



## Magic meets science at Sage Center event

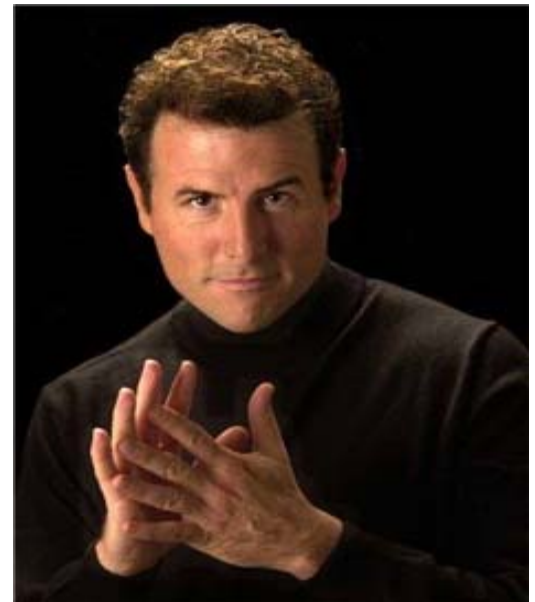
Grand illusionist Patrick Martin performed a little magic December 10 at UCSB as the Sage Center for the Study of the Mind hosted an event to help explain the science behind those “Now you see it, now you don’t!” moments.

**“For centuries, magicians have been manipulating human perception, taking advantage of what our minds do and don’t do well,”** says Sage Center Director Mike Gazzaniga. **“Cognitive neuroscientists are looking at the same problems, and knowing why and how magic works tells us something about how cognitive systems work.”**

We often think of visual perception as the output of a movie camera, reproducing reality as we look at it, but it is actually more of a reconstructive process. At any particular moment we see the detail of a small highlighted area we are focusing on and fill in the rest with a combination of expectation, memory, and crude peripheral signals. The gaps in the system, and the ways we fill them in without even knowing we do so, are grist for the magician’s mill.

Misdirection is the mainstay of magic shows – draw the audience’s attention with a wave of the wand, a beam of bright light, or continuous color commentary and hold it there while away from the action a card is marked or a ball disappears discreetly into a pocket. Taking pity on his audience, Martin led them slowly through a classic card identification trick, showing them when and how – while they were looking elsewhere -- he had unobtrusively bent back the corner of the card his audience participant had chosen.

Other illusions depend on known behavior of the visual system, such as when the production of afterimages promotes apparently amazing color changes or the disappearance of items against an opposite colored background. With a series of slides that would make any visual perception class a student favorite, Martin demonstrated both classic illusions and some of the completely deceptive trompe l’oeil street paintings of artist Julian Beever (see photo). *continued p.12*



*Grand illusionist Patrick Martin*



*Trompe l’oeil master Julian Beever “interacts” with his street created water scene.*

## The power of positive psychology

The burgeoning science of the human strengths that enable individuals and communities to thrive was in the spotlight at a presentation on positive psychology in May. A group of undergraduates, led by seniors Kate MacAleavey and Christina (Tina) Marini, organized the event, which was themed “Bliss, Thrive, Alive.” The positive psychology movement focuses on the antecedents and consequences of positive feelings and emotions; immersion and absorption in meaningful activities; and affiliation with and contribution back to a larger community.

“Research has shown that positive emotions, like gratitude and *continued p.8*

### Inside Inside Psychology

Scott Grafton becomes ICB Associate Director	2
Undergraduate research colloquium	2
Alumni Spotlight: Charles W. Nasser	3
Joe Jablonski receives 20 year pin	4
Psychology Donor List	4

Making a Difference: Nancy Collins	5
Where Are They Now?	6
Graduate student award winners	8
Brain mechanism identifies cheaters	9
Undergraduate award winners	9
How You Can Help	11

## Scott Grafton becomes Institute for Collaborative Biotechnologies Associate Director

Scott Grafton, Professor of Cognition, Perception, and Cognitive Neuroscience, will become Associate Director of the Institute for Collaborative Biotechnologies (ICB) at UCSB beginning July 2010. Inspired by the study of processes, structures, and features found in nature, interdisciplinary ICB research teams are tasked with developing revolutionary technological innovations in bio-inspired materials and energy, biomolecular sensors, bio-inspired network science, biotechnological tools, and cognitive neuroscience. The ICB is led by the University of California, Santa Barbara (UCSB), in partnership with the Massachusetts Institute of Technology and the California Institute of Technology.

