USC Dornsife 2020 dares to tackle the problems of the world with rigorous and relevant research.
Moh El-Naggar’s research lies at the intersection of physics, biology and nanotechnology. His work targets an exciting frontier in biophysics: the interface between biotic and abiotic systems, which offers potentially transformative approaches to bioenergy production. Doctoral student Ian McFarlane, a researcher in El-Naggar’s laboratory, is investigating for his dissertation how to potentially generate nanosized structures useful for constructing solar panels or other technologies. Working with undergraduate researcher Julia Lazzari-Dean, McFarlane studies how microbes build nanomaterials, including arsenic sulfide, in solution. McFarlane and Lazzari-Dean carefully monitor the growth of this pulpy, orange material at the microscopic level to explore its properties and potential applications, El-Naggar said. “We’re trying to understand at a basic level what these cells do and how they do it. And, at an applied level, how we can create new nanomaterials that do jobs we have not yet imagined.”

Read more on page 34.

PHOTO BY ALLISON V. SMITH
In our lifetimes, we have seen the boundaries of many fields of study shift and sometimes disappear. We have also learned that real innovation and progress often occur at the intersections of our traditional academic disciplines.

One of USC Dornsife’s great strategic advantages within American higher education is that our academic departments are not organized into separate colleges of the humanities, social sciences and natural sciences; instead, we house all the core academic disciplines under one roof.

And over the past few years we have capitalized on this strategic advantage. When we decided to explore the local effects of climate change, we built a team with expertise in marine science, interdisciplinary environmental studies, the social sciences and the cultures of coastal communities. When we decided to build on the work of our extraordinary USC Shoah Foundation Institute with a research program focusing on the prevention of genocide, we assembled a team of USC Dornsife faculty and students with expertise in such fields as history, international relations, psychology and literature. To investigate fundamental questions regarding the impact of science and technology on society, we brought to the table not just scientists and sociologists, but humanities scholars who have devoted their lives to studying the age-old question of what makes us fully human.

In USC Dornsife, we also expect our undergraduate students, whatever their majors, to traverse traditional academic boundaries as they pursue their natural curiosity. Some end up in labs where they explore connections between neurobiology and creativity. Others have traveled to China to see how culture shapes responses to advertising. We have also just created two important new programs in “cognitive science” and “human and evolutionary biology” in which students take an interdisciplinary look into our own nature.

Intersections can be confusing, exhilarating, intimidating and life-changing. But I urge you to follow the lead of our students and faculty and seek them out.

Howard Gillman
Dean of USC Dornsife
Anna H. Bing Dean’s Chair
Perfect Vision

Standing up against racism. Saving the oysters. Allowing science to progress. Just a few monumental topics in USC Dornsife 2020’s range of view. By Pamela J. Johnson

An Accident with Purpose

Bob Padgett ’68 chose a career in emergency medicine after a life-altering car crash. By Ambrosia Brody

Scholarly Symbiosis

With the guidance of USC Dornsife faculty, undergraduates are creating their own spaces for dynamic learning by contributing to research studies or embarking on independent study projects. By Michelle Salzman

Being Human

Students and faculty in two new USC Dornsife programs are exploring what it means to be human in mind and body. By Laurie Moore

From the Dean

A quantum leap in computing; Taking stock of Arab uprisings; A lesson in leadership from L.A.’s mayor; Kaya Press moves to USC

Social Dornsife

Our first Dornsife family photo album; Global explorations

From the Heart of USC

JEP fights childhood obesity; Troy Polamalu ’11 puts words into action; new minor in Korean studies

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Alumni Canon

Remembering

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On the Cover

USC Dornsife students and faculty have the vision and fortitude to tackle the problems of today while anticipating crucial issues of the future. Photo by Adam Voorhes.
**International filmmakers and development leaders discuss the challenges and opportunities for entertainment attractions in China during the UCLA-USC MEDIA AND CULTURE IN CONTEMPORARY CHINA CONFERENCE sponsored by the UCLA-USC Joint East Asian Studies Center housed in USC Dornsife.**

**MONICA VALENCIA**, a junior sociology major who served in the U.S. Air Force until 2008, joins her fellow Trojans on Veterans Day to read the names of the 6,300 casualties of the past decade’s wars in Afghanistan and Iraq.

**Graduate students in the MASTER’S IN PUBLIC DIPLOMACY program, offered by USC Dornsife’s School of International Relations and the USC Annenberg School for Communication & Journalism, travel to India to meet with a range of stakeholders and report on the country’s public diplomacy efforts. Read more on page 19.**

**USC Dornsife community members tour one of the finest collections of ancient Greek and Roman art in North America at the GETTY VILLA in Los Angeles as part of The Dornsife Commons event series.**

**“One can accomplish important, useful and appreciated work in many ways. The most important thing is how much curiosity and passion we have.”**

**ADA YONATH**, one of just four women ever to win the Nobel Prize in chemistry, gives an in-depth talk on the genetic code and its products in a chicken-or-the-egg conundrum and discusses a scientist’s career path with USC Dornsife graduate students.

**In honor of International Women’s Day, the USC SHOAH FOUNDATION INSTITUTE partners with The Holocaust and the United Nations Outreach Programme to hold a roundtable discussion, “Strength Through Adversity: Women and Mass Violence,” at USC.**

**The USC MOCK TRIAL TEAM nabs first, fourth, fifth and eighth places in the University of Pennsylvania’s Quaker Classic Tournament. Best Attorney and Best Witness honors go to USC Dornsife students.**

**USC Dornsife and USC Viterbi School of Engineering researchers are collaborating through the center to better understand the perplexing questions of quantum systems.**

**“Almost everyone has had that apex moment, when they feel like they’re on top of the world and then the next thing you know, the world’s on top of you.” L.A. Mayor ANTONIO VILLARAIGOSA shares his philosophy for overcoming adversity—a challenge he acknowledged that every leader must face—with students in “Case Studies in Modern Leadership.”**

**32nd Street Elementary School students experiment with a hand-held generator, read an ammeter, make lemon batteries and more as part of the ENERGY & MOTION STUDIO sponsored by the Joint Educational Project (JEP), the Department of Physics and Astronomy, and Women in Science and Engineering (WiSE).**
**Facebook** Our First Dornsife Family Album

Alumni showed their USC Dornsife pride during Homecoming 2011 and helped start the first Dornsife family photo album.

View the complete album and Homecoming Highlights video at dornsife.usc.edu/homecoming-album

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**YouTube** Global Explorations

Whether exploring the Maya civilization in Belize, studying history in Ireland or investigating coral reefs in Palau, USC Dornsife undergraduates take advantage of the many opportunities available to go beyond the classroom and experience the world. Some use undergraduate research funding and join USC Dornsife faculty on their research projects. Others choose to conduct their own independent research abroad.

Lorenzo Tovar ’12 helped a community in Ghana eliminate aid dependence and promote sustainability. Cara Magnabosco ’11 investigated human induced climate change in Norway and was awarded a 2011-12 Fulbright Fellowship to continue her research. In addition to these research-based trips, USC Dornsife’s Office of Overseas Studies offers more than 50 programs in 28 countries. Undergraduates can study nearly anywhere in the world from Cairo, Egypt, to Canberra, Australia. USC Dornsife opens doors to the way students view the world, live in the world and change the world.

Watch the video at dornsife.usc.edu/global-explorations

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**Twitter**

@divinitymatovu: wish i was in Cali for @USCDornsife Homecoming. but duty calls here in Uganda with @agya_africa. i ♥ my alma mater. #FightOn

@TrojanTopher: Jealous of @USCDornsife FYIs! “Cult, Fiction & Fantastic Archaeology” “The Politics of American Pop Culture” “Representing LA (Darkly)”

@robertsur: little sis doing work for @USCDornsife and rep’n the #TrojanFamily! this is what SC is all about. #FightOn #GiveBack

@SoCalibecca: I love being a @USCDornsife Ambassador! :)

@CarlNBCLA: A little light Sat AM read-very interesting! @USCDornsife on Neuroeconomics. A new term for me, probably you too.

@kelsdoescollege: Just saw someone at the University of Cape Town wearing a #Dornsife shirt! #small-world #fighton

@autiglobetrot: M.Twain’s “Explore, Dream, Discover” taken to the next level by #USC’s #global classroom

@tr0jan4lyfe: Absolutely loving hosting for Explore USC!!! Look out @USCDornsife! You’re gonna have some pretty amazing freshmen here next year!

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**ConneCT With USc DoRNSIFE**

Check us out on your favorite social media sites. We welcome your posts and tweets for possible inclusion in the next issue of USC Dornsife Magazine.

dornsife.usc.edu/facebook
Become a fan and get updates in your newsfeed.

dornsife.usc.edu/twitter
Follow our tweets for the latest USC Dornsife news.

dornsife.usc.edu/youtube
Watch the latest videos from the USC Dornsife community.

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Three Words

What three words describe a USC Dornsife student? To see all the descriptors submitted on Facebook, visit dornsife.usc.edu/three-words

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Steve Sperling '91 and family

Katie Vogel ’06, David Avenetti ’06 and Crystal Patton ’06

Stephen Heiner '61
USC Shoah Foundation Institute Launches IWitness

High school students throughout the New York metropolitan area utilized the new online educational resource IWitness — then met Roman Kent, a Holocaust survivor featured in the video archive. by Ambrosia Brody

More than 350 New York high school students had watched parts of Holocaust survivor Roman Kent’s video testimony about living in Lodz, Poland, when the Germans invaded during World War II. The young Roman, his parents, two older sisters and one younger brother were imprisoned in the Lodz ghetto, where his father died of malnutrition.

When the ghetto was liquidated, Kent and his family were transported to the Auschwitz-Birkenau concentration camp, where he and his brother were separated from his mother and sisters.

On Jan. 23, the high school students met Kent at United Nations headquarters in New York City during the debut of the USC Shoah Foundation Institute for Visual History and Education’s new IWitness online application.

IWitness is an online resource providing secondary school teachers and their students throughout the world with more than 1,000 video testimonies of survivors and other eyewitnesses of the Holocaust to be used in classroom lessons. The program is aligned with the institute’s focus to make educational use of its archive of nearly 52,000 video testimonies of survivors and other eyewitnesses of the Holocaust. Housed in USC Dornsife, the archive represents 56 countries in 32 languages and is the largest of its kind in the world.

The launch event gave the high schoolers, who used the beta version of IWitness, an opportunity to meet Kent in person, ask him questions and share how his story affected them. Despite the atrocities inflicted upon his family, including the death of his mother at Auschwitz, Kent gave the students a message of love and unity.

“I share my story to tell people that hate never gives us anything,” Kent said. “It is a wasted emotion. I share to influence people that the most important word in our dictionary is not ‘I’ it is ‘we.’ If we can achieve something together — that is the important thing.”

Stephen Smith, the institute’s executive director, also addressed the audience.

“Through IWitness, survivors will continue to teach students about the Holocaust, inspire them to oppose intolerance and empower them to develop the literacies needed for the 21st century,” he said during the event, jointly sponsored by the institute and The Holocaust and the United Nations Outreach Programme. The gathering was also held in observance of the International Day of Commemoration in Memory of the Victims of the Holocaust.

“In the videos I watched on IWitness, Roman Kent captures with quietly heartbreaking certitude the very personal experience of one man trapped in a grasp of a waking nightmare,” said Trent Williams of New Rochelle High School. “He has told his story so that we could remember and promise ourselves never again.”

For more information on IWitness and the USC Shoah Foundation Institute, visit iwitness.usc.edu and dornsife.usc.edu/vhi
INTRODUCTION TO ISLAM
Instructor: Sherman Jackson, King Faisal Chair in Islamic Thought and Culture, professor of religion and American studies and ethnicity

After the tragic events on Sept. 11, 2001, the world’s second largest religion came under fire, showing that many Americans know little about Islam.

In the course, students enhance their understanding of Islam as a religion and civilization.

The general education course explores Islamic history, literature and movements. Students of diverse religious backgrounds develop a deeper knowledge of Islam and conduct meaningful conversations concerning issues facing Muslims in a post-Sept. 11 world.

Thinking globally, students consider how Muslims and non-Muslims can reach a mutual understanding of Islam and discuss the relationship between the United States Constitution and Islamic law.

“I seriously consider this to be an American civics course on how we as Americans are going to come to terms with the very pluralistic, diverse nature of our society,” Jackson said. “It’s a good thing, if not necessary, for educated individuals to know something about Islam as they encounter the growing Muslim community.”

By the end of the course, students are prepared to engage in conversations about Islam in an objective and informed way.

“Students are learning to come to an understanding about Islam,” he said. “They are being empowered to intelligently analyze what they hear or read, so they are in a position to respond in ways that are balanced and reflect a fair understanding of the challenges Muslims face.”

—A.B.

The course provides USC students with a deeper understanding of Islam through class lectures, readings and discussions. As an introductory class, the course is meant to help build on students’ knowledge of Islam and to spur them on to further study of the religion and civilization.

Video: Watch a lesson in “Introduction to Islam” at dornsife.usc.edu/intro-islam
California was admitted to the United States in 1850, but the process of forming cultural identities in the new state was ongoing. As the transcontinental railroad and the Panama Canal opened California to the rest of the country, the state boasted an evolution from a gold hunter’s frontier to a complex and civilized destination.

Elizabeth Logan, a graduate student in history, examines California’s past with a focus on flowers. She is studying floriculture, and its impact on the fledgling state’s identity, from the end of the Mexican-American War in 1848 to 1915, when San Francisco held the Panama Pacific International Exposition.

“I’m looking at how the rhetoric around flowers was integral to shaping notions of taste in California,” Logan said. She is examining documents at the Huntington Library, Art Collections, and Botanical Gardens, with guidance from adviser Bill Deverell, professor of history and director of the Huntington-USC Institute on California and the West.

The back cover of this 1897 Sunset Seed and Plant Co. catalogue depicts a field of California poppies as well as the company’s new offering, Red Riding Hood sweet peas. Logan notes that the text inside the catalogue refers to sweet peas as “quaint beyond description” to convey a civilized, traditional taste to the publication’s readers even though the specific offering was novel.

“People planted certain kinds of flowers in their gardens to telegraph and privilege certain aspects of their society.” —L.M.

This 1897 Sunset Seed and Plant Co. catalogue provides a look into the way Californians shaped the identity of their new state through plants and flowers.
Power Scrubbers

USC scientists develop material that cleans carbon dioxide from the air.

A team of USC scientists has developed an easy-to-make material that can scrub large amounts of carbon dioxide from the air.

One day in the future, large artificial trees made from the material could be used to lower the concentrations of the greenhouse gas in the Earth’s atmosphere. Until then, the material can be used to scrub the air inside submarines and spacecraft, as well as certain kinds of batteries and fuel cells.

The material is the latest advance in an ongoing project at the USC Loker Hydrocarbon Research Institute that aims to recycle the harmful excess of carbon dioxide in the atmosphere into a renewable fuel source for humanity — an anthropogenic (caused by human activity) chemical carbon cycle. The institute is housed in USC Dornsife.

The project seeks to solve two of the world’s greatest problems at once: the increase in atmospheric greenhouse gases and the dwindling supply of fossil fuels burned to create that issue.

“Carbon dioxide is not a problem,” said George Olah, Distinguished Professor of Chemistry, Donald P. and Katherine B. Loker Chair in Organic Chemistry, and the institute’s founding director. “Nature recycles it. Mankind should too.”

Olah collaborated on the project with fellow corresponding authors G. K. Surya Prakash, George A. and Judith A. Olah Nobel Laureate Chair in Hydrocarbon Chemistry and the institute’s director, and Alain Goepert, as well as Miklos Czaun, Robert May and S. R. Narayanan. The results were published in the Journal of the American Chemical Society in November.

