primate color vision. OSA President Tony Heinz noted that, "This year's recipients have made major contributions to advancing the science and technology of light. Their accomplishments and commitment serve to inspire the next generation of optics researchers and educators."

Jacobs, who joined the department in 1969, is also a recipient of the 2009 Verriest Medal from the International Colour Vision Society.

Richard Mayer receives the 2011 Sylvia Scribner Award



Richard Mayer

Richard Mayer received the 2011 Sylvia Scribner Award at the Annual Meeting of the American Educational Research Association. The award is the highest honor bestowed by Division C (Learning and Instruction) of the American Educational Research Association, and recognizes a program of work by a Division C member who has significantly influenced thinking and research in the field of learning and instruction.

In bestowing the award, 2011 Award Committee Chair, Dr. Daniel Hickey, noted that "Dr. Mayer's work has been cited over 1000 times in the last decade, which certainly represents a significant influence in understanding of learning and instruction in the last decade."

Mayer is also the recipient of the E. L. Thorndike Award for career achievement in educational psychology (in 2000) and the Distinguished Contribution of Applications of Psychology to Education and Training Award from the American Psychological Association (in 2008). He will deliver his award address at the Annual Meeting of the American Educational Research Association in Vancouver, Canada later in 2012.

Department Donors July 2011—June 2012

The Department thanks the following individual and organizational donors for their philanthropic support in providing essential resources for student fellowships, faculty research, and departmental programs and priorities.

Joanne & Lorin Anderson

Dr. David & Barbara Anderson 1969 Mr. & Mrs. William Collins 1958 Dr. & Mrs. John M. Foley Ms. Sandra G. Funk 1967 Ms. Susan Inwood Dr. Kenneth D. Kallio 1981 Cynthia & Alan Macy 1983 Dr. & Mrs. Donald H. Merschon 1968 Charles Nasser 1977 Ms. Andrea M. Penner 1980 Mrs. Melanie J. Plane 1989 Mr. & Mrs. Bruce J. Smith Mr. & Mrs. Stewart A. Turner Mr. & Mrs. C. Joseph Weber 1976 Angeliki & Robert Zaller American Psychological Association BIOPAC Systems, Inc. Northrop Grumman Foundation John Templeton Foundation SAGE Publications Inc. Yoga Research & Education Foundation

Alumni Spotlight: Dr. James L. Fozard '1954

James Fozard spent the summer of 1954 hefting boxes. With a newly minted BA, he earned extra money moving Professor Bob Gottsdanker's research equipment from the old Rivera campus to the Quonset Hut that was the psychology department's first home on UCSB's new clifftop location. Switching majors from music to psychology as a junior, Fozard first took, and then served as teaching assistant for, Gottsdanker's classes in statistics and experimental psychology.

"Years later," Fozard recalls, "I was invited back to UCSB to give a seminar on mental performance and aging, research that Gottsdanker was also doing by then. I was able to tell a couple of funny stories about Dr. Gottsdanker, which of course delighted the students."

Gottsdanker's recommendations helped Fozard get admitted to San Diego State College and to the Ph.D. program in experimental psychology at Lehigh University. Teaching and research positions at Colby College and MIT followed. But it was his appointment as Research Psychologist with the Veterans Administration Normative Aging Studies and a faculty appointment at Harvard Medical School that changed the focus of Fozard's research for the rest of his career. As Fozard notes, "You have to be open to change. Somehow ten years with ageless albino rats and college sophomores led to a thirty-something career in geropsychology."

In fact, he helped catalyze the scientific study of cognitive psychology in older adults. His papers with Nancy Waugh on aging and memory are still some of the most widely cited in the gerontological literature. His work as the VA Director of Extended Care changed care delivery in geriatric programs in VHA hospitals,



James Fozard, retiring as Director BLSA, 1998

nursing homes, and home care programs. As Associate Director of the National Institute of Aging, he directed the internationally famous Baltimore Longitudinal Study of Aging for 13 years, developing benchmarks for standardization, reliability, and open access that made the databases models of scientific data-sharing. In 1984, Fozard received APA's Distinguished Contribution Award from the Division on Adult Development and Aging.

Looking back on his own career, Fozard advises psychology students to embrace the inherently multidisciplinary nature of psychology, and to avoid polarizing battles between scientists and clinicians. "Gerontology is a synthetic discipline, built on biology, psychology, sociology, and geriatrics. You need them all to make progress," says Fozard.

He attributes much of his own impact to his insistence forty years ago on an interdisciplinary team approach to solving research problems, an approach that was then clearly ahead of its time.

Interdisciplinarity is the hallmark of what Fozard views as the most satisfying of his achievements: his co-founding of the field of gerontechnology. Gerontechnology uses the empirical knowledge of both gerontology and technology to facilitate the elderly's interaction with their environment. Along with Dutch colleagues from the University of Eindhoven, Fozard is largely responsible for formulating and articulating the new discipline.