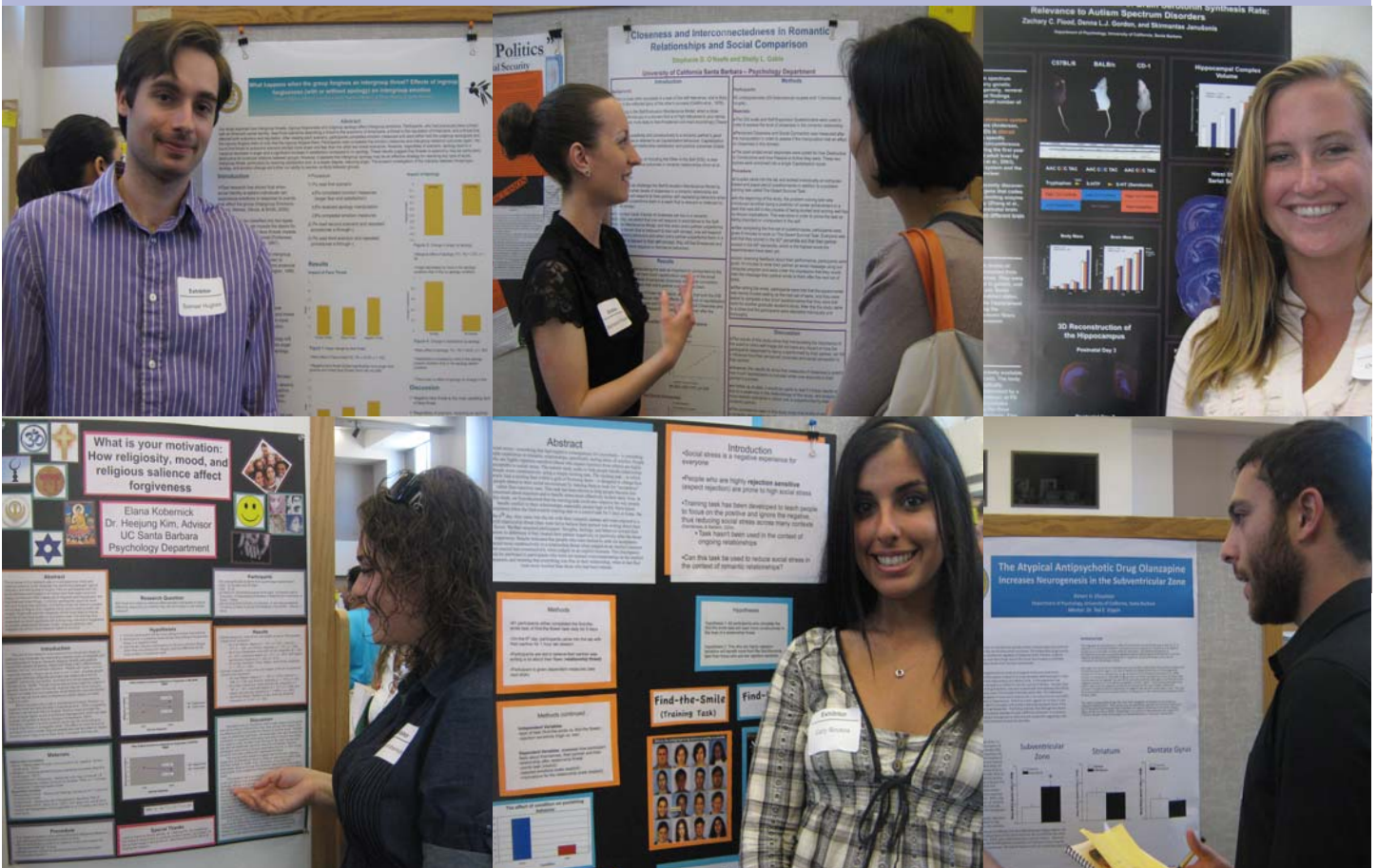
Grafton, whose own work focuses on elucidating the cognitive architecture that underpins people's organization of movement into goal-oriented action, has spearheaded the role of the cognitive neurosciences with the ICB. Current ICB projects include developing new methods for analyzing variation in human cognitive strategy, perceptual categorization, visual-motor control, and the effective retrieval and use of knowledge for decision making, with applications for optimizing human training and performance. Other psychologists working under the ICB umbrella are Greg Ashby, Jim Blascovich, Miguel Eckstein, Michael Gazzinga, Barry Giesbrecht, and Michael Miller.

A leading expert on sequence and skill acquisition, motor and attention control, and action representation, Grafton has pioneered use of functional Magnetic Resonance Imaging (fMRI), transcranial magnetic stimulation, and high-density electroencephalography to map brain activity to behavior. His tenure as Director of the UCSB Brain Imaging Center has been marked by the acquisition and integration of new technologies to enhance research opportunities. The Center recently acquired a 64 channel encephalograph to record electrical activity in the brain at the same time as fMRI brain imaging occurs, and a highly accurate eye-tracking system was installed in Spring 2010 to calibrate eye movements with brain activity.



Scott Grafton

## Psychology students shine at Undergraduate Research Colloquium





## Alumni Spotlight: Charles W. Nasser, 1977

Even at nine years old, Charles Nasser knew he had the soul of a collector. "Dad," he asked, "Can I get some business cards made up? They need to say 'Charles Nasser: Purveyor of Antiquities'." Decades later, he finds himself as the personal curator of 18 collections ranging from a fleet of Corgi die cast cars to a set of rare Ian Fleming autographs. "Collecting isn't about the material possessions, at least not for me," says Nasser. "It's the emotional tie to a piece. The items I collect all mean something personal or remind me of a pleasurable event. They connect me to something."

Nasser's journey from 9-year-old sports card aficionado to today's Director of Human Services Administration for the LA County Department of Public Social Services with a serious collecting habit has not always been linear. A self-admitted "wild teenager" and high school dropout, Nasser was drafted by the US Army at 18, sent to Fort Ord, California for basic training, then to Fort Sill, Oklahoma for two years, and then given a GI Bill-funded opportunity (including Work Study) for a college education.

Nasser recalls being thrilled the day he was admitted to UCSB. Intending to later pursue marriage and family counseling, he found the psychology department a natural fit. Nasser still appreciates the relationships he had with psychology professors Bob Sherman, Jerry Higgins, and especially Bob Gottsdanker and his wife, Jo, with whom he also worked at the Counseling Center. The Gottsdankers "always had a bunch of students over to their home.

They treated us like family."