Olah described his research on the anthropogenic carbon cycle as the most important work of his career — eclipsing even his work on carbocations in superacids that earned him a Nobel Prize in chemistry in 1994.

The researchers’ new material is a fumed silica (the thickening agent in milkshakes) impregnated with polyethelminime (a polymer) — and was found to absorb carbon dioxide well from both dry and humid air. Once the carbon dioxide is captured, the material can be made to release it simply by heating it up.

Though the work is ongoing, Olah and Prakash hope to find a low-cost, low-energy method of turning the captured carbon dioxide into methanol — which can be burned as a fuel source and used as a chemical feedstock.

“It is basically assuring a long-lasting renewable source of one of the essential elements of life on Earth,” Olah said.

The research was supported by the Loker Hydrocarbon Research Institute, the U.S. Department of Energy and the department’s Advanced Research Projects Agency-Energy. —R.P.

JEP Fights Childhood Obesity

Students join forces to lead a three-hour “health and fitness studio” at a local grade school.

Alison Thai and Janis Yee, junior biological sciences majors, were among five teaching assistants who helped lead a Nov. 18 “health and fitness studio” at Lenicia B. Weemes Elementary School near USC. Operated by USC Dornsife’s Joint Educational Project (JEP), students in the Young Scientists Program teamed up with their fellow Trojans in the USC Division of Biokinesiology and Physical Therapy to teach fourth and fifth graders the importance of healthy eating and exercise.

After fastening white chef hats onto the youngsters’ heads, Thai and Yee showed them how to prepare a healthy pasta alternative with squash, tomato, basil and oregano, and demonstrated portion control. “If they have a good diet, they’ll be more focused in class and better able to learn,” Yee said.

In addition, Weemes students constructed small planters in which they planted strawberries, cilantro, peppers, peas and tomatoes to better understand where fruits and vegetables come from and how they grow. They also learned games that provide a cardio workout and yoga exercises to help them relax and focus. —P.J.F.

Photos and Video: See more event coverage at dornsife.usc.edu/healthstudio
In the old days, we poured our hearts out in “Dear John” letters. Now, breaking up is easy. Just send a text: “Dear Baby, Welcome to Dumpsville. Population: You.” Instant messaging, texting, Facebook and Twitter have changed the way we tell our cuddle muffins we’re just not feeling it anymore.

Speaking to an audience of mostly USC students, Ilana Gershon examined the changing rules of romance amid the culture of new media. Gershon, associate professor of communication and culture at Indiana University, interviewed undergraduates about being decoupled via e-mail and similar forms of communication.

The talk was part of USC Dornsife’s 2011–12 Streisand Professor Lecture Series, “Where Is the Love?” Twenty-eight years ago, singer, actress and philanthropist Barbra Streisand endowed a USC Dornsife professorship in gender studies with a focus on the intersection of sexuality, intimacy and power between American men and women. This year’s series renewed the conversation The Streisand Foundation started in 1984 through five lectures exploring the contours of heterosexuality.

“People often assume that the realm of the intimate is dwarfed in importance by bread-and-butter — or financial — issues,” said Alice Echols, Barbra Streisand professor of Contemporary Gender Studies, Gender Studies program chair, and professor of English, gender studies and history. “However, as this lecture series demonstrates, love, intimacy and sexuality are themselves material, preoccupying, life saving and life changing for us all.”

The series kicked off in October with essayist, biographer and memoirist Vivian Gornick speaking about the vicissitudes of love and intimacy. In November, Lois Banner, professor of history and gender studies in USC Dornsife, discussed the ways in which Marilyn Monroe, an icon of white American femininity, rebelled against the gender and sexual rules of her day.

In January, Stephanie Coontz, a leading historian of the American family, examined women’s changing status, from the 1920s onward and identified new mystiques facing men and women today.

In March, Gershon, author of the critically acclaimed The Break-Up 2.0: Disconnecting Over New Media told the audience that the subject piqued her interest when she asked students to write down what they thought constituted a bad break-up during a linguistic anthropology class exercise.

“I was expecting stories about infidelity, about DVDs that were never returned, or loud, dramatic arguments,” Gershon said. “I did not expect what actually happened — everyone answered ‘breaking up by e-mail’ or ‘breaking up by text.’” Curious about why the mediums used in break-ups are so important, Gershon launched her investigation.

Streisand, who attended the Coontz lecture and dinner that followed, has been pleased with the content of the series.

“The series concluded in April with acclaimed sociologist Paula England discussing America’s changing family patterns, sexual behavior and labor markets.
Computational Biology Turns 30 at USC Dornsife

Scholars from across the globe learn and celebrate at symposium.

This year marks three decades of research in computational biology at USC Dornsife. The year 1982 is also when Michael Waterman arrived at USC. Waterman, University Professor, USC Associates Chair in Natural Sciences and professor of biological sciences, computer science and mathematics, is widely considered the father of computational biology. Seven years later, Simon Tavaré, George and Louise Kawamoto Chair in Biological Sciences and professor of biological sciences, arrived and became one of the pioneers in the field.

In March, USC Dornsife co-sponsored a three-day symposium celebrating 30 years of computational biology at USC Dornsife, Waterman’s 70th birthday and Tavaré’s 60th birthday.

Held at USC, the symposium included panel discussions, workshops, speakers from throughout the world, poster sessions, and a banquet.

“Being a computational physicist myself, I deeply admire what Mike and Simon have created here,” Stephan Haas, professor of physics and astronomy, and vice dean of research in USC Dornsife, told the packed audience during opening remarks. “It’s not only their exemplary scientific achievements we are celebrating, but also their ability to build a dynamic and cohesive group of researchers of all ages who love to work together.”

Waterman’s contributions include the dynamic programming algorithm for finding sequence homology and the algorithmic approach to RNA structure prediction. Tavaré has made significant contributions to methodology for the analysis and interpretation of DNA sequence and related genomic data, and to bioinformatics.

The computational biology and bioinformatics group they created now includes more than a dozen faculty members as well as a large cohort of graduate students and post-doctoral fellows. —P.J.J.

A New Home for Kaya Press

The nonprofit publisher of Asian and Pacific Islander diasporic literature is housed in the Department of American Studies and Ethnicity.

In January 2012, the leading independent press of Asian American literature in the United States, Kaya Press, moved from New York to USC Dornsife’s Department of American Studies and Ethnicity (ASE). Founded in 1994, Kaya Press has been publishing cutting-edge Asian and Pacific Islander diasporic writers for more than 15 years.

“They recognize what being at the forefront of the Pacific Century means,” said Sunyoung Lee, visiting faculty member of the East Asian Studies Center housed in USC Dornsife and Kaya Press publisher and editor, referring to the rise of Asia-Pacific economies during the 21st century.

“USC understands the role that arts and cultures play in a dynamic and interdisciplinary environment.”

The presence of Kaya Press at ASE will help bolster research on issues stemming from the Pacific Rim, said Macarena Gomez Barris, ASE interim chair and associate professor of sociology, whether in a scholarly or creative vein.

“Part of ASE’s vision is to talk about the real questions of how recent Asian immigrant populations are racialized and face discriminatory structural practices,” she said. “Yet we’re also as much focused on the expressive dimensions of Asian literature that Kaya so beautifully produces.”

Works published by Kaya Press tend toward the non-traditional, challenging readers’ understanding of what Asian American life really is. For example, Sesshu Foster’s City Terrace Field Manual explores violence and racism in a Chicano neighborhood and R. Zamora Linmark’s Rolling the R’s, written in Hawaiian Pidgin, discusses homosexuality in Hawaii in the 1970s. —A.B.
Troy Polamalu, Pittsburgh Steelers strong safety, earned his B.A. in history in 2011. The aspiring high school teacher continues to inspire fans and children on and off the field by his continuous follow-through.
PUTTING WORDS INTO ACTION

When Troy Polamalu left Los Angeles to join the Pittsburgh Steelers in 2003, he vowed to return and complete his college education. On May 13, 2011, he traded in his black and gold Steelers helmet and jersey for a black graduation cap and gown to make good on that promise.

Polamalu joined fellow USC Dornsife graduates on the short walk across the stage, fulfilling a commitment he made as a fourth grader to his uncle and aunt, Salu and Shelley Polamalu. “It was something that I had left unfinished in my life,” Polamalu said. “So it was great to bring closure. It was a huge blessing, and a relief to not have that hanging over me.”

The Orange County, Calif., native believes that action supersedes talk and wishful thinking. The father of sons Paisios and Ephraim enacted “praxis,” a practice of applying or exercising ideas in one’s everyday life. In Spring 2011, Polamalu completed a semester’s worth of classes in independent study and submitted a football player or as a good mentor, which became the second and last time he cut his hair.

Polamalu is also known for his versatility on the field. Since 2003, he has played strong safety for the Pittsburgh Steelers — a position for which he trains countless hours.

“It’s a tremendous blessing to play in the NFL,” Polamalu said. “It’s a sport that can teach you so many important life lessons like the fear of facing somebody that’s bigger, stronger and faster than you.”

The star NFL player who has left an indelible mark on and off the field hopes to one day be a high school teacher. Although he enjoys history, he is open to teaching other subjects.

Until then Polamalu continues to motivate and instill the importance of education by running a student-organized football camp in American Samoa. “The ‘Samoan Way’ taught me how to be responsible and about the foundations of what you need to be successful, as a football player or as a good teammate.”

At USC, Polamalu pursued a degree in history. It allowed him to explore a discipline that he believes embodies everything from business to sociology and religion. Within USC Dornsife’s rich liberal arts environment, he enjoyed Assistant Professor of Environmental Studies Roderick McKenzie’s geography course and Professor and Chair of Anthropology Nancy Lutkehaus’ class on the changing Pacific.

“What was really awesome about Professor Lutkehaus’ class is she talked about how great the Samoan people were as sea navigators,” he said. “That was fascinating to me because these are my people and I could connect with that.”

Outside of class, Polamalu held firm to his promise to play USC football. Because of his dedication to the sport, he was named the university’s first two-time All-American first team pick.

Even back then, Polamalu could be spotted from the stands with his raven black hair that sprouted beneath his helmet. The unruly frock caught the attention of a football coach during the Trojan’s junior year, which became the second and last time he cut his hair.

This Spring, USC Dornsife introduced the Dornsife Scholars Program to recognize its outstanding graduating seniors whose academic achievements across all spheres of knowledge address basic questions of human value and vital social challenges facing the nation and the world.

Honoring internationally renowned humanitarians Dana and David Dornsife, the program underscores that excellence in the core academic disciplines of the humanities, social sciences and natural sciences is the best preparation for students who wish to make a positive difference.

“The Dornsife Scholars program will serve as an enduring inspiration for USC Dornsife students to pursue scholarly inquiry in service of human enlightenment and progress,” said Howard Gillman, dean of USC Dornsife. “We are thrilled to recognize the inaugural group of Dornsife Scholars this Spring and to witness the positive changes they and future scholars will make to ensure the advancement of our communities and our world.”

The new Dornsife Scholar designation joins the university’s current undergraduate recognition programs. It combines the talents sought in the Discovery, Renaissance and Global Scholars programs with an added emphasis on positive human impact. Offering university-wide recognition, the designation is available exclusively to outstanding graduating seniors whose major course of study is in USC Dornsife.

This year, approximately 10 USC Dornsife Scholars will be selected and awarded $10,000 prizes to be used for graduate or professional school studies.

FROM THE HEART OF USC

Dornsife Scholars Program Launched

The new designation combines the talents sought in USC’s Discovery, Renaissance and Global Scholars programs with an added emphasis on positive human impact.
A Tale of Two Koreas

A new minor focusing on South and North Korea gives students an opportunity to specialize in the politics, economy and culture of the Korean Peninsula, present and past. by Michelle Salzman

Whether it is South Korea’s booming economy or North Korea’s nuclear ambitions, the business and politics of the Korean Peninsula make headlines on a regular basis, said David Kang.

“Solving the North Korean nuclear problem is a major issue. Then you have South Korea, which is America’s eighth largest trading partner. What happens in Korea has an effect on the United States. We’re deeply interlinked,” said Kang, director of the Korean Studies Institute (KSI) and interim director of the East Asian Studies Center (EASC) in USC Dornsife.

To delve more deeply into the political, economic, social and cultural changes in the region, USC Dornsife launched a new minor in Korean studies in Fall 2011. Students throughout the university have the opportunity to focus their research on Korea by taking courses from across the social sciences and humanities.

For the minor, students choose one lower division course for four units and four upper division courses for 16 units from a designated list of classes. They can mix and match courses based on their interests.

Many of the classes focus on contemporary issues in Korea, such as “Business and Politics in the Korean Peninsula,” “Gender in Korean Film and Literature” and “Korea: The Modern Transformation.” Students can also study Korean language and literature, and earn units by participating in related study abroad programs, such as the Global East Asia program offered through EASC.

Kang, professor of international relations and business, pointed out that the minor is a valuable concentration for a wide range of majors in USC Dornsife, among them anthropology, religion and international relations. He added that students in the USC Marshall School of Business, USC Annenberg School for Communication & Journalism and USC Viterbi School of Engineering may also find the minor complementary as well.

“In Los Angeles, we’re in a global city at the gateway to the Pacific Rim,” Kang said. “Many of the jobs students pursue will involve interacting with Asia at some point. This is one way to get expertise in one particular region.”

Eric Park, a sophomore majoring in international relations and business, took on the Korean studies minor because it balances out his interests in European foreign policy and security issues, giving him a chance to focus on East Asian security. He is interested in learning how Korea coordinates its foreign policy and security needs in comparison to China and Japan.

“The Korean studies minor fit really well with what I wanted,” Park said. “Studying Korea is particularly strategic geopolitically so I thought the minor would be a great way to learn about the country and its neighbors.”

In addition to the minor, KSI provides further resources for students interested in learning about Korea. The institute offers opportunities for research and regularly hosts lectures and events that spotlight issues throughout the region. Between the new minor and the programming available through KSI, students have a substantive channel for specializing in Korean studies.

“Asia is one of the most dynamic regions in the world,” Kang said. “The minor is a step toward opening it up to students interested in it.”

FROM THE HEART OF USC

IN THE NEWS QUOTABLES

“Mexico is at a crossroads in terms of dealing with organized crime. It’s quite clear that the government absolutely must confront organized crime, and it’s absolutely clear that the Calderón strategy hasn’t worked.”

PAMELA STARR of international relations in a March 31 New York Times article on the Mexican government’s efforts to control organized crime.

“An incumbent has to err on the side of realistic optimism; a challenger has to figure out a way to sell the need for change without terrifying people.”

DAN SCHNUR, director of the Jesse M. Unruh Institute of Politics, in a Feb. 7 Los Angeles Times article on campaign messaging strategies for the 2012 presidential election.

“In poetry, as in prose, we try for that tonal authority. Reading and committing to memory the conversation of literature accelerates this process. Poetry is alive when we ‘own’ a poem in memory.”

CAROL MUSKE-DUKES, professor of English and creative writing, and former California Poet Laureate, in a Dec. 3 op-ed in The Wall Street Journal on encouraging her students to memorize poems to commit to memory the conversation of literature and to develop their own writing styles.

Video: Learn more about the Korean Studies Institute at dornsife.usc.edu/ksi-video.
FRUSTRATION

\[\text{frəs-trā-shən}\] noun [From Latin frustratio, disappointment; related to frustrā, in vain] 1. Arises from competing interactions between particles. If the interactions between nearest-neighbor atomic spins are “antiferromagnetic,” i.e., they tend to anti-align, frustration occurs in triangular configurations. This is because while two spins can easily anti-align, the third spin in a triangle can then not simultaneously anti-align with both of the other spins.