At age 68, Fozard "retired" from thirty-one years in public service, to focus his creative talents on environmental interventions that could improve the elderly's quality of life. Using a patented human movement pattern analysis device that he co-invented, he and



The Sextet from Sound, 1954. Jim Fozard, trombone; Peter Swanson, clarinet; Tom Seal, trumpet, Galen "Ski" Wilson, piano; John Seal, bass; Bill Ward, drums.

colleagues at the University of South Florida and the Tampa VHA Hospital have successfully linked changes in the everyday movements of elderly people to increases in their risk for falls and cognitive decline, opening the way for preventive action. His many crucial contributions were honored in 2010 when the International Society for Gerontology named Fozard the first "Grandmaster of Gerontechnology," and dedicated a special issue of its peer reviewed journal, Gerontechnology, to his work.

Away from the lab, music has been a constant in Fozard's life. He played piano and trombone in high school, and trained while a UCSB undergraduate at the Music Academy of the West. His "Sextet from Sound" jazz-dance group was a popular favorite at UCSB dances and parties, and more than a half century later, Fozard is still moving with the beat as bass trombonist in Tampa Bay's premier brass quintet.

From operant conditioning to smart housing aids for cognitively impaired veterans, from appointments in the US to the Netherlands and Taiwan, across a career that has spanned more than six decades and produced more than 180 publications, Jim Fozard is certainly a monument to his own advice to be open to change.

Inside Psychology

Reese Leads Advance in Neuroscience and Vision

UCSB Press Release, 2012

Thanks to a new study of the retina, scientists at UC Santa Barbara have developed a greater understanding of how the nervous system becomes wired during early development. The work, described in a recent publication of The Journal of Neuroscience, reflects the expansion of developmental neurobiology and vision research at UCSB.

The research team examined the connectivity of nerve cells, called neurons, in mice. Neurons communicate with one another via synapses where the dendrites and axon terminals of different cells form contacts. This is where nerve signals are transmitted from one neuron to another.

Scientists have understood for some time how neuronal activation at developing synapses contributes to the patterns of connectivity observed in maturity, explained Ben Reese, senior author and professor in UCSB's Neuroscience Research Institute and the Department of Psychological & Brain Sciences.

Incoming activity plays a critical role in sculpting neuronal form and the elaboration of synaptic connections. The new research shows, by contrast, how relationships between neighboring cells of the same type independently regulate neuronal size and connectivity.

The researchers circumvented the difficulty of visualizing the threedimensional relationships between neurons within the brain by working within

the retina. The retina is an outgrowth of the brain during embryonic development, and is a precisely layered structure in which the cells, their dendrites and their axons are restricted to discrete strata. "This makes the visualization and analysis of neuronal morphology and connectivity far simpler," said Reese.

The scientists used two genetically modified mouse models to modulate the density of one particular type of continued on p. 12

2011-12 Graduate Student Award Winners

Graduate Division Science & Engineering Research Grant Program Marjorie Rose and Abdullah (Al) Nasser Scholarship Courtney Gosnell Charles G. McClintock Graduate Fellowship in Social Psychology Diana Leonard Harry J. Carlisle Memorial Award Kevin Lominac **Fletcher Jones Fellowship Graduate Research Mentorship Award** Joni Sasaki **Graduate Division Dissertation Fellowship** Jackie Chen **Graduate Division Opportunity Fellowship** Thery Prok National Science Foundation Graduate Fellowship Benjamin Baird Randy Corpus Jeff Hunger Benjamin Mooneyham William Ryan **Graduate Division Doctoral Scholar** Eva Padilla Lauren Winczewski **Dean's Fellowship**

Kerisa Shelton



A New Twist on Nature vs. Nurture: Heejung Kim and David Sherman

UCSB Press Release, 2012

Heejung Kim and David Sherman, associate professors in the Department of Psychological and Brain Sciences, have provided a new twist on the old adage that people are products of both nature and nurture. The researchers are studying how genotypes (nature) can express themselves differently as a function of culture (nurture).

Using the oxytocin receptor polymorphism (OXTR), which is linked to socioemotional sensitivity, Kim and Sherman demonstrated in research funded by the National Science Foundation that individuals can have the same gene, but manifest it differently, depending on their respective cultural experiences. The study involved Korean and American participants, which allowed the researchers to compare the expression of OXTR in people raised in a more collectivistic East Asian society, with that of people who grew up in the more individualistic American society.