UCSB gave Nasser what he still thinks of as some of the best years of his life. Always competitive, always a leader, always a reader of people, Nasser thinks of UCSB as a crucible and catalyst for these qualities. "Those years, those academic achievements, the volunteer and service opportunities, just instilled in me a sense of confidence that I knew I had to complete tasks, to develop further in what-

ever direction I wanted." Although Nasser failed the second grade, because he could not read nor speak in front of the other children in class, he is now an accomplished motivational speaker for his employer. Nasser has presented at such locations as the Long Beach Convention Center, The LA County Arboretum, and other venues.

He also treasures how much those accomplishments meant to his parents. Because of the pride he saw in his mother's eyes when her "intelligent boy, doesn't try" (comments from a seventh grade report) son graduated from college, Nasser intends to fund a perpetual scholarship commemorating his parents' contribution of unqualified love to his success.

In the meantime, Nasser would convey this advice to current UCSB psychology students. "The key is to understand who you are and accept the bad with the good. You have to believe in what you do, accept failure, and be convinced that next time you'll get it. Move forward." His favorite quote is Booker T. Washington's "Excellence is doing a common thing in an uncommon manner."

Washington would likely agree that Nasser's collections are nothing short of excellence. Casual collecting is an American pastime, but very few serious collections, let alone multiple collections, reflect the discernment and distinction of Nas-

ser's. He admits to being particularly fond of his Disney collection. He admires Walt Disney's "stick-to-it-ness," that quality that allows people to accomplish their goals, no matter what. But even more, his Disney items are an emotional connection to the boy who visited the newly opened Disneyland in 1955 (child admission 50cents, adults \$1). "You went through the tunnel below the Main Street U.S.A.'s train station, and left the outside world behind. It was the concept, pure fantasy; it could never let you down. There was nothing better than that!"



Two items from Nasser's collections: An original Disneyland Park poster from 1959 and a mint condition Captain Marvel comic book.



Charles W. Nasser, 1977



Nasser speaks at a County of Los Angeles workshop.

## Joe Jablonski receives 20 year service pin

At about 20 graduates and 100 undergraduates a year, that makes about 2400 psychology students who have picked up a smile and their keys from Joe Jablonski during his 20-year tenure as Assistant Development Engineer in the Department of Psychology. Jablonski received a 20 year pin for service to UCSB at a departmental ceremony in April.

A native of New York, Jablonski was drawn to UCSB by a renowned track and field coach of Olympic decathlon hopefuls. Although his Olympic dreams were never realized, Jablonski decided to stay "just one more summer" in the beach town with the decidedly non-Buffalo weather, and the rest, as they say, was history. Santa Barbara turned out to be a good place to make the transition from 10 events to 3, as Jablonski has long been a contender in the local swim-bike-run triathlon circuit.

In the department, Jablonski's duties include more than just coordinating key and keyless access to psychology facilities. His work covers the range from fabricating specialized lab equipment to execution of minor departmental repairs and the ubiquitous "other duties as assigned."

These varied tasks have brought him in daily contact with literally hundreds of staff, faculty, and students over the years, and that's been just fine with Jablonski.

"The best thing about this job are the people I work closely with," he says. "And the next best thing is the variety - each day is a new adventure."



*Psychology department Management Service Officer Lynne Pritchard presents Joe Jablonski with his UCSB 20 year service pin.*

Just as well he likes change, because Jablonski has seen plenty of it. Large increases in the number of faculty, students, and post-docs working in labs; refrigerator-sized computers with a megabyte of RAM that have morphed into laptops with gigabytes; explosive growth of campus buildings and loss of open space.

A constant, however: the "barracks." In Jablonski's next dream assignment, he oversees a committee to remove and replace Buildings 411 and 429, the "temporary" World War II buildings that still house teaching labs and graduate student offices.

In the meantime, he has also turned his talents to 3D computer animation and the production of short movies after designing a comic book and some small metal figures for a friend.

"So although I still get in my weekly 3 to 4 workouts, in the pool, on the bike, or running laps, these days you're just as likely to find me in front of my storyboards, or monitor, or a blank sketch pad with a #2 pencil."

Did we mention he doesn't like to do the same things over and over again? Let's see what adventures the next 20 years bring.

## Psychology Department Donors July 2009—June 2010

The Department of Psychology 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.

Mr. Roland Avellar  
Mrs. Terry Avellar  
Mr. Thomas P. Banigan 1984  
Mr. Waheed K. Baqai 2003  
Mrs. Sandra A. Butcher 1957  
Mr. Lawrence Chiu  
Mr. Patrick Craven  
Mr. Charles A. Dickinson 1975  
Dr. and Mrs. John M. Foley  
Mr. Stephen L. Foote 1967  
Ms. Sandra G. Funk 1967

Mrs. Caryn Gehris Ratcliff 1986  
Dr. Robert A. Hicks 1955  
Dr. Casey Hoffman 1998  
Mrs. Cheryl B. King 1983  
Mr. Gary M. King 1980  
Ms. Jacque Komplin  
Dr. Charles H. Markham  
Mrs. Lisa Markham  
Ms. Michelle Massoni  
Dr. Donald H. Mershon 1968  
Mrs. Loretta K. Mershon 1968

Mr. George E. Murphy 1975  
Mrs. Caroline S. Nicoll 1970  
Mr. and Mrs. Tom Shpall  
Mrs. Natalie J. Smith 1978  
Mr. Walter F. Thode, Jr. 1968  
Mrs. Diana R. Thomas 1995  
Ms. Cynthia Ulman 1983

America's Charities  
Fidelity Charitable Gift Fund  
Yoga Research Foundation



## Making a Difference: Social support and relationship success

A breakfast battle with your teenager, a fractious employee dispute, and a mind-numbing commute getting your blood pressure up and your feelings down? A prescription from the relationship expert: a little social support from your partner, tailored to your needs and your situation, and you'll feel better in the morning.