Origin: The term “frustration,” in the context of magnetic systems, was first used by Gérard Toulouse in two 1977 papers he published in the *Journal of Physics C: Solid State Physics and Communications on Physics.*

Usage: “Competing interactions in a system of particles can lead to frustration, preventing the material from ever reaching an ordered state even as the temperature approaches absolute zero.”

Stephan Haas, vice dean for research and professor of physics and astronomy, focuses on quantum magnetism, superconductivity and nanotechnology. His research group investigates microscopic models of interacting electronic systems, using numerical techniques to understand their phase diagrams, thermodynamic properties and excitation spectra.

Magnetic dipoles in this frustrated spin ice arrange themselves in an optimal configuration, with two poles pointing in and two pointing out.
USC Dornsife scientists have developed — for the first time — a method for generating accurate three-dimensional models of the entire DNA of a cell, known as a genome. The genome plays a central role in the functions of almost all human cells; flaws in its structure are thought to cause various disorders, including cancer.

Understanding the structure of the genome is crucial to grasping its function as a whole, said Lin Chen, professor of biological sciences and chemistry. “Everything biological works in three dimensions. Therefore, to comprehend the genome completely, you have to understand it three-dimensionally.”

“The genome has levels of complexity that go far beyond its linear sequences,” said Frank Alber, assistant professor of biological sciences. Chen and Alber led the team of USC Dornsife researchers, including Reza Kalhor, Harianto Tjong and Nimanthi Jayathilaka, who solved the problem.

None of the conventional methods biologists use for studying the structure of biomolecules works well for the human genome because of its tiny size and enormous length. The genomic DNA strand is so long that if a nucleus was scaled up to the size of a soccer ball, the strand of DNA inside it could be unraveled to stretch more than 30 miles long.
New Facial Recognition Research Turns Heads

Bosco Tjan of psychology has found that facial recognition hinges on recognizing the face’s features more than the “holistic” picture they add up to create.

A team of researchers that includes USC Dornsife psychologist Bosco Tjan has demonstrated methodically that a face’s features or constituents — more than the face per se — are the key to recognizing a person. Their study, which goes against the common belief that brains process faces “holistically,” appeared in March in Psychological Science.

In addition to shedding light on the way the brain functions, these results may help scientists understand rare facial recognition disorders.

Humans are great at recognizing faces. There are even regions in the brain that specifically are associated with face perception — the most well-known one is the fusiform gyrus in the temporal lobe.

Common wisdom has it that humans recognize the face “holistically,” meaning that it is something about the picture created by the entire face — the particular arrangement of a face’s eyes, nose and mouth and not just these features themselves — that makes it easier for the human brain to make a positive ID. That common wisdom appears to be wrong.

“This is the belief that faces are special,” said the study’s co-author Tjan, associate professor of psychology.

“But why? How is the face special?”

To use an automotive metaphor, would it be easier for a car aficionado to identify a ’58 Corvette by its distinctive quad headlights, chunky chrome grille and swoop on the side or if shown the car that all these pieces make when added together?

Tjan and collaborators Jason M. Gold, associate professor of psychology at Indiana University (IU), Bloomington and IU undergraduate student Patrick J. Mundy tested participants on how accurately they were able to identify a set of faces by the parts of those faces — the nose, left eye, right eye or mouth.

Then, using a well-established formula that Tjan developed in an earlier study, the researchers extrapolated how accurately each participant should be able to identify an entire face. If humans were better at face recognition than nose or eye recognition, one would expect each participant to do a better job of identification when the features are all arranged together into a face. But, in fact, the participants did a little worse than predicted by Tjan’s formula.

Facial recognition, it appears, hinges on recognizing the face’s features more than the “holistic” picture they add up to create.

The National Institutes of Health funded the research. —R.P.

Champions of Change

David Horacio Hernandez and Mark Benthien are lauded by the White House for their exemplary work improving their communities.

President Barack Obama’s administration has recognized USC Dornsife junior David Horacio Hernandez and earthquake preparedness expert Mark Benthien as White House Champions of Change. The program honors everyday Americans of all ages doing extraordinary things for their communities. The champions are invited to Washington, D.C., to share their ideas with governmental leaders during roundtable discussions.

A first-generation college student majoring in political science and American studies and ethnicity, Hernandez was praised for his commitment to the country’s youth. Hernandez is a member of Chicanos for Progressive Education, a campus organization that sends USC undergraduates to South Los Angeles’ high schools with high dropout rates to provide mentorship.

“Being recognized by the White House made me believe that I’m a rooted voice in my community,” said Hernandez. “Being honored by the people I hope to work for someday made me more passionate about my dreams.”

Benthien was praised for his disaster preparedness work as director for communication, education and outreach for the Southern California Earthquake Center (SCEC), and executive director of the Earthquake Country Alliance, both headquartered in USC Dornsife. In these roles, he helps prepare California communities and beyond for earthquakes — including promoting the “Drop, Cover and Hold On!” self-protection procedure as part of the Great California ShakeOut annual earthquake drill.

“Being selected as a White House Champion of Change is a recognition of the success of many people brought together by SCEC over the past 10 years to deepen our partnership, create products and programs and motivate preparedness,” Benthien said. “I’m honored to work with so many excellent people and partners.” —A.B.
A Search for Life at the Earth’s Extremes

Katrina Edwards leads a research team on a 65-day voyage examining the sub-seafloor.

This Fall, Katrina Edwards, who directs the National Science Foundation’s Center for Dark Energy Biosphere Investigations (C-DEBI) headquartered in USC Dornsife, spent 65 days at sea in search of life hidden beneath the seafloor. Edwards and Bremen University’s Wolfgang Bach co-led a team of more than 100 scientists and support crew that drilled four cores through the sediment of the Atlantic Ocean’s seafloor and into the bedrock below.

“A challenging aspect of this type of work is the relentless pace,” said Edwards, professor of biological sciences, earth sciences and environmental studies. “When installing sub-seafloor laboratories like we were, your day begins and ends only when the installation begins and ends. These are 24- to 36-hour operations. There are no breaks.”

The instruments Edwards and her colleagues placed will gather hard data about the microbes that live at the bottom of the biosphere — the portion of the Earth that is inhabited by living organisms. Edwards and other scientists from C-DEBI will return to harvest the data in an effort to learn more about the role that tiny sub-seafloor microbes play in shaping the oceans and crust of the Earth.

Read Katrina Edwards’ blog at darkenergybiosphere.org/return-to-northpond/
STUDENTS India
A team of seven graduate students embarked on a two-week research trip to India in December while reporting on the country’s public diplomacy efforts and posting entries on the India: Inside Out blog.

The second-year Master’s in Public Diplomacy students visited New Delhi and Mumbai to meet with a range of stakeholders interested in how India is positioning itself to both foreign and domestic audiences. The objective of the Web site and blog is to spark a larger discussion on the relevance and value of public diplomacy in the international affairs and communications communities.

ALUMNI Afghanistan
It is tradition for military personnel to fly an American flag over the Pentagon, military hospitals, a forward operating base (FOB) or inside an aircraft during mission flights in honor of someone or something important to them. For a Marine and an Air Force captain in Afghanistan, that something was their alma mater.

Marine helicopter pilot Capt. Brian “Domo” Gilbert, who earned his bachelor’s in international relations in 2005, affixed a flag inside the cabin in a CH-53E Super Stallion, which he flew during a combat mission over Helmand Province. The flag was signed by crewmembers, folded in the official manner and sent to the USC Dornsife Office of the Dean, where it is displayed.

“USC was one of the best experiences of my life,” Gilbert said. “I made lifelong friends as a member of the NROTC Trojan Battalion and as a student at the USC School of International Relations.”

Air Force Capt. Marat Zanov, a military clinical psychologist, flew the flag over his FOB in hostile territory near Kabul. A certificate accompanying the flag reads: “So that all shall know, this flag was flown in the face of the enemy, illuminated in the dark by the light of justice, and bears witness to [confronting the] terrorist forces threatening the freedom of the United States of America and the world. In honor of the USC Department of Psychology.”

Zanov earned his Ph.D. in psychology in 2009 and the flag hangs on a department wall.

“My experience at USC was not only unforgettable and greatly fulfilling but also formative in terms of my professional and personal development,” Zanov said. “Honoring USC with a U.S. flag flown over foreign soil is the least I can do to reciprocate.”

ALUMNI AND STUDENTS
Austria, England, British Columbia and Nevada
Between a Rock
Geologists find evidence that mass extinction events may have been caused by ocean acidification.

When the Earth’s carbon dioxide level increased at a rapid rate during the Triassic-Jurassic period 200 million years ago, nearly half the ocean’s marine life became extinct. USC Dornsife alumna Sarah Greene, who earned a Ph.D. in geological studies in 2011, and Rowan Martindale, a doctoral candidate in earth sciences, contributed to a March 2012 study in *Science* that looks at geological records for evidence that mass extinction events may have been caused by ocean acidification.

Having scoured ancient rock beds in Austria, England, British Columbia and Nevada for evidence of acidification, Greene and Martindale along with 19 other scientists report that examining the fossil records of ancient acidification events may provide scholars with evidence to predict and plan for future global changes.

“We can look at the outcomes of these paleo events to inform our predictions for the future,” Greene said.
PERFECT VISION

Standing up against racism. Saving the oysters. Allowing science to progress.
Just a few monumental topics in USC Dornsife 2020’s range of view.

By Pamela J. Johnson

At the Cold War’s dusk, history graduate Wolf Gruner swung a hammer at the Berlin Wall. For years, the East Berliner had been involved in a cultural underground movement against the communist regime.

Now Gruner’s life goal is to obliterate genocide.

“When mass murder has already begun happening you can’t change the course,” said Gruner, Shapell-Guerin Chair in Jewish Studies and professor of history. “Then you can only save some people. But if you start earlier when genocide is evolving, you can stop it.”

Gruner is co-chairing a USC Dornsife 2020 research cluster, “Genocide Resistance,” which examines what makes people stand up against racist ideologies, discrimination practices and mass atrocities. He organized the cluster with Stephen Smith, executive director of the USC Shoah Foundation Institute for Visual History and Education, housed in USC Dornsife.

“People often say that the Holocaust was a huge moving force that was unstoppable, inevitable,” Smith said. “But on a daily basis individuals were pushing back in large and small acts of defiance. People assume Jews went like lambs to the slaughter. They certainly did not.”

Established by Dean Howard Gillman, USC Dornsife 2020 calls for professors to identify a theme of great societal importance for years to come and form research groups to investigate solutions. Each cluster includes faculty, undergraduate and graduate students, and postdoctoral researchers who work across departments, centers, institutes and schools at USC.

Launched Fall 2010, one cluster studies the impact of climate change on Southern California’s ocean and coastal ecosystems. Another looks at highly charged public debates at the intersection of science, technology and society, such as stem cell research and teaching creationism in public schools. The first of three new clusters were introduced in Fall 2011 (see page 28).

“Genocide Resistance” brings together scholars of history, psychology, political science, international relations, literature, anthropology, medicine and law to study individual, group and institutional behaviors in the pre-stages, murder phase and aftermath of genocides.

Like Smith, Gruner wants people to know that Jews were not passive Holocaust victims as many believe. At the start of their persecution, many Jewish people didn’t flee or react because the conditions from town-to-town were wildly inconsistent.

“In the beginning there were not many laws enacted, but it was an anti-Jewish movement,” said Gruner, who continued his education in West Berlin after the wall’s collapse. He arrived at USC Dornsife in 2008.

“Jews had a hard time figuring out what the Germans were actually doing,” he said. “Many people decided not to emigrate because they thought this was a temporary thing, that perhaps just their mayor was much more fanatical than the others.”

But later, protests and other acts of resistance took place. For example, Roza Robotka, 24, a prisoner in Auschwitz-Birkenau led a small group of women in smuggling gunpowder to men counterparts who blew up a crematorium. Before being hanged, each woman yelled out “Nekamah!” which means “vengeance” or “be strong.”

USC Dornsife 2020 and the USC Shoah Foundation Institute have brought in international speakers such as Curt Lowens, a Holocaust survivor who, in an act of resistance, rescued Jewish children under a false identity. Smith noted that in June 2012 the institute and USC Dornsife 2020 will hold a conference in Israel with the University of Haifa to include scholars worldwide to discuss multiple genocides and prevention.

Resistance has been a woefully neglected part of genocide history, Gruner said.

“Holocaust history discusses uprisings in the ghettos, but there was so much more,” he said. “If you look at the Armenian Genocide there’s almost nothing known about resistance.”

Gruner’s student Roza Petrosyan knows this. The 21-year-old’s great-grandparents were persecuted during the systematic murder of 1.5 million Armenians by the Ottoman Empire beginning in 1915.

But it wasn’t what her relatives said about the Armenian Genocide that ignited her deep curiosity on the subject.

“It’s what they didn’t say,” she said.

Through USC Dornsife 2020, the double major in history and psychology is finally getting answers.

Petrosyan, who lost many relatives during the Armenian Genocide, set out to show that Armenians did not obediently walk to their deaths. In her research, she soon found that the little resistance literature that did exist focused on men.
I found that women were much more involved in fighting or providing weapons and bullets to the fighters than I had understood...

At USC Dornsife, Petrosyan took Gruner’s “Resistance to Genocide” seminar.

“Dr. Gruner inspired me to continue my research,” Petrosyan said. “He encouraged all of us to be creative about finding sources. That pushed me to start looking for video testimonies.”

The USC Shoah Foundation Institute is in the process of adding 400 Armenian video testimonies to its archive. In the meantime, Petrosyan used funds from USC Dornsife 2020 and traveled to the Zoryan Institute in Toronto, Canada, where she watched 50 interviews of survivors who spoke mostly in Armenian, her first language.

“I found that women were much more involved in fighting or providing weapons and bullets to the fighters than I had understood from written sources,” she said. “I also found that women were involved in other methods of struggle, sacrificing themselves for their families, committing suicide to show defiance or fleeing from deportations.”

Through video testimonies, Petrosyan learned of a woman in the Syrian Desert who sold her clothes to buy food to feed her three children. When her famished young son begged for an egg, the mother traded the shirt on her back. While the boy was handed the egg, a gendarme smacked the egg out of the boy’s hand then aimed a rifle at him. An aunt covered the boy’s body and was killed instead.

Petrosyan learned of Armenian girls who threw themselves into the Euphrates rather than fall into the hands of the Ottoman military. She learned of women fighting rapists with fists, rocks and sticks.

“It’s also important to look at how women resurrected the culture after the genocide,” said Petrosyan, who will continue her research in Armenia in Summer 2012. “The Armenian people survived because of the efforts of their women.”

Other research in this cluster also took students to various parts of the world. Jasneet Aulakh, a senior majoring in history, English and philosophy, traveled throughout northern India researching the Sikh and Hindu resistance in the 1984 Anti-Sikh pogrom. During the four days of violence, armed mobs killed Sikhs, looted, and set fires in response to the assassination of then Prime Minister Indira Gandhi.

Jeremy Schwartz, an international relations senior, produced a short documentary, Resilience, exploring organizations that help rehabilitate survivors of mass violence and torture. Schwartz interviewed survivors of torture from Ethiopia and Colombia and a survivor of the 1991 Somalia conflict. Heather Ashby, who is earning her Ph.D. in history, traveled to Washington, D.C., and London for her research on black radicalism during World War I and II.

In addition to travel grants, Ph.D. fellowships and undergraduate stipends, the cluster provides annual international workshops and thematic seminars. Gruner and Smith are developing curricula that will guide the creation of a graduate certificate program, freshman seminars and an interdisciplinary minor. They also plan to establish a genocide resistance research center.

Gruner noted that in the past two decades, the bulk of genocide research has focused on why people commit such crimes.

“But in the end there is no common feature of perpetrators,” Gruner said. “They are men and women; they come from all educational backgrounds and are all ages. We are still questioning why people do this. I thought perhaps we should instead ask why are some people not participating and instead standing against the mainstream?”