"There's a genetic component to psychology that people are studying more and more," said Kim. "Genes influence people's reactivity to different things, such as environmental sensitivity and stress reactivity." As an example, Kim cited the genetic component to depression. A person can inherit the gene for depression, but studies show that the gene alone will not make him or her more prone to the condition. "If you have the gene and you are subject to harsh life experiences, only then do you



Heejung Kim and David Sherman

see genetic differences emerging," she said. "That's the gene/environment interaction."

In their research, Kim and Sherman identified culture as the form of environment. "If people's genes lead them to be more environ-



culture as the form of environment. It people's genes lead them to be more environmentally sensitive," Kim explained, "then they should behave in a more culturally consistent way. If I'm an emotionally sensitive person, when I look around my environment and the cultural norms say 'this' is the appropriate way to be, I'm more likely to be that way." Likewise, the person who does not have the gene for that trait would be less likely to adhere to cultural norms.

Kim and Sherman's most recent work examines emotion regulation strategies. Prior research demonstrated that emotional suppression is more common in Asian cultures than in American culture — people tend to suppress their emotions more in Asia and are less disturbed by doing so. Korean and American participants completed assessments of emotion regulation and were genotyped for OXTR.

Among Koreans, those with the GG genotype (the more environmentally sensitive people) reported using emotional suppression more than those with the AA genotype, whereas Americans showed the opposite pattern.

The findings show a consistent pattern with other results from their labs. "In terms of gene-culture interactions, our research team has now found results in three different areas of psychology — emotion regulation, interpersonal interaction in terms of social support seeking, and cognitive style," said Sherman. "Each time, the genotype led to different psychological outcomes as a function of culture."

These findings underscore an important lesson. Noted Kim: "When thinking about genes, it's important to avoid simplistic genetic essentialist thinking. When you look at differences in genetic composition, you can't really assume that you can predict a person's outcome. There is a personal/environmental input, and we're adding cultural input as well."

"One of the oldest questions in psychology is how people are affected by nature and nurture," said Sherman. "Everyone agrees that people are impacted by both, but the gene/culture interaction framework begins to specify how that happens by accounting for cultural variability as well. Depending on an individual's cultural context, the same genotype can lead to very different phenotypes."

Other researchers involved in the study include Dr. Shelly Taylor from UCLA, P&BS graduate students Taraneh Mojaverian and Joni Sasaki, and Professor Eunkook Suh and graduate student Jenyeoung Park of Yonsei University in South Korea.

Where Are They Now? Psychology ClassNotes

1950s

Mary Jane Carlisle 1959 received a MEd in Counseling Psychology in 1970 (UCSB Graduate School of ED) and PhD in Counseling Psychology (Graduate School of Ed) in 1992. Licensed Psychologist 1994. Working at Counseling Services (UCSB) since 1970. Planning to retire in 2 years.

1960s

Arnold M. Golub 1962 completed graduate school and post-doctoral training on the east coast and settled in Sacramento, CA. where I taught and did research for half of my career and was a department chair or a university administrator for the other half of my career. I am proud of having chaired the Department of Psychology at the California State University Sacramento for four different and non-sequential three-year terms over a three-decade period and also served in the university's administration for six years. In May, 2010, I fully retired and am still living in Sacramento, CA.

David Reese 1967 retired on February 1, 2012 as Kentucky River Senior Regional Epidemiologist serving 8 counties in Southeast Kentucky. Continue to teach online part-time as Adjunct Faculty for the Behavioral Sciences Department, Drury University, Springfield, Missouri. I continue to serve as part-time community health consultant for the University of Kentucky, Appalachian Community Cancer Network and reappointed a Assistant Professor (voluntary) with the College of Medicine and College of Public Health at the University of Kentucky. Our son Jeremy begins his third year as a surgical resident in Urology at the University of Pittsburgh Medical Center this summer. Our second grandson is expected later this summer.

My interest in teaching Psychology began during my undergraduate years at UCSB when I began working part-time for Dr. Walter Gogel in his Psychology Laboratory. I developed an appreciation for the scientific method and excitement for psychological research in his laboratory and in my own laboratory studies of operant conditioning with the new "Skinner Boxes" and neuropsychology research involving the hypothalamus in laboratory rats. Dr. Gogel spent a great deal of time with me during these years discussing psychology, research and some of the "big" issues of life while serving as my teacher and mentor.

Following my graduation from CSU Dominguez Hills with an M.A. In Behavioral Science in 1970 I was appointed as Instructor of Psychology from 1970-973 at Holy Names College in Oakland, California. I was one of two full time faculty members at that time and responsible for establishing the Psychology Learning Laboratory with "Skinner Boxes" and teaching all of the Experimental Psychology courses as well as the History of Psychology and Introductory Psychology.