In the UCSB Close Relationships Laboratory, Dr. Nancy Collins brings science to bear on the giving and receiving of social support in couples. Collins isn't interested in who's nice and who's not -- leave that to Santa -- but the kind of interactions that make one relationship rock solid and another vulnerable to erosion. What's special about social support? **"What we get from our partners when we're weak and vulnerable really tells us about their love, commitment, their deep investment in our welfare,"** says Collins. **"So the social support we get is diagnostic not only for our own health and well being, but also for the health and well being of the relationship."**

Answers to questions about what works best, from whom and for whom, don't come easily.

In a typical study, for example, Collins and her research team recruit dozens of couples from the student and local communities. The couples often return three or four times over the course of a year or more to offer quite intimate glimpses into the ups and downs of their daily lives and how they relate to one another through those good times and bad.



Although it's revealing, Collins and her colleagues don't rely just on anecdote. In some studies, one member of the couple is randomly chosen to perform a stressful task on the spot -- make an impromptu speech or solve difficult mental math problems, for example. The partner might or might not get the opportunity to write a note of support. Some of these notes -- see the examples -- glow with pride in the partner and optimism about the partner's performance; others, not so much. And sometimes, unbeknownst to either member of the couple, Collins replaces the real missives with carefully crafted experimenter-produced ones that offer different levels of different kinds of support.

Again and again it's the responsiveness of support, rather than the sheer amount or type of support, that wins the day. Responsive care givers modulate and modify support depending on their partner's needs, offering a sympathetic ear, a broad shoulder, or a



Close Relationships lab members Bianca Acevedo, Lisa Jaremka, Heidi Kane, Nancy Collins, Molly Metz

helping hand when it's needed, but backing off when it's not.

In the short term, responsive support reduces cortisol, a stress-triggered hormone that helps the body cope with threat but whose effects can be harmful with repeated unattenuated release. It also binds couples together, making them feel close to and want to be with each other. In the long term, these outcomes build feelings of deep mutual trust, warmth, and security, cementing the partnership.

"That's why some couples work out better over the long haul," according to Collins. "Securely attached partners -- ones low in anxiety about their ability to love and be loved -- are better able to attune their support giving to the needs -- rational or otherwise -- of their partners under stress."

Collins' interest in and talent for relationship research was honed during PhD training at USC and a Postdoctoral Fellowship in Health Psychology at UCLA. She received a Young Investigator Award from the Society of Experimental Social Psychology in 1991, and her article "Optimizing assurance: The risk regulation system in relationships" (with Sandra Murray and John Holmes) won the 2007 Society for Personality and Social Psychology Theoretical Innovation Prize. Her work has attracted funding from the National Science Foundation, the National Institutes of Health, and the Fetzer Institute, all of who recognize the primary importance of support to relationship strength.

"Giving the kind of support that a particular partner needs is not always easy -- you have to know what to give, you have to want to give it, and you have to be able to give when it's needed" says Collins. "But given its importance to the recipient, the provider, and the relationship, it's well worth the effort. We hope that our research will help people recognize the importance of social support for their health and well-being and enhance the quality of support that they give and receive in their close relationships."

Sarah

Wow, I'm so sorry you are doing the speech, I definitely got the lucky coin toss. You said on the sheet that you weren't worried about it at all, that's good, you're much better at that kind of stuff than I am ☺ Besides it's on the value of a college education, who better to write about that than a hardcore academic like yourself. Opportunity is the name of the game in college, learn another language, study abroad, semester at sea, meeting new people, living away from home, all good things! Well, I'm sure you are doing just fine on the ~~essay~~ speech, don't worry about the presentation, I'll be right there to cheer you on.

They want me to write  
a note to you --  
how you go --

Support, and lack thereof, from partners.

Where Are They Now? *Psychology ClassNotes*

## 1950s

**Bert Kersh 1950** was recalled to active Army duty serving as a Neuropsychiatric Specialist at Madigan Army Hospital, a benefit of learning psychometric testing during his senior year, including the Rorschach, a rare undergraduate offering in those days. That experience taught him that he did not want to be a clinical psychologist, so he obtained a Ph.D in Educational Psychology from Berkeley in 1955. After working at System Development Corporation in Santa Monica he was invited to start a unique research center at Western Oregon University and after 7 years, he was appointed Dean of Faculty at Western, a position he held for over 10 years. Before retiring he taught undergraduate psychology, an experience that proved to be the most pleasant and personally rewarding phase of his career. Bert's wife of 59 years Barbara graduated from UCSB in Art and is a gifted fabric artist. They have 4 adult children, 7 grandchildren and 10 great-grandchildren. Their oldest son graduated from the USMA with an MS in computer science from the Post Naval Graduate School in Monterey; their daughter and her husband raised 3 daughters and are proud grandparents; their second son has a degree in architecture from Oregon and lives with his family in Eugene; their youngest son graduated from SFSU in Political Science and now works in the world of finance while living with his family in Laguna Niguel. Grandson Zackery Kersh entered UCSB in fall 2009.