Closed societies are more susceptible to mass violence, but the danger is present for genocide anywhere in the world, Gruner said.

“Remember what happened here in the United States after 9/11,” he said. “How quickly paranoia against the Muslims took place. People immediately started to denounce anyone who looked foreign and spoke foreign languages. It was only because there was public discussion about this that the paranoia fortunately eroded. But if there had been no public discussion the dangers could have escalated.”
**AW, SHUCKS**

So you like a little horseradish with your oyster shooter? Better enjoy it now. In a few decades, those juicy half shells may be only a delicious memory.

The human-induced carbon dioxide (CO₂) in the atmosphere is being absorbed into the ocean at an alarming rate, causing seawater to become acidic. These changes in ocean chemistry are dissolving the calcium-based shells of marine life.

"Oysters are in trouble," said David Hutchins, professor of biological sciences. "Clams are in trouble; lobsters and crabs are in trouble. Corals are in trouble, sea urchins. This is happening right along our coastline."

Hutchins and Doug Capone, William and Julie Wrigley Chair in Environmental Studies and professor of biological sciences, oversee the "Climate Change in the Southern California Bight" research cluster. Their team is looking at the implications of climate change in a marine setting bordering the densely populated urban area of the greater Los Angeles basin.

While many scientists study the effects of climate change on land life, this cluster examines its impact on the ocean.

"Many people don't understand that the changes going on in the coastal ocean have a bearing on their lives and our society," Hutchins said. "Problems like ocean acidification, sea level rise, changes in fisheries, harmful algal blooms — these are climate change issues that maybe fly a little bit lower under the radar than climate change in general."

A main goal of the project is to increase communication and promote collaboration among Southern California researchers and officials who deal with all aspects of oceanic climate change issues. Cluster members are working with researchers at the Jet Propulsion Laboratory at the California Institute of Technology; county and city sanitation officials in Los Angeles and Orange counties; National Marine Fisheries Services; the Santa Monica Bay Restoration Commission; several universities; and other entities.

In a series of workshops, ocean biologists, chemists, physicists, earth and social scientists, international relations experts as well as water quality representatives are sharing their research. In an outreach component, oceanic climate change symposiums are being held for the local community and USC students and faculty. The symposiums include discussions with USC Annenberg School for Communication & Journalism professors about how scientists can better communicate climate change to citizens and policymakers.

"Climate change is a major societal issue and people need to be better educated," Capone said. "One of the main thrusts of our efforts is to get the word out about coastal climate change because there are so many diffuse facts or downright misinformation put out that confuses the public."

A big issue is understanding human-induced climate change compared to natural climate change. Natural cycles exist such as El Niño and the longer-lived Pacific Decadal Oscillation (PDO) of the Pacific Ocean that waxes and wanes between cold and warm phases every five to 20 years.

In the cool phase of the PDO, higher than normal sea-surface heights are caused by warm water from a horseshoe pattern that connects the north, west and southern Pacific, with cool water in the middle. During most of the '80s and '90s, the Pacific Ocean was locked in the oscillation’s warm phase, during which these warm and cool regions were reversed, according to the Open Source Systems, Science and Solutions Foundation.

“What we're doing as humans is adding on top of the natural warm and cool cycles,” said Capone, referring to the burning of oil, coal and gas, and deforestation, which greatly increases the release of CO₂ into the atmosphere. The world’s oceans absorb much of the atmosphere’s CO₂.

Many people don’t understand that the changes going on in the coastal ocean have a bearing on their lives and our society.

Carbon dioxide and water together create carbonic acid and lead to a drop in ocean pH.

Further, it takes decades to centuries for the Earth to fully react to increases in greenhouse gases. Carbon dioxide remains in the atmosphere long after emissions are reduced, contributing to continued warming. As the Earth warms, the upper layers of the ocean are heated. And like a hot water bottle on a cold night, the heated ocean will continue warming the lower atmosphere well after greenhouse gases have stopped increasing, according to NASA Earth Observatory.

PDO has gained traction in the past years as many political and business communities deny that humans are causing climate change, pointing to PDO as the natural cause. Opponents believe that taking action against human-induced climate change would cause enormous expense with no obvious short-term benefits.

"So what we are doing here is dissecting away the natural variabilities of oceanic climate change," Capone said.

About one-third of all CO₂ that humans have put into the atmosphere from cars, power plants and factories is now in the ocean, Hutchins said.

"It's a good thing for the atmosphere because the ocean is taking CO₂ out of the atmosphere that would otherwise warm up the planet," Hutchins said. "However, it's not such a good thing for the ocean because the CO₂ is causing the ocean to become more acidic. The more acidic, the more the ocean becomes like orange or tomato juice. Marine organisms that calcify and make shells are not adapted to cope."

Shellfish industries are very worried, Hutchins said, adding that already they are experiencing failures in raising young oysters from Washington state to California.

"It's hitting them in the pocketbook," he said. "They're afraid that they're not going to be able to grow oysters..."
anywhere on the West Coast in the next few years and the industry is going to disappear.”

Further, some of the sea life affected by ocean acidification is the major prey supporting salmon.

“So you can imagine how the salmon industry all the way up and down the West Coast feels about this,” Hutchins said. Scientists consider climate change a bellwether.

“Harmful algal blooms have gotten bigger and more toxic and are causing a lot more environmental and economic damage,” Hutchins said. “Zones of depleted oxygen underlying the surface of the water are expanding, which is linked to climate. These are essentially dead zones.”

The negative consequences are happening here at home. “When people think of climate change, they may think of Antarctic ice sheets melting, which is pretty remote to most people’s world views,” Hutchins said. “But if you start talking to them about what’s happening around Catalina Island and right in our neighborhood here in Los Angeles then they know we need to get a dialogue going right away.”

Some of the research in this cluster is taking place at the USC Wrigley Institute for Environmental Studies on Catalina Island. In the laboratories, Hutchins is reconstructing phytoplankton communities and testing reactions when CO₂ is introduced. Hypotheses are then tested in experiments with natural communities of plankton aboard research vessels at sea.

USC Dornsife 2020 also supports postdoctoral scholar Li Luo, who works with Dale Kiefer, professor of biological sciences, in collecting and interpreting climate-relevant marine data in the Southern California Bight, which includes coastal Southern California, the Channel Islands and part of the Pacific Ocean. Under Kiefer’s guidance, Luo — who acquired expertise in remote sensing and geographic information system data analysis and modeling during her Ph.D. work at SUNY Syracuse — is placing the ongoing environmental changes along the Southern California coast into a broader regional context.

“We’re trying to make a distinction between the forest and the trees,” Kiefer said. “Scientists often get so involved in the trees that they miss the bigger picture. So we’re creating a tool for an overview and describing the forest so the guy working on the tree has context.”

Luo is looking at how temporal and spatial trends in climate change-related variables like sea surface temperature and ocean color (chlorophyll) in the Southern California Bight compare to the entire North Pacific Ocean. To accomplish this, she is integrating sources of long-term climate data including NASA satellite records.

With the data collected, Kiefer and Luo are developing a Web site that can be used by scientists worldwide researching climate change, particularly along the California coastline. Also available on the Web site will be their empirical orthogonal function (EOF) analysis, a decomposition of data including time series and spatial patterns of ocean temperatures across three spatial scales: the North Pacific basin, the West Coast and Southern California Bight.

The pair is comparing changes in the Pacific at large to changes in the California Bight.

“We’re looking at the extent to which what’s happening here is driven by larger regional patterns,” Luo said. “At the same time, we’re creating cohesion within the scientific community.”

All information is being integrated into maps that will be electronically available to scientists creating mathematical models to predict temperature and other changes in the ocean. A workshop this Fall will focus on modeling climate change impacts in the Southern California Bight.

These cluster members strive to be as inclusive as possible. They also invite the recreation industry to be part of the discussion.

“If you’re running a resort hotel along the coast, it’s not a good thing if you have a giant algal bloom going on in the coastal waters, or a big fish kill,” Hutchins said. “We’re looking at changes in the global environment that translate into effects on the coastal ocean that we care about. The worse it gets the more obvious it’s going to become.

“Right now we’re seeing the early stages of bad things beginning to happen, but all of our work suggests that it’s not going to get better unless we address the underlying issue — which is, we’re making too much greenhouse gas.”

AND THAT’S A FACT

What Galileo Galilei really needed was a public relations firm to market his theories. The law of gravity is now an agreed-upon fact, but Galileo met with fierce opposition from the Catholic Church and fellow scientists when he introduced the theory in the late 16th century.

Galileo endured a long struggle before his work became the catalyst for Isaac Newton’s theory of gravity. After he famously dropped balls from the Tower of Pisa and took measurements of balls rolling down inclines, Galileo showed that gravity accelerates all objects at the same rate. His discovery directly contradicted Aristotle’s belief that heavier objects accelerate faster.

When he additionally claimed that the Earth revolved around the sun and not the other way around, Galileo was ostracized and ordered to denounce his beliefs. When he refused, he was charged with heresy by the inquisition of Pope Urban VIII and imprisoned.

It took 300 years for the church to admit Galileo was right — an ordeal that illustrates the overwhelming social barriers in scientific fact creation.

...So if you study gravity and say gravity is a social construction, people will say you are completely wrong and you will be ridiculed.
A NEW AMERICAN NARRATIVE
The year is 2042. If you are white and living in the United States, you are a minority, according to Census Bureau projections.

"By 2042, the U.S. is going to look completely different in terms of who’s being born, going through the school system, being educated in college and who’s joining the workforce,” said Ange-Marie Hancock, associate professor of political science and gender studies in USC Dornsife.

“For the next 20 years, how immigrants integrate into society will be one of the key areas of discussion throughout the nation. At USC Dornsife, the topic is becoming a core specialty.”

The country’s first graduate certificate in immigrant integration is being created through USC Dornsife 2020 — cross-discipline research clusters exploring societal issues crucial today and into the future. The “Taking the Next Step: Enhancing Graduate Education and Scholarship on Immigrant Integration” group is the brainchild of Hancock, associate director of USC Dornsife’s Center for the Study of Immigrant Integration (CSII), and Manuel Pastor, professor of American studies and ethnicity, and CSII director.

Certificate graduates will be trained to collect and analyze data using disciplines such as sociology and American, ethnic and gender studies. There will be dissertation development workshops and funding for CSII research assistantships.

CSII researchers gather data to study the impact of immigrants who meld into the American fabric without abandoning their own traditions. “Integration” is the topic as opposed to assimilation, when immigrants shed most of their host country’s customs.

“USC can be the go-to place for anybody who’s producing scholarship in this area,” Hancock said. “Whether it’s research about health care, public schools, community safety — all of these key issues will include a component of immigrant integration by 2042.”

LIVING IN A PHOTOSHOPPED WORLD
No matter what they told you, seeing is not always believing.

The “Seeing 20/20: The USC Visual Studies Research Institute” cluster teaches participants how to critically examine the constant barrage of images in an increasingly visual world. Everything from paintings to newspaper and television images to billboards, graffiti and sculptures is being deconstructed.

Led by Kate Flint, Provost Professor of English and Art History, the cluster builds on the success of USC Dornsife’s Visual Studies Graduate Certificate program that began in 2006. The institute explores the nature of visual evidence across disciplines and in society as a whole.

“We want undergraduates, graduates and colleagues not to take their visual surroundings for granted. And to think intelligently and questioningly about what use we make of images. And, in a sense, the use that images make of us.”

Using functional magnetic resonance imaging (fMRI) data, researchers are identifying lifespan shifts associated with self-control decisions in a graduate course, “Social Neuroscience of Self-Control,” taught by Wood and John Monterosso, associate professor of psychology.

“We think about how people adapt to circumstances,” Wood said. “We’re living through major changes in the economy, higher unemployment rates and stagnated incomes. This research shows us how we cope with a variety of changes in our lives.”

“Delayed Gratification”
Neural evidence shows that the elderly rely on habits more than younger people, who are more impulsive and emotion driven. As one gets older, the brain’s impulse system decreases in activity. The ability to learn new habits wanes.

This may explain why older people become dependent on the place they live and may find traveling or moving into a retirement home extremely stressful.

“It’s good to know there’s a neurobasis to explain why it’s so hard for many elderly people to adapt to change,” said Wendy Wood, Provost Professor of Psychology and Business in USC Dornsife, who is heading the USC Dornsife 2020 research cluster, “Adapting to Downturn, Rising with Recovery: Multi-Method Training for Social, Behavioral and Brain Scientists.”

The group is examining lifespan changes in neural systems underlying self-control and decision-making.

Graduate training, courses and speakers from throughout the world are addressing how self-control varies across the lifespan, affecting decision-making. Typically, successful decisions involve suppressing bad habits and tempting urges to choose smaller, short-term rewards and instead selecting larger, future rewards.

Because the neural systems underlying deliberation, habits and tempting urges mature and decline at differing rates across one’s lifespan, the neural sources of self-control failure shift from children to older people.

“How do little kids decide to delay gratification and do homework rather than play?” Wood asked. “How do elderly people learn to eat a healthy diet when they no longer have people around them reminding them?”

We want undergraduates, graduates and colleagues not to take their visual surroundings for granted. And to think intelligently and questioningly about what use we make of images. And, in a sense, the use that images make of us.”

KATE FLINT, Provost Professor of English and Art History, leads the USC Dornsife 2020 research cluster “Seeing 20/20: The USC Visual Studies Research Institute.”
“For sociologists who study science, one of the biggest problems they face is when they say, ‘Listen, there is a social process involved in making facts and we need to understand this process in order to understand science better,’” said Dan Lainer-Vos, Ruth Ziegler Early Career Chair in Jewish Studies and assistant professor of sociology. “People interpret such a statement as doubting the integrity of science. So if you study gravity and say gravity is a social construction, people will say you are completely wrong and you will be ridiculed.”

Lainer-Vos is working to enlighten the naysayers. He helped to formulate and is teaching courses in USC Dornsife’s new minor in science, technology and society. The minor was created as part of USC Dornsife 2020’s research cluster of the same name. The cluster and the new minor address the public controversies involving science, technology and society.

As science and technology deliver breakthroughs for better health, cleaner energy and deeper knowledge of human anatomy, the same developments have provoked widespread anxiety. Scientists advising policymakers are often met with skepticism or worse, whether about stem cell research or setting guidelines for breast cancer screening.

In many cases, economic interests, scientific initiatives and societal values clash. Understanding these encounters requires a historical and comparative perspective, said Andrew Lakoff, associate professor of anthropology, sociology and communication, who formed and is heading the Science, Technology and Society cluster.

Whether in Galileo’s long-ago battle with church authorities, or current debates over climate change among U.S. policymakers, specific cultural and political factors are at play in societal responses to scientific developments.

Stem cell research is a good example. Despite the promise of discovering treatments to fight diseases, political and religious groups launched an effective campaign against the research. The protest centered on the use of human embryos to conduct the studies.

“From engineering and biomedical viewpoints, what clearly looks like an exciting and interesting field to explore, bumps up against religious and political positions,” Lakoff said. “That kind of opposition may not have been envisioned within the fields of medicine and engineering.”

In an era of rapid globalization, such tensions will likely intensify in the coming decade. Will synthetic genomics lead to the creation of deadly new pathogens? Do genetically modified organisms pose invisible threats to the environment or to human health? Are developments in neuroscience and psychopharmacology undermining traditional notions of human agency and reason? Does the use of functional magnetic resonance imaging (fMRI) to measure activity in a prospective consumer’s brain open Pandora’s Box?

“What we wanted to do was create a setting for serious reflection on these kinds of questions,” Lakoff said, referring to his group of scholars in the social sciences, the natural sciences, history and other disciplines in the humanities.