In 1975 I earned the M.P.H. In Public Health Education at the University of California, Berkeley. I taught part time for a few years in Bay Area community colleges and then launched my 35 year public health career as Public Health Education Specialist with the District Seven Health Department in Idaho Falls, Idaho. I have since served as senior executive officer for local health departments and federally qualified community health centers in Idaho, Washington, Missouri, Kansas and Kentucky. My last eight years of service as Senior Regional Epidemiologist were with the Kentucky River District Health Department in Hazard, Kentucky.

I am grateful for the opportunity to have studied and graduated from UC Santa Barbara. These years of study helped provide a firm foundaation for my professional and my personal life.

Gregory Cermak 1968 got a PhD in psychology from Stanford in 1972. He did applied psychophysics and applied psychometrics in industry for 38 years at General Motors Research Labs, Information Resources, Inc., and GTE/Verizon Labs. Research topics included human response to pollution caused by automobiles and trucks at GM, and perceived voice quality and video quality over telecommunication channels at GTE/Verizon. He currently is retired, living in a village in England, and improving his change-ringing.

1970s

Michael P. Levine 1971 *1979 retired in June 2012 after teaching psychology at Kenyon College (Ohio) for 33 years. He and his wife (Mary A. Suydam, UCSB BA in Medieval Studies, 1973; UCSB Ph.D. in History, 1993) plan to move, by 2015, to their condominium in Goleta, on the north side of the UCSB peninsula.

Richard S. Marken *1973 was Associate Professor and Chairman of the Department of Psychology at Augsburg College in Minneapolis and consulted at Honeywell on statistical, methodological and human factors issues related to workspace design and human-computer interface technology. He was an engineering specialist at The Aerospace Corporation, where he did human factors engineering for satellite control systems and a Senior Behavioral Scientist at the RAND Corporation in Santa Monica, CA where he did policy research on health care and national security issues. He currently works as a statistical consultant and lecturer in Psychology/Statistics. He is the author of three books and over 50 papers on the application of control systems theory in the behavioral sciences.

Darlene C. (Fogal) Peterschick 1975 I'm a semi-retired art therapist (ATR) and hypnotherapist returning more fully to making ART. I am in the process of building an art studio finally after all of these years. The last year I built a wine bottle wall as a back wall to my garden--(no, I didn't empty the bottles myself--our in-laws own an Italian restaurant). I am hoping to be able to complete the art studio this summer in order to present a variety of workshops in creativity, wellness, etc. I am also happy to say that my husband and I are spending as much time as possible with our 6 year old grandson. More traveling is also on the bucket list.

Randy Kado 1975 After completing my Ph.D. in Clinical Psychology at the California School of Professional Psychology Los Angeles in 1980, I served five years on active duty U.S. Navy Reserves. Since then I have worked for Kaiser Permanente, Department of Rehabilitation and Department of Psychiatry. I am currently working at Montclair Mental Health testing outpatients, testing inpatients at Canyon Ridge Hospital, and evaluating patient's at the Ontario Emergency Department.

Sybillyn H. M. Jennings 1975 is Professor and Chair of Psychology at The Sage Colleges, where she has been teaching since 1976, except for a year at The University of Denver where she completed a postdoctoral fellowship in cognitive development, with leaves to work on various projects at Rensselaer (RPI) in mathematics and physics education, and materials handling engineering. She coordinates the WORLD general education program at Russell Sage, which focuses on women's lives globally and human rights in the local community. Syb has had the great pleasure to connect with Linnda Caporael, Professor at Rensselaer, in studying the relation between evolutionary and developmental psychology.

Joel Moskowitz *1976 has directed the Center for Family and Community Health in the School of Public Health at UC Berkeley since 1993. The center conducts community-based health promotion and disease prevention research. In the past 3 years, Joel has developed expertise regarding the health effects of cell phone radiation and has informed many journalists and policy makers about this emerging public health problem.

Bob Renard 1978 I am a 61 year old licensed clinical social worker living in Ventura, CA with my wife and two dogs. As a psychotherapist, I strive to combine my clinical skills with spirituality and compassion. In recent years I discovered my passion for writing poetry. I am happiest when sharing an evening with friends or when I am out in nature hiking, golfing, kayaking or camping. The past 11 years have brought many changes to my life. I married, moved to Ventura, opened my own practice and converted to Judaism. My spiritual and personal journey has brought me knowledge, fulfillment, and a greater understanding of myself and those around me. I have a 27 year old daughter and a 29 year old son. brenardlcsw@sbcglobal.net

1**980**s

Bart Allan 1986 double majored in Business Economics. Until this year, it was the business degree that was related to my profession. However, when looking for a change of careers, it was the Psychology degree that caught the eye of the owner of RKS Designs - an industrial design company. Apparently, there's a good correlation between designers and psychology when it comes to the creative space. I'm in business development and get to work on great projects in which our company gets to design products for the medical and consumer electronics industries here in southern California. Go Gauchos!