## 1960s

**Rick Kendall 1967** earned an MA at SF State and a Ph.D. in community psychology at NYU. While in San Francisco, he worked first as house manager for Huckleberry's for Runaways and then as research associate at the Haight Ashbury Research Project. From NYU, he went into survey research, first at Yankelovich in NYC, then at Abt Associates in Massachusetts. He returned to NYC first to run market research for HBO and then as VP of marketing for Cinemax. He left HBO in 2000 to start his own marketing consulting practice serving a range of internet-based companies primarily in health-related fields. Rick is currently president of the New York American Marketing Association and lives in Greenwich, CT.

## 1970s

**Jim West 1970** M. Ed. Counseling Psych 1973. Jim was employed as a high school instructor, counselor and football coach from 1971 until 1989 starting at Ventura High then moving to Nordhoff High in Ojai and then to Mariposa County High. In 1989 he took a position as a counselor at Allan Hancock College (AHC) in Santa Maria, CA. In 1991 he was selected as the first Chair for the Counseling Department at AHC. In June of 1994 he became Dean, Counseling and Matriculation. He served in that capacity until he retired in December of 2006. He continued as the instructor for the college's student government program through the fall semester, 2008. He is married to Susie West, a UCSB psychology department graduate. They have

two children: Rusty (29) and Joe (27).

**Susan (Susie Lukes) West 1971** After working two years at Goleta Elementary School as an instructional specialist, Susie took a job teaching third grade at Monica Ross, a private school in Ojai, Ca. While there she completed her elementary teaching credential and obtained a position as a sixth grade instructor at Woodland School in Mariposa California. In 1989, she moved with her husband Jim to Santa Maria, CA where she obtained a position teaching sixth grade for the Orcutt Union School District. She continues to teach at May Grisham Elementary School. Susie has two children: Rusty (29) and Joe (27).

**Steven Ross \*1972** is in private practice as a clinical psychologist in San Ramon, CA. In addition, he has been teaching a variety of psychology classes at California State University East Bay in the undergraduate and graduate departments.

**John N. Gardi 1973**, Ph.D. from UCSF 1978, D. ABNM, F. ASNM, CCC-A. NIH post doctoral fellow 1978-1980; UCSF Dept. of Otolaryngology Assistant Prof. 1980-1987. Since 1988 he has served as Chariman and CEO of Evoked Potential Associates, Inc., a small private medical company in Northern California that provides intraoperative neuromonitoring services to patients undergoing difficult surgical procedures that place nervous system tissue at risk during surgery (e.g., brain tumors, spinal cord deformity corrective surgeries, brain aneurysm coiling or clipping procedures, etc). They physically go into the OR and stimulate and record from nervous system tissue in such patients receiving surgical procedures in hospitals throughout the greater Bay Area. [gardi@cnsiom.com](mailto:gardi@cnsiom.com)

**Judith Lee-Squire 1973** also received an elementary teacher credential from UCSB in 1975; LH & SH teaching credentials, 1977 and M.S. Educational Psychologist from Cal State Hayward, 1982; M.S. School Psychology San Jose State, 198. She is a Licensed Educational Psychologist and currently lead psychologist, Santa Clara Unified School District.

**Michael Schorr 1974** married, divorced, living in Modesto, CA.

**Mary McGrath 1975** continued with her pursuit of psychology by going into advertising sales. After spending time at such publications as *Newsweek*, *Sports Illustrated*, and *Wired*, she realized she really wanted to try to follow her true passions in journalism. Her career change has taken her into travel writing, where she contributes to such publications as *Copley Newspapers*, *RangeFinder Magazine* and many others. "A psychology degree helped me understand human behavior, and that can be applied to any profession," she remarks.

**Van W. Riley 1975** PhD 1999 UCSB in Education. Proud parents of two wonderful children, Van and wife Mary (Class of 1976) are living in Long Beach and spend part of their time in their home in Montecito. Van has been Superintendent of the Huntington Beach Union High School District for seven years. Prior to that, he was Superintendent in Carpinteria Unified and Ojai Unified. A true Gaucho family, daughter Sahara received her PhD in Communications in 2007 and is a professor at Cornell University. Son Matthew received his MA in

Environmental Science and is CEO of Infinity Wind, a Santa Barbara company located on upper State Street. Sahara has two daughters, Isabella and Charlotte who, according to Van and Mary, are the best grandchildren anywhere! Van's email is [vriley@hbuhds.org](mailto:vriley@hbuhds.org).

**Diane Lovko Premeau, 1977** received an MBA, RHIA. She is currently Director Health Information Management Santa Clara Valley Medical Center and President California Health Information Association since 2009.

## 1980s

**Piraye Bayman \*1983** moved to NJ to work at AT&T Bell Labs where he worked until 2002 on various projects from designing and developing user interfaces for testing devices made for telephone technicians to developing telecommunication services for consumers and businesses, including internet-related services, and loved living in the Garden State and being close to NYC for all those years. In 2002, he took a major step to live in his father's home town, Ayvalik, Turkey --a beautiful little town across from Lesvos. He has visited Lesvos several times to discover the towns where his ancestors lived until the 20s and is very much enjoying living in Ayvalik and discovering the early civilizations along the Egean and Anatolia, in general. [piraye@mac.com](mailto:piraye@mac.com)

**Alyson Bostwick 1987** is currently a licensed MFT and a full-time faculty member at Santa Barbara City College. Her title is Mental Health Counselor and she coordinates the personal counseling services in the Student Health Services Office. She has been at SBCC since 1989 when she finished her MA in Clinical Psychology at Antioch University. She started at SBCC as an Academic Counselor and MFT Intern (all part-time), and worked there part time when she got her license while running a small private practice in town. Her full-time tenured position began in Fall 2000. [bostwick@sbcc.edu](mailto:bostwick@sbcc.edu)

**Cynthia Lawley (Taylor) 1988** received a UCSB teaching credential in 1990. She taught high school for a while before going back to get her master's at SDSU (evolutionary biology) and her PhD at UCSD's Scripps Institution of Oceanography. She is now at a company called Illumina where she has been working for over 6 years. Her current position is as a consortia manager in the agriculture space. She helps research scientists collaborate to pool their resources to create tools to study the genetic basis of desirable characteristics in crops, livestock, and companion animals. She currently lives in the Bay Area, California with her husband Fred Lawley.