These scholars are studying how new technologies and scientific innovations are produced, the processes of their dissemination and their societal impact. They are examining what enables and what blocks knowledge from circulating. They are also studying the human sciences from the early modern to the molecular age, and how politics have intervened in technology’s future.

Through working and reading groups, an annual research workshop, lectures, panel discussions and symposiums, humanists and scientists are debating the role of science and technology in public life. Participants are addressing key problems — whether end-of-life care, how parents of autistic children led an anti-vaccination campaign despite public health officials’ assurances of vaccine safety or the merits of teaching creationism in public schools.

Other highlights are graduate student training and the sponsorship of postdoctoral fellow Mihir Pandya, who earned his Ph.D. in cultural anthropology from the University of Chicago. Pandya’s dissertation, *The Stealth Effect: Aerospace and Cold War Southern California*, is an historical ethnography of Cold War era stealth airplane projects and the culture of aerospace in the L.A. basin from the 70s through the early 90s.

“There are significant studies about how the Cold War shaped commercial, familial and political life, and insights into how the nuclear imaginary found purchase in the American psyche,” Pandya said. “But the inheritance of the larger, sometimes seemingly more mundane, material architectures of national defense and their traces in American culture remain undervalued. I hope my work in some small way brings to light an increasingly forgotten history of Southern California — while also addressing what causes this kind of collective forgetting.”

Like the climate change cluster, this group is holding workshops with USC Annenberg addressing how to better communicate the sciences to the public.

“This provides seed funding for us,” Lakoff said. “We’re using this as a platform in which to create an ongoing space for conversation.”

Overall, the USC Dornsife 2020 philosophy echoes Malcolm X’s assertion that “The future belongs to those who prepare for it today.”
On a bright day in 1964, Bob Padgett drove a company Ford van down two-lane Highway 4 from Hayward, Calif., to a construction site in Pittsburg, a 43-mile trip, and rounded the top of a small hill. Without any warning signage to alert him, Padgett looked up to see the bumper of a slow-moving truck watering plants in the center divider a few feet in front of him. He slammed on the brakes and heard tires skidding on asphalt.

Then everything went black.

Living with his parents in San Mateo, Calif., during the summer after his freshman year at USC, Padgett had taken an equipment delivery job. A routine run would alter his future.

He woke up in a hospital bed in Contra Costa County and his parents told him what happened. Padgett was driving at an estimated 65 miles per hour in a vehicle that lacked seatbelts when he rear-ended the truck, thrusting his head and upper body through the windshield. A fire team used a torch to free him. It was a miracle Padgett was alive.

“The car looked like an accordion,” Padgett said, recalling photos.

Hospital physicians tended to his broken jaw, ankle, hip and pelvis as well as his fractured tibia and fibula, right knee and left femur. He was later transferred to San Mateo Medical Center, where he spent four months undergoing surgeries and recovering.

“It was through this experience that I got my first awareness of what medicine was like,” he said, “and learned the interesting interactions between doctors and patients.”

Several months into his recovery, he was able to lower himself from the bed to a wheelchair and meander throughout the facility. But with both legs in casts, Padgett had no choice but to spend most of his time observing the medical staff. He was impressed with what he saw. The 19-year-old was intrigued by the doctors’ and nurses’ efficiency and ability to save the lives of strangers. He was reminded of his own family physician, Adolph Lakes, who had the same qualities. The compassionate doctor also had ties to USC. Among them, his daughter, former Congresswoman Jane Harman, is a USC trustee.

During Padgett’s hospital stay, “It just sunk in that there were many people genuinely interested in my outcome,” he said. “They did not know me, had never seen me before and all of a sudden I was presented to them in a very negative circumstance with all types of injuries. Their job was to combine their efforts to put me back together.

“It worked itself into my psyche and wore on me in a positive way.”

Shortly before his accident, Padgett had begun his freshman year as a history major in USC Dornsife. He had taken a variety of courses expecting that something would light his fuse. He had held an affinity for cardinal and gold since age 1, when his father, Robert Padgett, brought him to campus in 1946. After serving in World War II, his father enrolled at USC on the G.I. Bill that same year and in 1950 graduated with a bachelor’s degree in public administration. When the younger Padgett himself became a Trojan, he knew he belonged at USC, but was unsure about his career path.

“Back then it was about taking classes and having fun,” the younger Padgett said. “I expected that things would fall into place.”

But things had taken an unexpected turn. By the spring of his sophomore year, Padgett was able to walk without crutches and in 1966 rejoined the varsity crew team. He returned to campus with a new focus: enrolling in courses required for medical school. Padgett decided to continue pursuing a bachelor’s degree in history because many of the classes required for medical school overlapped with the major. He enjoyed Joseph Boskin’s history class and in his life sciences studies he was particularly impressed with Richard Stone’s historical geology, Thomas Clements’ physical geology, Paul Saunders’ human biology and Ronald Brown’s organic chemistry courses.

“I was so fearful in that organic chemistry class,” Padgett said. “Ronald Brown was tough, but his class and others I took at ‘SC helped me learn how to buckle down.”

Outside of class, Padgett attended football games and rushed Kappa Alpha Order. He made lifelong friends who would become major figures at USC: Taylor Hackford, who in 1968 earned a bachelor’s in international relations in USC.
“Majors such as business didn’t light me up...I just knew something would happen to give me direction. And something did.”

Bob Padgett ’68 was captivated with USC’s sprawling campus when his father introduced him to Tommy Trojan in 1949 when he was 4. Later, as a USC Dornsife student, Padgett was an outgoing and athletic Trojan who spent much time on the water with the USC crew team. He is now a USC trustee and past president of the USC Alumni Association Board of Governors.

Dornsife, became an Academy Award-winning film director, and in 2010 received USC’s Asa V. Call Alumni Achievement Award; and USC trustee David Dornsife, who graduated in 1965 with a bachelor’s in business administration. Dornsife and his wife, Dana, would later provide $200 million — the largest single gift in USC’s history — to name the college of letters, arts and sciences.

Hackford and Padgett worked during the school year and much of the summer and then spent the end of the summer hitchhiking from state to state, visiting historic sites and exploring cities. Hackford recalled how Padgett’s life changed after his accident.

“His old charm didn’t disappear as he found time to become president of the Kappa Alpha fraternity and was focused intensely on his new goal of becoming a doctor,” Hackford said. “Suffice it to say, he accomplished that ambition with alacrity and has worked productively for the past 40 years saving people’s lives.”

Upon graduation in 1968, Padgett ventured 1,549 miles to attend medical school at Creighton University in Omaha, Neb., with a few fellow Trojans. After enduring a Midwest winter, he transferred to the University of California, Irvine School of Medicine, where he obtained his M.D. in 1972.

Vowing to never stay too far from his alma mater, he began a paid internship at LAC-USC Medical Center, where he met his wife of 34 years, Valerie, a nursing student at California State University, Los Angeles. As he rotated from obstetrics and gynecology to cardiology and radiology, he knew he was well suited for the fast-paced, high-intensity work.

He had kept in touch with his USC friends, who were now in a position to offer him a job at the then-Doctors of Hospital Lakewood (now the Lakewood Regional Medical Center). He went on to serve as assistant director of the center’s emergency unit from 1981 until his retirement in 2000.

Padgett marked his first day at the Lakewood medical center as his first true experience in the workforce. He remembers walking down the hospital corridor, passing a patient’s room and stopping in his tracks.

“My patient was fibrillating,” he recalled, “and I had to act immediately to save his life.”

A rush of adrenaline flowed through him as he called for nurses, grabbed the defibrillator and saved the patient’s life. It was moments like these that fueled Padgett’s passion for medicine.

Throughout his career, Padgett appreciated the work and enjoyed making a difference in his patients’ lives. He also formed a tight-knit group of physician friends.

“There’s a camaraderie that develops in the emergency room,” he said. “Physicians are results-oriented and we were all there for the common good.”

A Manhattan Beach, Calif., resident since 1974, Padgett worked in various emergency facilities throughout his 28-year career. When a fellow alum asked him to serve as ship doctor aboard the S.S. Universe Campus for the World Campus Afloat program (now called Semester at Sea), he enthusiastically agreed to spend the Spring semester of 1975 traveling the globe and being the sole physician for 500 students and 200 faculty and staff. He also worked in emergency rooms in Alabama, often flying from Los Angeles to the Heart of Dixie for eight-day stays.

The energetic physician has not slowed since his retirement. He volunteers with Liga International’s Flying Doctors of Mercy, provides free medical care to patients at clinics in Sinaloa, Mexico, and maintains a strong presence at USC, including serving as a member of the USC Board of Trustees. A past president of the USC Alumni Association Board of Governors, he is also a member of the USC Athletics Board of Councilors and the board of the Women of Troy.

“USC provides the opportunity to meet people from all walks of life — from colleagues, teachers to lifelong friends,” Padgett said. “USC is a major part of my life and the life of my family.”

The Padgett legacy continues with his son Cody, who earned a bachelor’s degree in English in USC Dornsife in 2006, and his daughter Shayne, who graduated from Long Beach Community College and is a registered nurse at the Keck Hospital of USC.

Padgett pondered what his life would have been like had the accident not occurred. He believes the time he spent confined to a hospital bed and later exploring the various wards in a wheelchair ignited his interest in medicine.

“Emergency medicine really is a reward scenario,” Padgett said. “There are so many opportunities to make a real difference.”

Before the accident, he lacked a strong sense about what he wanted to do for a living.

“Majors such as business didn’t light me up,” Padgett said. “I just knew something would happen to give me direction. And something did.”
By Michelle Salzman

It’s no secret: Learning happens in many places, not just the classroom. In fact, students throughout USC Dornsife create their own spaces for learning by tapping into faculty expertise. By contributing to research studies or embarking on independent study projects with their professors’ guidance, students are adding a dynamic element to their undergraduate education. These experiences reinforce their professional goals and build strong foundations for their careers.

“Professor El-Naggar and Ian do very different things in the laboratory and it’s very helpful for me to work alongside them,” Lazzari-Dean said. “As I plan my career and think about graduate school, they are models for me.”

Professors also benefit from collaborating with students, said El-Naggar.

“I rely on my graduate students for 90 percent of the active research work done in my lab. At some point in their graduate training, they become more like colleagues than students, and I think that’s when the real magic starts happening.”

For undergraduates, opportunities to participate in independent projects or research studies are an integral part of USC Dornsife’s mission, he noted. “I want to help them learn hands-on, and in the case of bright students like Julia, there is an immediate payoff because research projects will culminate in a publication.”

USC Dornsife encourages these partnerships by providing funding opportunities through programs like Student Opportunities for Academic Research (SOAR), which supports collaboration between undergraduates and faculty, or the Summer Undergraduate Research Fund (SURF), which provides funding for faculty-student research conducted during the summer. Many students pursue and earn additional stipends to support their work.

Here are a handful of the countless academic partnerships teeming in the laboratories, libraries and halls of USC Dornsife.

Working with professors and more advanced students also adds another layer of understanding to the scholarly process, said sophomore Julia Lazzari-Dean. She’s a research assistant collaborating on a study with Moh El-Naggar, assistant professor of physics, and doctoral student Ian McFarlane.
As a research assistant in Moh El-Naggar’s lab, Julia Lazzari-Dean regularly prepares solutions filled with microbes, which she studies closely with her collaborator Ian McFarlane.

The clear liquid grows into a yellowish-orange mass overnight. What look like bottles of pulpy orange juice are actually containers of arsenic sulfide, and they could hold a key to creating new nanomaterials that do jobs not yet imagined, explained El-Naggar, assistant professor of physics.

El-Naggar’s lab looks at how charges move in biological systems and finds ways to harness and apply them. Lazzari-Dean and McFarlane’s study — McFarlane’s dissertation project — could potentially generate nanosized structures useful for constructing solar panels or other technologies.

“If it works like I think it could, we could make cheap solar material in a bucket,” McFarlane said.

The study’s interdisciplinary nature demands collaborations that bring together scientists with different backgrounds, El-Naggar said. “With Julia’s interest in chemistry and Ian’s in biophysics, they ask different questions, which is how you push this sort of project forward.”

Studying chemistry as an undergraduate, Lazzari-Dean says she’s benefiting from working with colleagues who have different areas and levels of expertise.

“With Ian, I learn how to do various procedures and we talk about what we’re doing at each step,” Lazzari-Dean said. “Professor El-Naggar is a wonderful adviser because he’s so involved. I have the benefit of regular group meetings with him and one-on-one meetings in which I get to talk more about what the research means and where it’s going.”

In March, Lazzari-Dean and McFarlane presented findings from their study at the 2012 national meeting of the American Chemical Society in San Diego, Calif. Lazzari-Dean also presented her work to date in Spring 2011 and Spring 2012 at USC’s Undergraduate Symposium for Creative and Scholarly Work.

“Every time I present, I get more excited about my research,” Lazzari-Dean said. “It’s always really interesting to hear what kind of questions people ask.”
A month into Grant Dixon’s freshman year, he stumbled on a curious terracotta figurine in the Archaeology Research Center at USC Dornsife.

It depicted a bearded Roman emperor striking down his enemy in what’s known as the “smiting king pose.” The motif, symbolizing a king’s power and strength, is deeply rooted in ancient Egyptian religious iconography. So why was this Roman figure appropriating 3,000-year-old Egyptian imagery, and who could he possibly be?

Dixon, who had selected USC Dornsife’s archaeology program for its focus on undergraduate research, decided to tackle the mystery with an independent study project. “I have always been fascinated with history,” Dixon said. “I’m the type of person who goes out and loves to learn more about the past.” Last summer, through USC, he participated in an archaeological dig in Rome led by Professor of Art History and History John Pollini, excavating materials dating back to 300 B.C.E. This summer he will return to the same site as part of another excavation team.

Under the guidance of Lynn Swartz Dodd, archaeology lecturer in USC Dornsife and curator of the Archaeology Research Center, Dixon scoured international museum archives and discovered that the statuette was rarer than previously thought. While Egyptian terracotta figurines are abundant, he found only three examples that blended Roman classical aesthetics with this particular Egyptian pose.

Dixon and Dodd are also collaborating with David Scott, founding director of the Getty/UCLA Conservation Graduate Program, to analyze traces of paint on the figure. “We’re able to start identifying the paints, which lets us reconstruct ancient craft practice,” said Dodd, whose own research focuses on material science and ancient innovation and technology.

Using the comparanda and paint analyses, Dixon has been able to narrow down one possible identity for the figurine: Hadrian, one of Rome’s first emperors to wear a beard.

Dixon, who received an honorable mention at the 2011 USC Undergraduate Symposium for Scholarly and Creative Work, hopes to publish his findings in an academic journal. “What I enjoy about this most is that I’m doing research on something that nobody else has done before,” he said. He aspires to attend graduate school in preparation for a professional career as an archaeologist. Dodd said Dixon’s experience at USC Dornsife should give him a leg up.

“Grant’s research is not only meaningful for him during his undergraduate years, but it’s launching him into the next phase of his life.”
Tran Nguyen was surprised when she learned that the 18th-century Scottish philosopher Thomas Reid hypothesized that the visual field obeys a non-Euclidean geometry.

As a double major in mathematics and philosophy, Nguyen found it compelling that Reid, by reflecting on his own observations, could surmise something that took mathematicians nearly another century to conclude.

She approached James Van Cleve, professor of philosophy, to discuss this fact that she learned in his course on British empiricism. Van Cleve is currently writing a comprehensive overview of Reid’s ideas slated for publication by Oxford University Press in 2013. The two decided that they would partner to study Reid’s philosophies in more depth.

“Professor Van Cleve thought I would have something to contribute in terms of Reid’s geometry of visibles,” explained Nguyen, referring to the philosopher’s belief that the visual field is governed by principles other than the theorems put forth by the Greek mathematician Euclid. “It was a nice point of intersections between my two majors.”