Jeff Hayden 1987 received his MA in Special Education, Disabilities and Risk studies from the Gevirtz Graduate School of Education in 2004 and passed his exam to become a Board Certified Behavior Analyst. Jeff is currently writing his doctoral dissertation examining the facilitators and barriers to implement evidence-based practices in community behavioral health settings. He and his wife, Dr. Lisa Hayden, own a behavioral services agency that serves the behavioral needs of individuals throughout the tri-counties region. Jeff and his wife live in Camarillo and have six children, two in college, one soon to graduate top of his class in the Navy's submarine school, one in fifth grade, and twins in the third grade.

German Torres *1988 torresg@nyit.edu | am currently an associate professor at a medical school (New York College of Osteopathic Medicine of New York Institute of Technology) where I teach neuroanatomy, neurochemistry and neuropharmacology to first and second year medical students.

Sarice (Intrieri) Plate 1989 I am now the head of HR Operations & Talent Management for Cadence Design Systems, Inc. I have been with Cadence for over 16 years, and feel very blessed to have had many growth and development opportunities presented to me over the years. I am married with two wonderful children – boys age 11 and 9. We live in Austin, TX and love spending time together as a family doing outdoor activities and boating on the Lake. I cherish my memories from UCSB and remember fondly the wonderful faculty and student community!

1990s

Michelle Johnston 1990 is the Regional Director for the Alzheimer's Association in the Greater Sacramento Area.

Tim Harrison 1991 Currently I am Dean of Athletics, Communication Studies, ESL, Foreign Languages, Kinesiology, Health, and Off-campus Programs at Ventura College. Great memories of UCSB and my psychology courses. Go Gauchos!

Matt Quinley 1992 returned home to Sacramento, CA and worked briefly in a residential treatment program for emotionally disturbed youth. In 1993, I was accepted into the UC Berkeley Social Welfare Masters program and received my MSW in 1995. I have been working for Sacramento County Mental Health since graduation as a clinician, therapist and manager. I am currently a manager in our Quality Management services providing training and technical support to providers and contractors. My wife and I also have started a business providing training and support to residential care homes and facilities (M&D Quinley Professional Services). MQuinley@Comcast.net

Lisa (Hellwig) Wofford 1992 I'm finishing my 15th year of working as a school psychologist. My husband and I have been married for 11 years, and we have twin boys who are almost 5. We're headed to Disney World this summer! fape4all@pacbell.net

Peter A. Rosen 1993 recently co-authored a paper with Donald Kluemper and Kevin Mossholder entitled 'Social Networking Websites, Personality Ratings, and the Organizational Context: More Than Meets the Eye?' that appears in the May 2012 issue of the Journal of Applied Social Psychology. The article examined how personality, as measured on social networking websites, could be used to predict job and academic performance. The article received international press coverage and was featured in the Wall Street Journal, Chicago Tribune and Los Angeles Times. The article is available as a free download from the *Journal of Applied Social Psychology* website. Dr. Rosen is an Associate Professor of Management Information Systems at the University of Evansville in Evansville, Indiana.

Daniel Thomas (Tom) Wellman III 1993 I have been teaching internationally for now 12 years. Just finished a contract with Newmont Mining Co. in Sumbawa Indonesia, great pay for a teacher of the IB school grades 2 and 3 in the jungle with lots monkeys and amazing white sand and perfect surf. I took that money and my two boys ages 6 and 9 back to Bali! Now I'm running a company called thumbs up! Motivating positive attitudes through activities! So we do surfing, skateboarding, parkour, wrestling, and a variety of cool stuff! I am now doing an adventure race and party on the outlying islands of Bali! So come join us- mountain biking and paddle boarding and cliff jumping, a fun event for family or to meet people! Twellman3@yahoo.com

2000s

Navid Papehn 2004 went on to receive his MA in Clinical Psychology from Teachers College, Columbia University. He graduated in 2005, returning to Los Angeles. At the start of 2006 he began working at an inpatient eating disorder treatment facility, of which he was the Program Director for 3 $\frac{1}{2}$ years. During this time, Navid also began his studies at Fielding Graduate University in pursuit of his doctorate degree in Clinical Psychology. He hopes to graduate in 2014. Navid is currently the Program Director at The Bella Vita, an outpatient clinic in Los Angeles that specializes in the treatment of eating disorders. He and his wife married last year and live in Thousand Oaks, CA.

Celeste Campos-Castillo 2004 received a Ph.D. in Sociology from The University of Iowa during May 2012. As a graduate student, her dissertation research on patient-provider interaction was supported by a National Science Foundation Doctoral Dissertation Improvement Grant. Beginning July 2012, she will be a post-doctoral fellow in the Institute for Security, Technology, and Society at Dartmouth College researching Health Information Technology.