**William Frea 1989** received his Ph.D. in Counseling/Clinical/School Psychology at UCSB, specializing in autism. He completed an internship at Johns Hopkins School of Medicine, and fellowship at Vanderbilt University. Bill went on to develop the autism programs at Cal State LA. He eventually founded Autism Spectrum Therapies (AST), where he currently serves as Chief Clinical Officer. Bill is a frequent guest speaker, and actively publishes in the areas of autism and applied behavior analysis. He serves on state and national boards guiding policy for autism services. He is also on the board of directors for Autism Speaks LA. Currently AST serves over 300 children with autism throughout Southern California. Bill's wife, Riki, just gave birth to their third child this year.

## 1990s

**Juliette R. Mackin 1990** Juliette is Vice President of Training and Technical Assistance and Senior Research Associate at NPC Research in Portland, OR. She has been with this company for 11 years. She conducts evaluation/research and trainings across a range of social service topics, but her primary areas of interest are strategies that promote healthy child and adolescent development. Her current work is focused on strength-based practices, juvenile crime prevention, youth suicide prevention, and drug courts. Juliette has an 8-year-old daughter, Maia. She received her Ph.D. in Ecological/Community Psychology and Urban Studies from Michigan State University in 1997.

[Mackin@npcresearch.com](mailto:Mackin@npcresearch.com)

**Iain Barksdale 1990** received MPhil in Archaeology in 1991 from the University of Glasgow, JD in 1999 from the Louis D Brandeis School of Law, MLS in 2003 from the University of Arizona. He worked for four years at the James E Rogers College of Law at the University of Arizona as an Electronic Services Librarian, and four years at the Chase College of Law as the Asst Director for Information Technology. He is currently working as Head of Reference Services for the Bounds Law Library at the University of Alabama School of Law and as an Adjunct Professor of Anthropology teaching online courses for Northern Kentucky University in Cultural Anthropology, Celtic Archaeology, and Legal Anthropology.

**Randal Doane 1991** is a father, a husband, and, as time allows, still an avid volleyball player. After a lengthy tour on the graduate school circuit, he earned his Ph.D. in sociology from the City University New York, Graduate Center. He works at Oberlin College as the Director of the Office of Undergraduate Research.

**Daniel Thomas (Tommy) Wellman III 1993** is an international educator after obtaining credentials from Cal Poly San Luis Obispo and a Masters from Azusa Pacific in Education. He's been head coach at Morro Bay High, taught at Ventura High, spent two years teaching in Salinas until going overseas. He lasted one term in Venezuela where he fell in love. After teaching for a year in Pismo Beach they moved to Taiwan, spending 4 years there and their summers in beautiful Bali, before moving to Lahore, Pakistan. Tom is now raising two boys ages 4 and 7 on his own in Bali, surfing and doing property and teaching 2<sup>nd</sup>/3<sup>rd</sup> grade as well. [twellman3@yahoo.com](mailto:twellman3@yahoo.com)

## Stay in Touch with UCSB Psychology

If you'd like to be added to the departmental alumni e-mail list send an e-mail here to subscribe: [alumni-subscribe@psych.ucsb.edu](mailto:alumni-subscribe@psych.ucsb.edu)

If you would like to contribute to ClassNotes, please submit a no-more-than 120 word update for the next volume to [InsidePsychology@psych.ucsb.edu](mailto: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 web-sites can be included in ClassNotes. Submissions may be edited or included in later volumes. We look forward to hearing from you!



## The power of positive psychology, *continued*

forgiveness, hope and optimism, expand attention and thinking, and build up mental and emotional resources," said MacAleavey. "Since stress is the number one impediment for college students, we really wanted people to know about this approach."

Students, faculty, and community members filled the standing-room-only event to hear presentations from Dr. Laura Delizonna, founder of the organization *Choosing Happiness*, UCSB's Dr. Michael Furlong, co-editor of the *Handbook of Positive Psychology in Schools*, and Mark Shishim, Director of the UCSB Wellness Program.

"The event was a huge success, with lots of students asking how they could learn more and where they could find the information," noted Marini. "And since UCSB is a research institution, our scientific community was strongly interested in the research side of this field."

The students hope that one outcome of their organizational effort will be the introduction of a Positive Psychology course to the curriculum and indeed such a course is already in the works in the department.

Marini and MacAleavey have pursued their own positivity and passion post graduation. Marini, who majored in biological psychology, is currently a research assistant at Posit Science/Brain Plasticity Inc., San Francisco, as well as a research assistant at Langley Porter Psychiatric Institute at UCSF.

MacAleavey, who majored in psychology, is currently a project coordinator at the Osher Center of Integrative Medicine and Langley Porter Psychiatric Institute at UCSF. Both intern at *Choosing Happiness*, a Bay area business that provides workshops, speakers, and professional training in emotional intelligence and positive psychology. In the future, MacAleavey and Marini plan to start a company combining their strengths in positive psychology, organizational psychology, and neuroscience.