Since Spring 2011, Nguyen has been digging into all things Reid — sifting through scholarly write-ups on his work, summarizing them for Van Cleve and making recommendations for additional readings.

Van Cleve also sends Nguyen drafts of his book chapters for her feedback.

“I want to make sure that what I’m writing is accessible to intelligent undergraduates,” he said. “It’s good for me to get Tran’s feedback and objections, or questions about things that aren’t sufficiently clear. That’s another valuable part of what she’s doing.”

Nguyen plans to continue studying the history of philosophy in graduate school. She said her work with Van Cleve has helped her to hone her skills as a student of philosophy. “It’s helped me gain confidence in developing a voice in the field.”
manda Johnston’s to-dos once she earns her bachelor’s degree this May are pretty weighty. At the top of the list: a) train to become an emergency medical technician and b) attend medical school. She’s interested in studying infectious diseases and possibly joining Doctors Without Borders or the Navy National Guard, where she would be responding to crisis situations.

As an undergraduate, she’s been gearing up for a career in medicine, most recently in Matthew Dean’s genetics lab as a research assistant on a study of reproductive proteins.

Dean, assistant professor of biological sciences, studies how genetic variation affects the fitness of organisms. In his lab, Johnston performs polymerase chain reactions to analyze rodent DNA to study their genotypes. She’s helping to determine if they possess certain alleles that would cause males to produce the protein transglutaminase 4, which leads to the formation of a structure in a female rodent’s reproductive tract during copulation that helps her to conceive.

The data that Amanda are collecting could potentially help provide a larger framework of understanding for infertility issues in humans as they relate to seminal proteins, which are often overlooked in overcoming the challenges of infertility.

When Johnston applied for her current position, Dean could immediately see that she was a great fit for his lab. He asked her about her previous research experiences — including a study on retinal degeneration — and she launched into a detailed explanation of her work and her goals. Her enthusiasm and scientific understanding shone through.

“I said, ‘This meeting’s over. You can work in the lab,’” Dean recalled. “I thought, wow, she really gets it.” Her work has proven him right, he said. “She’s very independent and thinks carefully about how to solve the problems she’s faced with in our research.”

While patient care will be a priority in her chosen profession, it’s important to see other aspects of science, Johnston said. “I’ve definitely learned a lot about molecular biology and laboratory techniques, which are important for clinical research in the medical field.”
ad Men’s Don Draper could learn a lesson from Emily Gee and Lisa Cui’s research. The two USC Dornsife students conducted an independent study project in China and the United States to understand if culture determines how environmental advertisements are perceived and the factors that motivate campaigns’ viewers to action.

“With our majors covering political science, public relations, communications and environmental studies, we were both interested in how international communications affect environmental issues,” Gee said.

China is growing so quickly that concern for the environment is not always a priority, Cui explained. “If we understand how Chinese people feel about the environment, then environmental ads can be tailored to appeal to Chinese emotions and make the most impact.”

With guidance from Ann Crigler, professor of political science, Gee and Cui crafted questionnaires and designed focus groups. Previously, both students had worked with Crigler on a study of the media’s role in the 2010 California elections. Crigler’s own research focuses on how people understand and learn about politics from the news media.

Gee and Cui traveled to three universities in China to survey students and then returned to the U.S. and replicated their efforts at three universities in Los Angeles. While the students were in Asia, Crigler provided support from L.A., answering technical questions and e-mailing words of encouragement.

“Their work has been phenomenal,” Crigler said. “Their skill sets dovetail — Lisa has Chinese language skills and familiarity with the culture, and Emily has experience with content analysis research. They were able to bring that together in a very positive way.”

Crigler will share their work with other undergraduates as an example of research they can initiate. Gee and Cui are now analyzing their field data. They presented their project at the 2012 USC Undergraduate Symposium for Scholarly and Creative Work and received the first place award in the social sciences category. In September, they will share their research at the American Political Science Association annual meeting.

“We initially thought that the differences in reactions would be due to the ads themselves,” Cui said. “Now it seems that there are just fundamental cultural differences that lead people to perceive ads in different ways.”

When presented with ads depicting a number of environmental messages — one in particular showed a melting planet Earth scooped into an ice cream cone — Chinese students gave “serious and proper” responses while American students generally answered more casually. (Many noted the ice cream cone image made them hungry.) When asked open-ended questions like “What does the environment mean to you?” Americans’ answers were diverse. In China, answers tended to come back in the same wording.

Undertaking the study was an important learning experience, said Gee, who will pursue a master’s degree in strategic public relations at USC and will focus on environmental nonprofits. “We proved to ourselves that we could work on a project of this magnitude if we are truly passionate about what we are doing.”
We humans are unique animals. Each of us may define what it means to be human differently. We place value in memory, form cultures, innovate, question the purpose of life, and dream of the future.

Since the beginning of our modern existence, we have been examining ourselves through the lens of countless fields of intellectual study, from neuroscience to philosophy to religion.

In anthropology, we are Homo sapiens who walk upright on two legs and hold within our skulls a highly developed brain capable of forming language, problem solving and reasoning. To social critics throughout the years, humans are creatures both moral and immoral, loving and hateful, successful and blundering, hopeful and despairing.

In a lecture on wit and humor in 1819, English writer William Hazlitt noted, “Man is the only animal that laughs and weeps; for he is the only animal that is struck with the difference between what things are, and what they ought to be.”

Two new programs offered by USC Dornsife focus on the exploration of the human being; cognitive science, an undergraduate major, examines the human mind and cognition; the human and evolutionary biology section, part of biological sciences, focuses on the human body. Both were introduced in Fall 2011 and offer multifaceted, interdisciplinary looks into our own nature.

“I think it’s very important to explore who we are, where we come from and what we’re capable of,” said Klaudija Flori, a junior cognitive science and psychology major. “The more we learn about how the brain works, the better we can understand our mind and explain our behavior.”

The new cognitive science major combines courses in the fields of anthropology, computer science, linguistics, mathematics, philosophy and psychology for a unique approach to the study of the mind.

“These different disciplines are coming together and enabling new kinds of discoveries that wouldn’t be so readily achieved working within just one discipline,” said Toby Mintz, associate professor of psychology and linguistics, and director of the cognitive science major. Mintz’s own research on the mechanisms underlying language acquisition incorporates his knowledge of linguistics and psychology as well as computer science.

The undergraduate students currently in the major bring even more disciplines to their studies.

Mary Waller was thrilled to find a major that combined anthropology, philosophy, linguistics and psychology — the four fields she wanted to study. The freshman, double majoring in cognitive science and Spanish, said that working in so many areas gives her more flexibility and “a little bit more oomph” to her research. This summer, Waller travels to Taiwan to take part in a Problems Without Passports course documenting an endangered indigenous language.

In addition to Spanish, Waller speaks French, and has found that her new studies in cognitive science have impacted the way she views language. “Speaking a foreign language allows you to really delve deeper into that culture,” she said. “Next year, when I take a class in anthropology or psychology, it’s going to be cool to have a linguistics take on it.”

Freshman Colin Conwell has a double major in cognitive science and international relations, and a minor in psychology and law.

“A degree in cognitive science really says I have a diverse array of interests,” said Conwell, who plans to pursue a career in international criminal courts.

“The study of the mind — and in my field of interest, the defects of the mind — and how this influences criminal and social behavior is highly pertinent to my study of international relations,” he said. “I’m finding that I’m applying my psychological study of social behavior to international relations, and there are quite a few overlaps.”
Joshua Greenberger, a cognitive science major and minor in jazz studies, is conducting research on language acquisition with psychology graduate student Susan Geffen in Mintz’s lab. They’re testing whether infants can understand the difference between questions and statements. “The study is very psychology-based, as we’re trying to track human behavior, and the linguistics part is trying to isolate the different variables in language and how we learn them,” he said. “As a freshman, I love having a window into all these different fields.”

An experience with a friend suffering from depression, and the desire to understand what was happening in the brain to cause this state, inspired Greenberger to pursue the study of the mind. “I’ve always been interested in what makes people unique.”

What also makes humans unique is how we physically interact with the world. In attempting to understand ourselves, studying the role of our bodies as biological organisms is just as vital as studying our behaviors and emotions.

The new human and evolutionary biology section in USC Dornsife’s biological sciences department is focused on the structure and function of the human being in terms of development, environment, pathology and evolution. The research section brings together faculty from diverse disciplines such as bioanthropology, biomechanics and physiology to study how the body as an integrated system works and overcomes challenges encountered in everyday life.

“We’re interested in the whole human,” said Casey Donovan, professor of biological sciences and head of the section, who researches the mechanisms by which the body detects and responds to low blood sugar, and the role this plays in conditions such as diabetes. “This involves looking at everything from molecular components on up through cells, tissues, tissue interactions, and in some cases how behavior and movement emerge from these elements.”

The work of human and evolutionary biology faculty and their graduate students demonstrates the interdisciplinary research that epitomizes the new section.

Jill McNitt-Gray is professor of biological sciences and biomedical engineering and director of the graduate program in integrative and evolutionary biology, which is administered by the new section. She uses principles of physiology, mechanics and mathematics to study the neural control and musculoskeletal dynamics during human movement. The challenge — and fascination — of biomechanics is studying how the body takes advantage of an ever-changing set of physiological capabilities to improve performance and avoid injury across the lifespan.

Unlike machines, the structures of our bodies are alive and adapt to loads experienced during activities of daily life. So it is important to keep moving and, as she said, “use it or lose it.”

Marco Mendoza, a doctoral student and provost fellow, takes an engineering approach to his research on the effects of fatigue on shoulder control and dynamics in wheelchair propulsion. For men and women dependent on wheelchairs for mobility, repetitive use of the shoulders during manual wheelchair propulsion can often lead to pain that can significantly impact health and active involvement in their community. Preventative strategies that translate science into improved shoulder function are a primary aim of Mendoza’s research.

In partnership with the Rancho Los Amigos National Rehabilitation Center in Downey, Calif., Mendoza uses three-dimensional motion capture, electromyography to monitor muscle activation patterns, and smart wheels that record forces to analyze how each individual propels a wheelchair.

“Understanding how a person effectively interacts with his or her wheelchair provides me an opportunity to find solutions for preserving shoulder function without injury,” he said. “Simply changing the way people push wheelchairs can have a direct impact on their overall health and quality of life.”

Anne Jokiaho is currently working with Donovan to understand the role of glucose sensors in conditions such as diabetes. “Insulin treatment is not perfect, and as a result, hypoglycemia is a limiting factor in everyday life for people with insulin-dependent diabetes,” she said.

By examining neuronal projections from the periphery and hindbrain to the hypothalamus, the brain’s control center, she is able to determine those elements critical to detecting the onset of hypoglycemia. Exploring the connections between these glucose-sensing elements may enable researchers to identify what goes wrong when the body does not sense hypoglycemia correctly and contribute to a more effective treatment of the disease.

Graduate student Maureen McCarthy has spent months in the tropical rain forests of western Uganda studying our closest living relatives — chimpanzees. She combines observational research with genetics and spatial devices like global positioning systems to track how far chimpanzees travel through forests that have been reduced in size by human settlements and deforestation. Genetic testing also gives her insight into the amount of gene flow between different forest fragment communities.

It is often cited that humans and chimpanzees share between 98 and 99 percent of their DNA, so in addition to studying them for purposes of conservation, McCarthy finds implications that impact people as well. “Chimps are often used as a model for understanding human evolution,” she said. “Understanding how they respond to changing environments might also help us to understand how our own human ancestors may have adapted.”

For many of these programs’ students and faculty, the decision to devote their studies to aspects of human nature came naturally.

“Why would you not be interested in studying humans?” asked graduate student Silvana Constantinescu of integrative and evolutionary biology, who works with adviser Lorraine Turcotte of biological sciences on the regulation of fatty acid metabolism and its connection to obesity and type 2 diabetes.

“Af ter all, we are human beings.”

**MAN IS THE ONLY ANIMAL THAT LAUGHS AND WEEPS; FOR HE IS THE ONLY ANIMAL THAT IS STRUCK WITH THE DIFFERENCE BETWEEN WHAT THINGS ARE, AND WHAT THEY OUGHT TO BE. —William Hazlitt, 1819**

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**Evolving Humanity**

Genetically, chimpanzees are our closest living relatives, making the study of their behavior and adaptation key to understanding our biological past, present and future. The new human and evolutionary biology section in USC Dornsife’s biological sciences department focuses on the structure and function of the human being in terms of development, environment, pathology and evolution.
The grand two-story cream and burgundy house on West 34th street on the University Park campus has quietly observed life at USC for more than 100 years. Once home to USC’s fourth president, George Finley Bovard, and his family, the building now serves as the headquarters of the Joint Educational Project (JEP), one of the oldest and largest service-learning programs in the United States. For JEP, the house has become a symbol of the organization’s ongoing dedication to reaching out to the Los Angeles community — from one house to another, our home to yours.

Founded in 1972 by Dr. Barbara Seaver Gardner and led by executive director Tammy Anderson for the last 10 years, JEP offers students at USC the unique opportunity to combine academic coursework with volunteer experiences in the neighborhoods surrounding the university. Thanks to organizations such as JEP, USC is able to contribute to the well-being of its community while educating students on issues such as poverty, immigration, education, and inequality.

Each year, JEP places 2,000 USC students in positions at more than 50 local schools, health-care facilities, agencies and community partners, where they can earn academic credit for their work. Since the organization’s beginning, 70,000 USC students have contributed more than a million hours of service to the community. Students also take part in JEP programs such as Trojan Health Volunteers, which allows pre-health students to obtain experience in hospital and clinical settings, and USC ReadersPlus, USC’s version of America Reads/America Counts, mobilizing work-study students to provide one-on-one reading and math instruction to K-6 students in nearby schools.

This Fall, JEP will celebrate 40 years of linking the campus to its community. To provide more space for the growing program, the JEP house is currently undergoing a renovation process to upgrade and modernize the space. The building’s exterior will remain unchanged to preserve its rich history so students in the next 40 years can recognize and honor this icon of JEP.

(above): This photograph from the George Finley Bovard family album shows the future Joint Educational Project (JEP) house, where the Bovards lived from 1905 to 1921. An unidentified woman stands in front of the porch where the “JEP House” sign hangs today.

(right): The JEP house is currently undergoing interior renovations and will debut during JEP’s 40th anniversary celebration in Fall 2012.

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Videos: Learn more about the Joint Educational Project at
dornsife.usc.edu/jep
Faculty News

YEHUDA BEN-ZION, professor of earth sciences, became the president of the International Union of Geodesy and Geophysics’ Mathematical Geodesics Committee.

BETTINE BIRGE, associate professor of East Asian languages and cultures, and history, was awarded a National Endowment for the Humanities fellowship.

JOHN BOWLT, professor of Slavic languages and literatures, was awarded a grant from the Prokhorov Foundation, Moscow, toward his publication of the collected writings of Leon Bakst.

RICHARD BRUTCHEY, assistant professor of chemistry, was named a 2012 Emerging Investigator by ChemComm, a publication of the Royal Society of Chemistry. He was also identified as a “rising star” in the field of inorganic chemistry by the editors of Dalton Transactions, a journal of the Royal Society of Chemistry.

KARL CHRISTE, professor (research) of chemistry, has been named the 2012 Richard C. Tolman Award from the American Chemical Society’s Southern California Section.

ANTONIO DAMASIO, University Professor, David Dornsife Professor of Neuroscience and director of the USC Brain and Creativity Institute, received a CORINE International Book Award in the Future Award category for his book Self Comes to Mind: Constructing the Conscious Brain (Pantheon, 2012).

KELVIN J. A. DAVIES, James E. Birren Chair in Gerontology and professor of gerontology and biological sciences, won the Biennial Award from the European Society for Free Radical Research.