Miles Ashlock 2007 completed his M.A. in Educational Leadership & Organizations in 2011 at the UCSB Gevirtz Graduate School of Education and remains enrolled there as a doctoral student. He now serves as the associate director of the UCSB Office of Student Life. He was married last fall in Santa Barbara. miles.ashlock@sa.ucsb.edu

Cosmides and Tooby Faculty Lecturers, continued

UCSB Press Release, 2012

for their groundbreaking scholarship, outstanding research contributions, and scientific leadership in the field of evolutionary psychology."

In spearheading the new field of evolutionary psychology, Cosmides and Tooby, who are co-directors of UCSB's Center for Evolutionary Psychology, have integrated knowledge from a variety of fields, including evolutionary biology, cognitive neuroscience, primatology, and behavioral ecology. In doing so, they have explored the extent to which the human mind contains neuro-computational mechanisms that evolved to solve specific adaptive problems repeatedly faced by humans across their evolutionary history.

"Psychological Foundations of Culture," their chapter in the book "The Adapted Mind," which they also co-edited, is regarded as one of the most important publications in psychology in the 1990's. That paper, along with a dozen or so related publications, created what scholars have described as a paradigm shift in thinking in the field of psychology that extends into the social sciences. The work of Cosmides and Tooby is now seen as foundational in fields such as political science, sociology, and economics, among others.

In "Psychological Foundations of Culture," they compared the Standard Social Science Model (one that assumes a small number of general-purpose programs that allow reasoning and learning of many different kinds) with the tenets of evolutionary psychology (which proposes special-purpose programs that evolved to solve specific types of problems). In a relatively short period of time, the proposed framework became accepted as one of the major approaches to both psychology and anthropology.

In selecting Cosmides and Tooby for the 2012 honor, the Faculty Research Lecture Committee also noted that a central feature of their respective careers is a sustained — and, indeed, escalating — rate of scientific productivity. Their work has received more than 20,000 citations, with more than 50 papers cited at least 50 times. Their research has appeared in top journals, including Nature, Science, the Proceedings of the Royal Society of London, the Proceedings of the National Academy of Sciences, Psychological Review, Psychological Bulletin, Behavioral and Brain Sciences, and Harvard Business Review.

In addition, they were jointly recognized as recipients of the J.S. Guggenheim Memorial Award, and Cosmides was selected for a 2005 National Institutes of Health Directors' Pioneer Award, an honor she shared with Tooby. Only 23 of these awards have ever been given, and Cosmides is the only behavioral scientist ever to receive one. The award is reserved for those "willing and able to explore ideas that were considered risky at the inception," and who are "truly visionary thinkers who are able to make those leaps and change the current paradigms of medical research."

Tooby joined the Department of Anthropology at UCSB in 1990, and Cosmides joined the Department of Psychological and Brain Sciences in 1991. Both professors completed their undergraduate and graduate degrees at Harvard, and were fellows at Stanford University's Center for Advanced Study before becoming members of the UCSB faculty.

A Peek at the Past



Dr. Robert Reynolds, standing left, supervises the work of three students, Larry Rust, Jack Hall, and Harry Carlisle in the new experimental research laboratory. Santa Barbara News Press, February 13, 1959.

Chairperson's Award Presented to students who have provided service to the department as peer advisors and officers of Psi Chi.

UCSB Undergraduate Research Colloquium Award Awarded for the best poster presentation in Psychological Sciences at the annual UCSB URCA Colloquium. Jennifer Lane Kelly Rowe Jonathan Barthelet (Honorable Mention) Jeremie Djauhari (Honorable Mention) **Distinction in the Major** Cynthia Eschenfelder Melanie Guevara Brenna Malta Katerina Marcoulides Justina Mujica Angel Ramirez Kelly Rowe Rachel Samec Amy Williams Rachel Wu **Exceptional Academic Performance** Awarded to students who have achieved a 3.9 or higher GPA in at least 36 units of upper division major coursework.

Jenna Adams Ramanjot Bains Lauren Copley Cynthia Eschenfelder Karim Farrag Rachel Gray Daniel Greentree Melanie Guevara Kathryn Guy Alyce Haley Eric Holtzman Jennafer Hope Carolyn Husa Kristen Iwanicki Lauren Keller Taylor Krippes Brenna Malta Kelsey Menges Katherine Peck Kelly Rowe Lauren Smith Alexander Smitham Mateen Soleman Khiem Tran **Amy Williams**

Philip Steven Rethis Memorial Award Awarded to a graduating senior in Psychological & Brain Sciences who demonstrates some of the attributes that made Philip Rethis special, including character, determination, and scholarship.

Charles Clarke

The Morgan Award for Academic Excellence in Psychology Awarded to graduating Psychological & Brain Sciences students in recognition of outstanding scholarship, selected by the faculty.