Some of the standing room only crowd that attended the "Bliss, Thrive, Alive!!" positive psychology event organized by seniors Kate MacAleavey and Tina Marini.



Keynote positive psychology speakers Dr. Michael Furlong, UCSB, Mark Shishim, UCSB, and Dr. Laura Delizonna, *Choosing Happiness*.

## Graduate student award winners for 2010

### Dean's Fellowship

Adam Cohen

### Charles G. McClintock Graduate Fellowship in Social Psychology

Debra Bunyan

### Graduate Division Dissertation Fellowship

Jocelyn Sy

### Graduate Division Opportunity Fellowship

Thery Prok

### Graduate Division Science & Engineering Research Grant Award

Lisa Jaremka

### Harry J. Carlisle Memorial Award

Joannalee Campbell

### National Science Foundation Fellowship

Cameron Brick

Kimberly Hartson



## Brain mechanism evolved to identify those with propensity to cheat

UCSB Press Release, 2010

New research by scholars at UCSB indicates that the uncanny human ability to detect cheaters reflects the operation of a reasoning system that evolved for that narrow purpose, and cannot be explained by more general abilities to reason about conditional rules, moral violations, or social interactions. Their findings appear in the current issue of the Proceedings of the National Academy of Sciences (PNAS).

According to the authors, this system becomes activated only when detecting a violation that has the potential to reveal a specific aspect of someone's character — his or her propensity to cheat.

The new findings, which build on research presented in a 2002 PNAS paper highlighting neuroscientific evidence of a distinct cheater detection system, specifically debunk the blank-slate theory of human intelligence. This competing view attempts to explain special abilities like cheater detection as the product of experience plus a general capacity to learn or reason.

"The thing that's startling about the results is how specialized this reasoning mechanism turns out to be," said Leda Cosmides, a co-author of the paper. She is a professor of psychology and co-director of UCSB's Center for Evolutionary Psychology. Cosmides wrote the current PNAS paper with John Tooby, a professor of anthropology and also co-director of the Center

for Evolutionary Psychology; and H. Clark Barrett, formerly of the Center for Evolutionary Psychology and now associate professor of anthropology at UCLA.

Social exchange is the form of cooperation that occurs when people trade or reciprocate favors.

"Evolutionary analyses have shown that social exchange cannot evolve unless individuals are able to detect those who cheat," said Barrett.

"Therefore, from an evolutionary standpoint, the function of detecting acts of cheating is to connect them to an identity — to deduce character."

However, only some violations of social contracts **cont'd p.10**



Leda Cosmides

## Psychology celebrates 2010 undergraduate award winners

### Chairperson's Award

Natasha Avis

Nicole Ginther

Marvin Guemo

Alyssa Krier

Alyssa Somavia

### Distinction in the Major

Philip Boekelheide  
Jacqueline Kadin  
Stephanie O'Keefe

Matthew Cook  
Steven Khoubian  
Eric Pedersen

Nicole Ginther  
Elana Kobernick  
John Plass

Marvin Guemo  
Andrew MacNamara  
Carly Roukos

Spenser Hughes  
Jason Nemirow  
Sandra Short

### Exceptional Academic Performance

Alberto Amarante  
Hannah Holt  
Matthew Majdick

Britt Bender  
Spenser Hughes  
Jason Nemirow

Katerina Ford  
Jacqueline Kadin  
Eleanor O'Keefe

Lauren Foust  
Sarah Kiou  
Eric Pedersen

Nicole Ginther  
Andrew Kneisley  
Carly Roukos

Marvin Guemo  
Amanda Lane  
Sandra Short

### Philip Steven Rethis Memorial Award

Joseph Seidman

Ashley Adams

### The Morgan Award for Academic Excellence in Psychology

Spenser Hughes

### The Morgan Award for Research Promise in Psychology

Spenser Hughes

Erin Cowgill

### Distinguished Graduating Senior

Jason Nemirow

## Brain evolved to detect those with propensity to cheat, *continued*

relevant to assessing character. "For example, someone can be deprived of what he or she is entitled to by an innocent mistake or when something accidentally interferes. In those cases, mentally flagging a violation would not reveal the presence of a cheater," said Cosmides.

"If this ability was produced by general learning abilities operating on experience," Tooby pointed out, "then you would expect it to detect the broad range of violations that people actually experience and suffer from — incidents of cheating, accidents, innocent mistakes, and so on. All of these equally deprive people of what they are entitled to, and what they are motivated to recover. Indeed, the fastest, simplest, and most informative cognitive step would be to learn to uniformly detect all violations of social contracts."

Yet that is not what the mind does. The researchers found that the violation detection system is more complex and selective, with computational steps that respond to the intentions of the partner, whether the partner was in a position to cheat, and whether the partner could have benefited by the violation. The system remains inactive — that is, it tends not to notice violations — when confronting situations where people are deprived of what they are entitled to, but for reasons that are unlikely to expose cheaters. "This reasoning system does not respond to economic consequences per se. It focuses only on those violations that are likely to reveal cheaters — individuals who take the benefit offered in an exchange while intentionally failing to do what the other person required in return," Cosmides said. "It ignores the others. This matches the evolutionary prediction that the system's function is sifting for people who cheat."

**"The system is most strongly activated when there are cues that the violator is acting intentionally, will get the benefit regulated by the rule, and has the ability to do all of this,"** Barrett explained. **"Take away one of these three elements and reasoning performance drops sharply; take away two and it drops to the same baseline incompetence the mind exhibits when reasoning about most conditional rules, such as moral rules."** That is, only a narrow range of conditions activate the cheater detection system: "It does not search for violations of social exchange rules when these are accidental, when they do not benefit the violator, or when the situation would make cheating difficult," he said.