LOUIS GOLDSTEIN, professor of linguistics, has been elected a fellow of the Linguistic Society of America.

ANGE-MARIE HANCOCK, associate professor of political science and gender studies, has been elected to the council of the American Political Science Association.

ANNA KRYLOV, professor of chemistry, received the American Chemical Society’s Physical Chemistry Award in Theoretical Chemistry and the Friedrich Wilhelm Bessel Research Award from the Humboldt Foundation. She was also elected as a fellow of the American Physical Society.

LOONI KURASHIGE, associate professor of history, and American studies and ethnicity, has been awarded an Abe Fellowship from the Social Science Research Council.

STEVEN LAMY, vice dean for academic programs and professor of international relations, received the 2012 Outstanding Higher Education History-Social Studies Teacher Award from the California Council for the Social Studies.

ADAM LEVENTHAL, assistant professor of preventive medicine and psychology, has received the 2012 Judy K. Black Early Career Research Award from the American Academy of Health Behavior.

MARIA-ELENA MARTINEZ, associate professor of history and American studies and ethnicity, has received a Fulbright award.

CHARLES McKENNA, professor of chemistry, gave a plenary lecture at the International Congress on Organic Chemistry held in Kazan, Russia.

CAROL MUSKE-DUKES, professor of English and creative writing, and former California Poet Laureate, received the 2012 Barnes & Noble Writers for Writers Award, which celebrates authors who have given generously to other writers or to the broader literary community.

MUSKE-Dukes’ poem “White Key,” was set to music by composer Reena Esmail and performed by the Volti voice ensemble in San Francisco this March.

HASHEM PESARAN, John Elliott Chair in Economics and professor of economics, was interviewed by ScienceWatch about his paper “A Simple Panel Unit Root Test in the Presence of Cross-Section Dependence,” which Essential Science Indicators from Thomson Reuters selected as the most-cited paper in economics and business.

MATTHEW PRATT, assistant professor of chemistry and biological sciences, has received the Damon Runyon-Rachleff Innovation Award from the Damon Runyon Cancer Research Foundation.

RHACEL SALAZAR PARREÑAS, professor of sociology, was an invited panelist for the U.S. Commission on Civil Rights’ briefing on sex trafficking in Washington, D.C., in April.

HILARY SCHOR, professor of English, comparative literature, gender studies and law, has been awarded a Radcliffe Fellowship.

HUBERT SALEUR, professor of physics and astronomy, has been awarded the Medalle d’Argent by the French National Center for Scientific Research.

Continued on page 47.
Behind Those Violet Eyes

Cultural critic M. G. Lord describes how Elizabeth Taylor’s feminist impact has been hidden in plain sight.

Just for a hoot, M. G. Lord and a group of friends rented a mid-century modern house in Palm Springs, Calif., for Memorial Day weekend.

Lord had brought a box of Elizabeth Taylor movies, and popped in a DVD. “We were expecting an evening of camp,” said author Lord, an instructor in USC Dornsife’s Master of Professional Writing program. “Instead we were gobsmacked.”

The group was astounded not only by Taylor’s great acting, but by her movies’ feminist messages. After that 2007 weekend, Lord began researching Taylor and her work and wrote The Accidental Feminist: How Elizabeth Taylor Raised Our Consciousness and We Were Too Distracted by Her Beauty to Notice, released in February by Bloomsbury Publishing.

“I was shocked at the feminist themes hidden in plain sight,” Lord said of many of Taylor’s films.

The feminist thread in Taylor’s movies began with National Velvet, her 1944 breakout film at age 12. After Taylor’s character Velvet Brown is forbidden to ride in the Grand National because she is a girl, she finds a way around gender discrimination by posing as a male jockey.

Taylor’s most feminist role, Lord said, was as call girl Gloria Wandrous in Butterfield 8, for which Taylor earned an Oscar in 1960.

“Gloria is a beacon of female sexuality and power,” Lord writes. “She boldly defies marital convention and rejects men who repel her, no matter how much money they offer. She will not be rented like a prostitute or owned like a chattel — or like a wife, for that matter.”

Who’s Afraid of Virginia Woolf? shows what can happen when society permits a woman to define herself only through her children and her husband’s career.

“To me, the film’s feminist message could not have been more explicit,” Lord writes. “Patriarchy crushes men and women alike. But reviewers at the time did not seem to notice this, and some projected their own paranoia onto the movie.”

In the book, Lord writes about art imitating life. Early in Taylor’s career, when she performed in films with feminist themes, she may not have been conscious of what she was contributing to. Yet attributes of the characters she played remained with her — and helped to make her the brave, defiant woman she became in later life.

Take Taylor’s major impact as an AIDS activist, beginning in the 1980s when even President Ronald Reagan had not publicly acknowledged the deadly virus. “Directors cast her in these powerful roles because they saw something in her that she would finally see in herself,” Lord said. —P.J.J.
**47 USC Dornsife**

REZ LIFE: An Indian’s Journey Through Reservation Life

Atlantic Monthly Press / In his first full-length work of nonfiction, David Treuer, professor of English, brings a novelist’s storytelling skill and an eye for detail to a complex and subtle examination of Native American reservation life, past and present.

LESIAS IN EARLY MODERN SPAIN

Vanderbilt University Press / Sherry Marie Velasco, professor of Spanish and Portuguese, and gender studies, provides the first in-depth study of female homosexuality in the Spanish Empire from 1500 to 1800.

Alumni News

1940s

LOUIS ZAMPERINI (B.S., physical education, ’40) and JOHN NABER (B.A., psychology, ’77) were profiled in the Los Angeles Times in November for their connection as friends, USC Trojans and former Olympians. Zamperini, whose life was chronicled in the book Unbroken by Laura Hillenbrand, took part in the 1936 Olympics in Berlin. Naber was a USC swimming star who won five medals — four of them gold — at the Montreal Olympics in 1976.

1960s

HUSTON CARLYLE (B.A., history, ’59; JD ’72), an attorney who serves as Glenn County counsel, was named to the board of the Willows Planning Commission in Willows, Calif.

1970s

ALEXANDRA COCK (B.A., economics, ’78) was re-elected to the Corte Madera, Calif., town council.

1980s

RAFAEL BERNARDINO JR. (B.A., economics, ’81; JD, ’84), a partner at Hobson, Bernardino & Davis, LLP, was appointed to the Board of Fire and Police Pension Commissioners by Los Angeles Mayor Antonio Villaraigosa.

1990s

JoYcE caTHER (B.A., English, ’82) was named chief financial officer of Grinbath LLC, a technology startup building affordable research and assistive solutions, including EyeGuide Eye Tracker and Assist.

ROB CAVALLO (B.A., English, ’85), chairman of Warner Bros. Records, was listed, along with Warner Bros. Records co-president/CEO Todd Moscowitz, as number 45 on Billboard’s Power 100, a ranking of the most powerful people in the music business.

1998

William M. Keck Chair Emeritus and University Professor Emeritus and Spencer Foundation.

2000s

Mark Lare (M.A., political science, ’78), chief executive officer of UCSF Medical Center and UCSF Benioff Children’s Hospital, has been elected chair of the board of the Association of American Medical Colleges.

2010s

Rafael Bernardo Jr., a partner at Hobson, Bernardino & Davis, LLP, was appointed to the Board of Fire and Police Pension Commissioners by Los Angeles Mayor Antonio Villaraigosa.

2017

SUSUMU tAKANASHI, assistant professor of chemistry, and physics and astronomy, was named a 2012 Searle Scholar.

VERONICA TERRIQUEZ, assistant professor of sociology, received a grant from the Spencer Foundation.

RICHARD THOMPSON, University Professor Emeritus and William M. Keck Chair Emeritus in Psychology and Biological Sciences, received the Pavlovian Society’s Gantt Medal.

PAOLO ZANARDI, professor of physics, has been elected a fellow of the American Physical Society.

FRANK ALBER, assistant professor of biological sciences, and MEGHAN MILLER, assistant professor of earth sciences, have been awarded 2012 CAREER grants from the National Science Foundation.

ROBERT GURALNICK, professor of mathematics, JASON FULMAN, professor of mathematics, and KO HONDA, professor of mathematics, received Simons Foundation Fellowships.

1960s

HUSTON CARLYLE (B.A., history, ’59; JD ’72), an attorney who serves as Glenn County counsel, was named to the board of the Willows Planning Commission in Willows, Calif.

FRED JEREMY SELIGSON (B.A., international relations, ’67), English professor at Hankuk University of Foreign Studies in South Korea, was profiled by The Korea Herald for his research on the significance Koreans traditionally attach to their dreams. He has spent 20 years collecting the dreams of thousands of his students, their parents and their grandparents.

NELSON TCHAKIRIDES (B.A., English, ’62) has compiled an anthology of his fictional short stories titled The Complete Anthology of Nelson F. Tchakirides’ Works, which he will self-publish.

AL ZAPANTA (B.A., psychology, ’66), the president and CEO of the United States-Mexico Chamber of Commerce, was appointed to the Board of Directors of Mindesta Inc.

1970s

ALEXANDRA COCK (B.A., economics, ’78) was re-elected to the Corte Madera, Calif., town council.

1980s

RAFAEL BERNARDINO JR. (B.A., economics, ’81; JD, ’84), a partner at Hobson, Bernardino & Davis, LLP, was appointed to the Board of Fire and Police Pension Commissioners by Los Angeles Mayor Antonio Villaraigosa.

JAMES T. BLOMO (B.A., political science, ’84) was appointed superior court judge for Maricopa County by Arizona Governor Jan Brewer. Blomo had previously served as a superior court commissioner on the criminal court bench for eight years. Prior to

Continued on page 48.
New Alumni Relations Director for USC Dornsife

Jeremy Wingerter will develop programming and communications strategies to increase alumni awareness and build support for USC Dornsife.

Jeremy Wingerter has been the first-ever director of USC Dornsife Alumni Relations, a new partnership initiative between USC Dornsife and the USC Alumni Association. In this position, he will develop programming and communications strategies to increase alumni awareness and interest about USC Dornsife and build alumni support for the oldest and largest of the university’s schools.

“Partnering with USC Dornsife will create new and innovative opportunities for us to engage the Trojan Family,” USC Alumni Association CEO Scott M. Mory said. “Jeremy is eminently qualified to serve as our director on this exciting initiative.”

To boost awareness of the distinguished scholarship and groundbreaking research at USC Dornsife, Wingerter is planning a spring series of “We Are USC Dornsife” events, spotlighting faculty research and work with current students in connection with the Southland’s cultural landmarks. Upcoming events will feature Professor of Biological Sciences and Anthropology Craig Stanford discussing his work with primates at the Los Angeles Zoo and Botanical Garden’s “Chimpanzees of the Mahale Mountains” habitat and Professor and Chair of History Steve Ross discussing his acclaimed book, *Hollywood Left and Right: How Movie Stars Shaped American Politics* (Oxford University Press), at the iconic Roosevelt Hotel. Information about these and other events can be found at dornsife.usc.edu.

Wingerter is also working with the USC Dornsife Office of Communication to introduce a monthly e-newsletter, *Dornsife Connect*, for all USC Dornsife alumni. Scheduled to launch in May, this e-newsletter was created in response to the USC Alumni Association’s 2011 Alumni Attitude Study findings, which revealed that 90 percent of USC alumni (with USC Dornsife alumni representing the largest sector of the respondents) prefer to be contacted by e-mail. To receive the *Dornsife Connect* e-newsletter, visit dornsife.usc.edu/newsletters.

A member of the Trojan Family since 2008, Wingerter joined the USC Alumni Association as the associate director of lifecycle programs; in this position, he played an instrumental role in the founding of two USC Alumni Association generational groups: Society 53, the USC Alumni Association’s student outreach program, and the Young Alumni Council. In 2010, he was named the senior associate director of alumni clubs and communities and provided leadership and support to several regional USC alumni clubs and affiliated organizations.

Wingerter received his B.A. and M.S. in education from Iowa State University. He is pursuing his Ed.D. at the USC Rossier School of Education. He can be reached at (213) 740-5196 and jeremy.wingerter@dornsife.usc.edu.
1990s
SHEILA BARBARINO (B.A., political science, ’96), an ophthalmic facial plastic surgeon, has joined the Morrow Institute Medical Group, Inc., as the first woman on its team of specialty plastic surgeons.

CARRIE ANN JOHNSON (B.A., international relations, ’92) has been appointed adjunct professor of education at Point Loma Nazarene University.

KERI L. LIERMAN (B.A., sociology, ’94) has been named vice president of operations of EK Health Services, a workers’ compensation managed care company.

STEVE LOESWICK (B.S., exercise science, ’96) was named head coach for the University of North Florida volleyball program.

JOSEPH MONTES (B.A., political science, ’91; MPA, ’95), an Augustinian brothers board member, has been reappointed to the Los Angeles Industrial Development Authority board as authority chair.

BLAKE OSHIRO (B.A., English/creative writing, ’92) was named the deputy chief of staff for Hawaii Governor Neil Abercrombie.

MARK SUNDEEN (MPW, ’99), author of books including Car Camping and The Man Who Quit Money, was hired as a new faculty member by Southern New Hampshire University’s MFA in Writing, Low Residency Fiction and Nonfiction Program.

KEYSHAWN JOHNSON (B.A., social sciences/history, ’97).

TINA THOMPSON (B.A., social science & communication/sociology, ’97) and QUINCY WATTS (B.A., social science and communication/communication ’94) were elected to the 10th class of USC’s Athletic Hall of Fame. Johnson, a former wide receiver, has played football for teams including the New York Jets and the Tampa Bay Buccaneers. Thompson has been a nine-time All-Star and All-WBNA performer in her 15 years playing basketball with the Houston Comets and the Los Angeles Sparks. Watts won two gold medals at the Barcelona Olympics in 400 meters and the 1,600-meter relay, and was ranked in the world top 10 in the 400 for four consecutive years.

ROSS GARRETT (B.A., English/language and literature, ’00) was named vice president of surf products at Surfline/Wavetrak, Inc., a provider of surf report, wave and wind forecast and editorial surfing content.

KINA GRANNIS (B.A., psychology, ’07) appeared on Ellen to sing her song “In Your Arms” and discuss the song’s animated music video, which was made almost entirely from jelly beans, and took more than a year to create.

2000s
ALEXANDER AVIÑA (Ph.D., history, ’09), assistant professor of history at Florida State University, has won the Hubert Herring Award for the best dissertation in Latin American Studies in the Pacific Coast region from 2009 to 2011. His dissertation was titled Insurgent Guerrero: Genaro Vázquez, Lucio Cabañas, and the Guerrilla Challenge to the Postrevolutionary Mexican State, 1960–1996.

HEATHER APRAKU (B.A., English, ’05) is the co-owner of Munch, a cereal bar and grilled cheese café in South Pasadena, Calif., which was inspired by a business plan she created as part of her master’s thesis at the USC Annenberg School for Communication & Journalism.

BRIAN CALLE (B.A., political science & communication, ’05), opinion columnist and editorial writer for The Orange County Register and a member of the USC Board of Governors, was the featured speaker at the Satellite Group of the Republican Club of Laguna Woods in California.

WILLIAM DENTINO (B.A., history, ’03; JD ’06) joined the law firm Bonfante Steinbeck as partner.

NANCY GANDRUD (B.A., American literature, ’05) was named manager at Roger King Fine Arts, a mid-century American art gallery in Newport, R.I.

KRISS MARSH (Ph.D., sociology, ’05), associate professor of sociology at the University of Maryland, College Park, wrote an article titled “Where is the black middle class? You don’t have to look far” published on CNN wire.

GERARDO MARTI (M.A., sociology, ’91; Ph.D., sociology, ’02), L. Richardson King Associate Professor of Sociology at Davidson College, presented the lecture “Have You Seen Our Gospel Choir?” Worship, Music and the Integration of Races in Multiracial Churches” at Baylor University.