> Brenna Malta Davis Vo

The Morgan Award for Research Promise in Psychology

Awarded to students who demonstrate the most promise in the area of experimental research in Psychological & Brain Sciences, selected by the faculty.

> **Daniel Greentree** Nils Madsen

Distinguished Graduating Senior

Awarded in recognition of academic and research excellence and service to the department, the university, and the community.

Rachel Samec Amy Williams

Department Celebrates 2012 Undergraduate Award Winners

Kallie Dixon

Katerina Marcoulides

Erin Embrey David Greenberg Melissa Nilles Joanna Tieu

Volume 8

Amy Williams

Presented to students who have completed a senior honors thesis in the Department of Psychological & Brain Sciences.

New Faces in Student Affairs

Department students are in good hands with the hiring of a new team in the Student Affairs area.

Casey Hankey, Student Affairs Manager, is a 3-year veteran of Psychological & Brain Sciences Student Affairs, starting as Undergraduate Advisor in 2009. A Santa Barbara native, Hankey went east to Columbia to get her BA in English. Although her responsibilities include all the administrative duties that come with oversight of four graduate programs, two undergraduate degrees, and three staff members, she's happiest when channeling the energy she feels from working on campus into problem solving. "What I like best is the satisfaction of helping students achieve their goals, especially in this climate of constant budget cuts."

When changes in the department gave Hankey an enviable opportunity to hire her own team, she helped bring on board Jami Chavez and Chris McFerron as Undergraduate Advisors. Students seeking guidance on classes, schedules, and campus life get the benefit of an inside view: both Chavez (Sociology 2001) and McFerron (Psychology and Philosophy 2002) graduated from UCSB.

Both are committed to offering the kind of one-on-one personal attention that might otherwise be hard to find in a department with 2200 majors and premajors. McFerron loves the interaction with students, and tries to spend as much time as needed with each one. "Each person and each situation is different. It's easy to forget that when you hear the same questions and problems over and over again, but I try to remember that a lot of students are incredibly nervous just coming in to talk to us in the first place." Chavez feels the same way and finds that her Masters degree in counseling psychology comes in handy. "I know I might be the first or only staff member the student sees, so I try and provide as much assistance as I can. Then I encourage them to explore their interests, to take advantage of all the opportunities available on campus, and to get involved."

On the Graduate Affairs side, Graduate Program Assistant Crystal Carlos coordinates the recruitment and orientation of new graduate students, assigns teaching assistants and associates, oversees graduate progress to degree, and is the official keeper of records for the department's 80 graduate students. Another graduate of the department, Crystal volunteered at local non-profit Council on Alcoholism and Drug Abuse's Teen Court before being hired as a Financial Assistant at UCSB's National Center for Ecological Analysis and Synthesis, a job she now splits with her graduate advising duties in Psychological & Brain Sciences.

Weekends and evenings find the Student Advising staff enjoying the great outdoor activities Santa Barbara has to offer – like running, biking, playing soccer, scuba diving, and developing a fine appreciation for the wineries of the Santa Ynes Valley. But come Monday morning they're ready and waiting with advice: "Don't wait to come in and ask!"



The Psychological & Brain Sciences Student Affairs team: Crystal Carlos, Chris McFerron, Jami Chavez, and Casey Hankey

Stay in touch with Psychological & Brain Sciences at UCSB

- Visit the department on the web: www.psych.ucsb.edu
- Like us on Facebook at http://www.facebook.com/UCSBpsych
- If you'd like to be added to the departmental alumni e-mail list send an e-mail to **alumni-subscribe@psych.ucsb.edu** We use this list only to get in touch with you about the Inside Psychology newsletter.
- If you would like to contribute to ClassNotes, please submit a 120 or fewer word update to **InsidePsychology@psych.ucsb.edu** Start with your name and year of graduation. Include your e-mail address only if you want it seen by the entire readership of *Inside Psychology*. No websites can be included in ClassNotes. We look forward to hearing from you!

Giving Opportunities in the Department of Psychological & Brain Sciences

Would you like to be part of the future of teaching and scholarship in the Department of Psychological & Brain Sciences at UCSB? Your gift, no matter how large or small, can help us:

- create top-notch learning programs for undergraduates
- support and reward the research endeavors of our very best undergraduates
- facilitate cutting edge research efforts that move both science and society forward
- attract and hire the most competitively recruited scientists at every stage of their careers
- support the best and brightest graduate students in their pursuit of the Ph.D. degree
- bring distinguished lecturers to the department to the benefit of both faculty and students
- outfit and equip research and scholarship spaces in the new building where faculty and students of all levels can interact

The Department greatly appreciates any support you can offer. We can provide information on dollar amounts associated with specific gift needs in the department.

The Department gratefully accepts gifts of any variety or type of assets, including appreciated securities, cash, real property, and personal property.