"These experiments were designed to rule out every alternative hypothesis that we know of about why people are skilled at detecting cheaters. No other theory predicts this pattern of results," said Cosmides.

"It takes a moment to appreciate how inconsistent these results are with traditional ways of thinking," noted Tooby. "Learning theories, economic theories, and motivational theories all predict that skill acquisition or performance should be at least partly a function of payoff. Here, innocent mistakes, cheating, and accidents all lead to the same payoff for the people who did not get what they were entitled to — zero — and detection of the violation is a necessary first step toward recovering the lost benefit. Yet, the mind tends to disregard those losses that don't expose cheaters."

"If you take away the cues that indicate a person is predisposed to cheat, the mechanism isn't activated," Cosmides added. "That's what falls out of the evolutionary theorizing. Evolutionary theory says you should be looking for people who are cheating by design, not by accident," she said.

## Psychology Department researchers capture opportunity funds

With funds made available through the American Recovery and Reinvestment Act of 2009 (ARRA), psychology faculty were well represented among the more than 40 grants already awarded to research projects at UCSB. Also known as the economic stimulus package, the ARRA was passed by Congress in February.

**"These ARRA grants are further recognition of the very high caliber of research being conducted at UC Santa Barbara,"** said Chancellor Henry T. Yang. **"We appreciate this important support for the pioneering research and teaching of our faculty and researchers, who are working not only to advance the frontiers of knowledge but also to serve our state and nation and help our society."** Various agencies in the National Institutes of Health supported a broad range of psychological research.

The National Institute of Health Drug Abuse program funded Neuroscience and Behavior Professor Aaron Ettenberg's research

investigating mechanisms of opiate and stimulant drug reinforcement.

Social psychology Professor Brenda Major received funding from the National Heart, Lung, and Blood Institute to study the short and long term effects of perceived discrimination on mental and physical health.

The National Eye Institute funded Research Professor in Cognition, Perception, and Cognitive Neuroscience Jack Loomis' research through the Institute for Social, Behavioral, & Economic Research. Loomis will be investigating multi-modally encoded spatial images in the sighted and the blind.



ARRA award recipients Aaron Ettenberg, Brenda Major, and Jack Loomis



## Would You Like to Help? *Giving Opportunities in the Department of Psychology*

Would you like to be part of the future of teaching and scholarship in the Department of Psychology 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 of Psychology 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 of types 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 graduates, 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 Psychology 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 Greg Ashby at [ashby@psych.ucsb.edu](mailto:ashby@psych.ucsb.edu).

### From the Psychology 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 Greg Ashby at 805 893 2858 or [ashby@psych.ucsb.edu](mailto:ashby@psych.ucsb.edu). Or click on the “Give to Psychology” button at our departmental home page [www.psych.ucsb.edu](http://www.psych.ucsb.edu)

## Department of Psychology, UCSB

Department of Psychology  
University of California  
Santa Barbara CA 93106-9660

Phone: 805 893 2857

Fax: 805 893 4303

E-mail: [InsidePsychology@psych.ucsb.edu](mailto:InsidePsychology@psych.ucsb.edu)

Editor: Diane Mackie

**We're on the Web!**  
**[www.psych.ucsb.edu](http://www.psych.ucsb.edu)**

### Magic meets science at Sage Center event, *continued*

But some of Martin's grand illusions – he ended the performance by making a bird in a cage disappear in plain sight -- depend on something more, and cognitive psychologists are fascinated by people's tendency to miss things that are happening right in front of them.

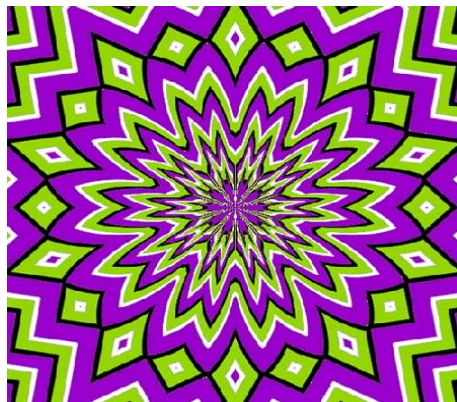
"It's not just drawing or deflecting attention," says Miguel Eckstein, Vice Director of the Sage Center and Professor of Cognition, Perception, and Cognitive Neuroscience at UCSB. "It's why people have blindsight – they can't see something they are looking right at – or why they swear they see things they don't."

Blindsight refers to phenomena like the now well-known demonstration that people directed to count the number of passes made by a group of basketball players completely miss a gorilla strolling through the group. The opposite effect occurs in the classic vanishing ball illusion. The magician tosses the ball into

the air several times and catches it. On the final toss, the ball disappears in midair. In fact, the magician simply mimes the last throw. Yet watchers are adamant that they actually see the ball going up until it disappears. Cognitive scientists have yet to understand why either of these effects occur.

"Collaboration between magicians and cognitive scientists is new, and that's just the kind of cutting edge development the Sage Center at UCSB is able to promote," says Gazzaniga. "The potential payoff in learning about attention and perception goes far beyond the lab. Flight traffic controllers, security guards, medical technicians reading brain scans – they all depend on managing attention."

That just might make a better understanding of the human mind the most amazing rabbit that magic can pull out of the hat.



*Some of the visual illusions that help perceptual psychologists, neuroscientists, and magicians understand the constructive properties of perception and the role played by expectation and attention.*