Gifts to the department can be made outright, pledged over a period of years, or made through planned giving vehicles such as charitable remainder trusts, charitable lead trusts, gift annuities, bequests, or other vehicles.

Many employers also match contributions to UCSB. Please check with your employer if you are unsure.

Graduate Student Support Fund

Who inspired you to get a psychology degree? Who made the difference between finishing and not finishing that honors thesis? When you had a problem in class, whom did you seek out? For many undergraduates, the answers to all these questions is "My T.A." or "The graduate student I worked with." Graduate students make crucial and compelling contributions to the teaching and research missions of the Psychological & Brain Sciences Department at UCSB. In large lecture courses, they are the students' lifeline to the instructor. In lab classes, they are the ones who can crack the statistics codes, and show you the technique over and over again. And most students working in individual labs work closely with and learn much about graduate school from the lab's Graduate Student Researchers. As UC funding falls, the need for graduate student support grows ever more pressing. If you'd like to make a donation earmarked for graduate student support in thanks for all that help you might have received back then, please contact chair Diane Mackie at mackie@psych.ucsb.edu.

From the Department Wish List

Non-restricted Fund: non-restricted funds for the department to use to meet its highest priority needs

Departmental Distinguished Colloquium Speaker Fund: funds for costs associated with bringing nationally and internationally known speakers to the department to share their research with faculty, graduate students, and undergraduates

Charles G. McClintock Fund: funds established to support senior graduate students in the Social Psychology program who combine high standards of scholarship with service to the program

Harry J. Carlisle Award: funds established for the support of outstanding graduate students in the Neuroscience and Behavior program

Undergraduate Awards Fund: funds to support awards given to seniors in Psychology and Bio-psychology who graduate with distinction in the major, and to enhance and enrich the undergraduate program

Psi Chi Fund: funds for the support of professional activities and scholarship enrichment for psychology majors elected to the national psychology honors society

You Choose

You can give to the department and specify how you would like your funds used, or allow us to use the funds where we need them most. You can give by check or credit card or by contacting the Department Chair Diane Mackie at 805-893-2858 or mackie@psych.ucsb.edu. Or click on the "**Give to the department**" button at our departmental home page **www.psych.ucsb.edu**

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Reese Leads Advance in Neuroscience and Vision, continued

retinal neuron, a class of cone bipolar cell. Cone bipolar cells relay information from the population of cone photoreceptors to the retinal ganglion cells. The latter are neurons that in turn project information to locations within the brain where further visual processing of the retinal image takes place. The lead author on the study, Sammy Lee, was a postdoctoral researcher in Reese's lab and supported by a C.J. Martin National Health & Medical Research Council fellowship from Australia while the study was run. Lee labeled individual cone bipolar cells with a fluorescent dye through a new microinjection procedure developed by Patrick Keeley, a graduate student in the Reese lab. "What Dr. Lee has shown is that cone bipolar cells modulate the size of their dendritic fields (branched extensions of the neuron) in association with the local density of like-type neurons," said Reese. "One line of mice has conspicuously fewer cone bipolar cells, each now with a larger dendritic territory, while the other line shows heightened densities and correspondingly smaller dendritic fields." Other studies have suggested such homotypic (like-type) modulation of dendritic field size, but the current study directly shows this modulation following genetic manipulation of neuronal density, said Reese.

Additionally, the researchers found that connectivity with the afferent population of cone photoreceptors is impacted directly, with the larger dendritic fields being innervated by more cones, and the smaller dendritic fields connecting with fewer cones. At any individual cone, the number of dendritic endings associating with that cone was not observed to change, so that the total number of connections made by a cone bipolar cell was remarkably plastic, defined solely by the number of cone contacts formed. "This developmental plasticity in



A single cone bipolar cell (green) extends its dendrites to receive synaptic inputs (red dots) from a local population of cone photoreceptor terminals (violet).

dendritic growth and synapse number may be well-suited to ensure uniform coverage and connectivity between two populations of neurons — afferents and their targets — when the number of cells in each population is specified independently," said Reese.

Other studies from Reese's lab, recently reported in The Proceedings of the National Academy of Sciences and Investigative Ophthalmology and Visual Science, showed how neuronal number is tightly specified genetically, yet is highly variable between different strains of mice. "Wiring together two populations, each of which may vary nearly two-fold in size, yet independent of each other, might best be served by such homotypic plasticity during early development," he said.

Studies like these may prove relevant for re-establishing connectivity following nerve cell re-specification or replacement in degenerative diseases, particularly as advances in stem cell biology make this an increasing possibility. Reese's research is funded by the National Eye Institute of the National Institutes of Health. In addition to clinical research, National Institutes of Health funds basic research furthering the fundamental understanding of biological processes; in this case, neural development.