APRIL ROSS (B.A., international relations and global business, ’06), a member of the USC beach volleyball team that won back-to-back NCAA Championships in the 2002 and 2003, was awarded the “Female Beach Athlete of the Year” honor by USA Volleyball.

Continued on page 50.
MOSS ZAPIEN (B.A., political science, ’04), an attorney, has joined the law office of James M. Morris.

2010s
ZARA LUKENS (B.A., international relations & neuroscience, ’11), who competed in cross country and track and field at USC, finished second in the Seattle marathon.

Engagements and Weddings
MICHAEL R. LAWLER JR. (B.A., psychology and speech, ’75) and Barbara Burdick were married Nov. 8, 2011, in Newport Beach, Calif.


MATTHEW THOMPSON (B.A., creative writing, ’09), a Sigma Chi, married Genevra Mendoza on Sept., 24, 2011, at the Clarke Estate in Santa Fe Springs, Calif. They honeymooned in the Turks and Caicos.

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In Memoriam
HARRY JEROME AFFLEY JR. (B.A., zoology, ’61; M.D., ’65) Monmouth, OR (12/8/2011) at age 87; was a practicing physician until his retirement in 2000; served as clinical professor at Keck School of Medicine of USC from 1961–75; established Rogue Valley Hospital’s Occupational Health Department; served as a lieutenant in the U.S. Navy during the Korean War.

SAUL ALTSHULER (Ph.D., physics, ’52) Santa Barbara, CA (10/10/2011) at age 92, worked in several positions during his 25-year tenure at the Applied Physics Department at the Ramo-Wooldridge Corporation; was a consultant for R&D Associates and Litton Industries, before forming his own company, Physical Science Interests; held four U.S. patents as sole inventor.

MAX AZICRI (M.S., political science, ’66; Ph.D., political science, ’75) Erie, PA (11/24/2011) at age 77, taught at Edinboro University, was considered one of America’s leading authorities on Cuba and published extensively on the subject; a member of the Cuban Revolutionary Council in Miami in the 1960s; served in the U.S. Army.

BREAT S. BAHARIE (B.S., biological sciences, ’83; M.D., ’87) Seattle, WA (9/5/2011) at age 52, worked for 24 years as an anesthesiologist; the North Hollywood, CA, native graduated magna cum laude from USC; enjoyed the outdoors and spending time with his family.

BURT R. BALDWIN (B.A., sociology, ’65; M.A., sociology, ’68) Litchfield, CT (1/1/2012) at age 73, had a career in teaching at Central Connecticut University until his retirement in 1997; founded The Center for Social Research and was the sociology department chair for several years; served in the peacetime U.S. Navy on the USS Princeton.

MIRIAM WEBB BOBB (B.A., comparative literature, ’50) Riverside, CA (11/4/2011) at age 84; was active in her community, a member of Friends of the Library, the Junior League, and Riverside Community Hospital; served on the Grand Jury for Riverside County in 1980.

ALBERT J. BOUDREAU JR. (B.A., psychology, ’51) Hartford, CT (11/4/2011) at age 85; retired from Middlesex Mutual Assurance as vice president and continued to work for Connecticut Underwriters; involved in the Windsor community, served on the Inland Wetlands Commission.

EILEN JOHNSON BRADLEY (B.A., sociology, ’70) Prosser, WA (2/28/2012) at age 63, led a very active and full life in Prosser, WA; enjoyed spending time with family and leading worship at Prosser First Baptist Church; volunteered for several years at Prosser and Sunnyside assisted living facilities and Prosser Hospital Long Term Care.

WILLIAM BRINKMAN (B.A., psychology, ’52; M.S., education, ’53) Santa Clara, CA (9/14/2011) at age 84, worked as a school psychologist and administrator in the San Jose Unified School District and the Cupertino Union School District; served in the U.S. Marine Corps during WWII, ran his private psychology practice for several years.

Continued on page 52.

ALUMNI CANON

GLENN FORD: A Life

THE ESSENTIAL GUIDE TO GRIEF AND GRIEVING
Alpha Books / Debra Holland (B.A., psychology, ’82; M.S., marriage, family and child therapy, ’86; Ph.D., counseling psychology, ’93) presents an understanding guide to coping with loss and finding hope and meaning beyond grief.

LIGHTS OF MANKIND:
The Earth at Night as Seen From Space Lyons Press / L. Douglas Keeney (B.A., economics, ’73; MBA ’76) showcases the Earth at night through this collection of photographs and essays.

PAN AMERICAN WORLD AIRWAYS: Images of a Great Airline BluewaterPress LLC / James Patrick Baldwin (B.A., international relations, ’74) presents a timeline of Pan American firsts and historical events illustrated with memorabilia from each era.

MANHATTAN BEACH: A California Beach Town Ballwalk Press / Jane Centofante (B.A., humanities: Italian, ’79, MPR ’81) and California artist Gloria Judson take readers on a walk through this 100-year-old town that combines its historical past with an eye on the future.

Vladimir’s Mustache and Other Stories
Russian Information Services, Inc. / Stephen Eirik Clark (Ph.D., literature and creative writing, ’10) presents a collection of nine stories set against the backdrop of Russian history from the time of Peter the Great to the post-Soviet collapse.

GLENN FORD
15 MINUTES: General Curtis LeMay and the Countdown to Nuclear Annihilation
St. Martin’s Press / L. Douglas Keeney (B.A., economics, ’73; MBA ’76) tells this true, behind-the-scenes Cold War story assembled from formerly classified documents.

READING THE ANIMAL IN THE LITERATURE OF THE BRITISH RAJ
Palgrave Macmillan / Shefali Rajamannar (Ph.D., English, ’09) lecturer in the Writing Program, explores representations of animals during British rule in India that were integral in the creation and maintenance of the hierarchies of colonialism.

AFTER THE TSUNAMI
Stephen F. Austin State University Press / Annam Manthiram (MWP ’05) narrates the story of Siddhartha, an Indian man who struggles to find purpose in the terror he faced as a child during his time spent in an orphanage in India.

THE MAN WHO QUIT MONEY
Riverhead/Penguin / Mark Sundeen (MWP ’99) tells the amazing story of how Daniel Suelo learned to live, sanely and happily, without earning, receiving, or spending a single cent.

A WRATHFUL VINTAGE

IMMORTAL DESIRE
CREATESPACE / Linda Lee Talbert (Ph.D., comparative literature, ’79) spins a tale that follows a vampire as she engages in a battle of wills with her creator over the course of seven centuries.

Twisted Beauty
Bonnie Nadzam ’11 wins the Flaherty-Dunnan First Novel Prize for Lamb.

The relationship in Bonnie Nadzam’s debut novel Lamb (Other Press, 2011) begins with a cigarette. An awkward, unpopular 11-year-old girl named Tommie bums a smoke from a middle-aged man in a Chicago parking lot. The man, David Lamb, has just buried his father and divorced his wife, and he decides to help this seemingly pitiful girl in an attempt to regain faith in his own goodness.

Nadzam (Ph.D., creative writing, ’11) won the Flaherty-Dunnan First Novel prize, awarded to the best debut novel of the year by The Center for Fiction, for her story about this questionable but complex relationship.

She began writing Lamb while in the creative writing Ph.D. program in USC Dornsife, where she drew inspiration from her study of 18th-century prose and literary theory.

“Some kinds of storytelling are quite seductive, even hypnotic,” Nadzam said. “I wanted to look closely at how stories work on a person this way, especially when a person is unaware of being told (or of telling herself) one.”

The book’s seductive qualities come through in many ways — in Nadzam’s straightforward, vivid prose; in her unique narration style that is at times both close and distant; and in her descriptions of America during the road trip to the Rockies that David convinces Tommie to join him on. David’s conviction that he is helping Tommie avoid a destiny of apathy and emptiness is both deeply disturbing and completely fascinating, and the journey changes both of them in ways neither expects. —L.M.
Kelly Purvis ’82 and Jeffrey Smulyan ’69 receive Alumni Service Awards for their dedication to USC.

Two USC Dornsife graduates have been honored with Alumni Service Awards for their lifelong volunteer efforts on behalf of USC. Kelly G. Purvis (B.A., political science, ’82) and Jeffrey H. Smulyan (B.A., history and telecommunications, ’69; JD ’72) were celebrated for their work at the 79th Annual USC Alumni Awards on April 28.

Purvis is a past president of the Trojan League Associates of San Diego County, past president of the Association of Trojan Leagues, and member of the USC Associates. Her affiliations have included the Alumnae Coordinating Council and Kappa Alpha Theta Mother’s Club.

In 2008, she received the USC Alumni Association’s Widney Alumni House Award, and in 2011, the Trojan League Associates of San Diego County dedicated a scholarship in her name. Purvis lives in Coronado, Calif., with her husband, Jim, a USC alumnus, and three children, two of whom are USC graduates.

Smulyan serves as chairman of the board for Emmis Communications, which he founded in 1980. The broadcasting company owns and operates 22 radio stations and seven publications including Los Angeles Magazine.

He is a member of the USC Board of Trustees, USC Associates and board of councilors for two USC schools. He is past president of the USC Alumni Club of Indianapolis, where he lives with his wife, Heather, and three children. An adviser to Classical KUSC radio, Smulyan was a driving force behind expanding the station to the San Francisco Bay Area. —L.M.
Christopher Cox  '73 elected to USC Board of Trustees.

Christopher Cox (B.A., English and political science, '73), the former United States representative from Southern California and 28th chairman of the U.S. Securities and Exchange Commission (SEC), was elected to the USC Board of Trustees on Oct. 5.

Having served as the chairman of the U.S. Securities and Exchange Commission, Cox currently is a partner at the international law firm of Bingham McCutchen LLP and president of Bingham Consulting LLC.

"Throughout a distinguished career spanning politics, law, academia and business, Christopher Cox has remained an ardent advocate for his alma mater and its mission," said USC President C. L. Max Nikias in announcing the election. "USC is fortunate indeed to have the benefit of Chris’ continued guidance, insight and engagement in his new role as a trustee.”

Cox graduated magna cum laude from USC Dornsife in 1973, having taken only three years to complete his bachelor’s degree in English and political science. In 1977, he earned his MBA and JD degrees simultaneously from Harvard University, where he served as an editor of the Harvard Law Review.

Cox entered politics at age 35, when President Ronald Reagan hired him as a White House counsel. Cox advised the president on matters ranging from the reform of the federal budget process and the 1987 stock market crash. Following his White House service, Cox represented Orange County in the U.S. Congress from 1989 to 1987 for the nomination of three U.S. Supreme Court justices to replace the U.S. Senate, as chairman of the SEC.

During his time in the country’s capital, Cox maintained close ties with his alma mater, hosting a number of “USC in D.C.” events, participating in the opening of the USC Office of Research Advancement in Washington, D.C., in 2007, and speaking at university events on campus and in Washington.

A second-generation Trojan, Cox received USC’s Asa V. Call Alumni Achievement Award in 2008.

Welcome New Trustee

Charles T. Kowal

(B.A., astronomy, ’63) Cinebar, WA (1/28/2011) at age 71; astronomer who discovered the 13th and 14th moons of Jupiter, joined the Johns Hopkins University Applied Physics Laboratory where he wrote computer programs for the mission of the Near Earth Asteroid Rendezvous spacecraft until his retirement in 2006, helped identify 13 asteroids and 81 supernovae.

Todd Stuart Latin

(B.A., political science, ’89) Fair Oaks, CA (1/8/2011) at age 45; the Sacramento native graduated from Lincoln Law School; had a zeal for life and a love for all people.

Ernest S. Lawrence

(Ph.D., psychology, ’53) Santa Monica, CA (8/13/2011) at age 91; was a founder and first president of the Los Angeles Institute and Society for Psychoanalytic Studies, which created the Ernest S. Lawrence Trauma Center; and was instrumental in an antitrust suit that permitted non-medical analysts to receive analytic training in the U.S.

Renee Overell Lee

(B.A., history, ’46) Dana Point, CA (9/7/2011) at age 87; started the Visiting Nurse Service Association Used Book Sale in Phoenix, AZ; one of the largest used book sales in the Southwest; a member of Kappa Alpha Theta sorority; was active in service organizations.

Jim Lloyd

(M.A., political science, ’66) Pensacola, FL (3/2/2012) at age 89; former Southern California congressman who served three terms in the 33rd Congressional District; was a consultant for the aerospace industry in Washington, D.C.; served as an aviator in the U.S. Navy during WWII and the Korean War.

Howard Miller

(B.A., economics, ’65; JD, ’70) Park City, UT (2/9/2012) at age 68; had a law practice and was a partner at Tech Art; enjoyed hiking, skiing and bike riding.

Jerry F. Nail

(M.A., economics, ’66) Tustin, CA (12/27/2011) at age 83; worked at Southern California Edison for more than 35 years and made his way to division manager of the South East Division, served in the U.S. Army and was awarded three Bronze Service Stars and a National Defense Service Medal.

Tanna Nankin

(B.A., political science, ’96) Las Vegas, NV (1/11/2012) at age 45; enjoyed traveling, reading, music, dancing, swimming, and spending time with family; a member of the Church of Jesus Christ of Latter-day Saints.

Thomas Parker

(B.A., zoology, ’47) Eugene, OR (12/20/2011) at age 90; an educator who founded and ran the unorthodox Thomas Parker School in Carmichael, CA, for 27 years before his retirement in 1986; served as a lieutenant in the U.S. Navy during WWII; earned an M.A. in education from the University of Redlands.

Mary Roby

(Ph.D., physical education, ’71) Tucson, AZ (1/30/2012) at age 83, a pioneer of University of Arizona’s women’s athletics; was inducted into the National Association of Collegiate Directors of Athletics Hall of Fame in 1995; worked at the University of Arizona for three decades in several positions.

William Roth

(M.A., international relations, ’83) Manchester, NH (10/13/2011) at age 78; was the head of international public relations for the Bertelsmann Corporation of Stuttgart, Germany; served in the U.S. Army with end rank of lieutenant colonel; and received the Bronze Star for bravery in the Purple Heart.

Warren W. Simonds

(B.A., foreign service, ’50) Cumming, GA (1/25/2012) at age 84; served as an administrator at the Baton Rouge General Hospital for many years; was an administrator at the Barnes Hospital complex; served as a radio operator in the U.S. Army Air Corps during WWII.

Paul Anthony Shonafelt

(B.A., international relations, ’48; M.S., education, ’51) Long Beach, CA (9/7/2011) at age 91; was a principal and educator in L.A. City schools for 32 years until his retirement in 1984; served in the U.S. Navy during WWII.

Gerald W. Putnam

(M.S., international relations, ’73) Virginia Beach, VA (9/23/2011) served as faculty of the Armed Forces Staff College until his retirement in 1978; was a lieutenant colonel in the U.S. Air Force; earned several commendations including the Distinguished Flying Cross and the Meritorious Service Medal.

John H. Riutzel

(Ph.D., religion, ’54) Ventura, CA (1/30/2012) at age 87; taught at E. O. Green School for 23 years; served in the 104th Infantry Division during WWII; earned a bachelor’s in Divinity from Fuller Theological Seminary; an accomplished pianist, sign painter and photographer.

Tahna NahkIn

(Ph.D., psychology, ’63) Tustin, CA (12/27/2011) at age 83; worked for the U.S. Army and was awarded three Bronze Service Stars and a Meritorious Service Medal.
REMEMBERING

DONALD WALKER (B.A., religion, ‘43; M.A., religion/social ethics, ’47) Los Angeles, CA (8/12/2011) at age 90; served as chancellor of the Grossmont-Cuyamaca Community College District in El Cajon; was named associate dean of students for San Diego State University in 1954 and served as the college’s acting president in 1970; wrote several books.

THOMAS C. COX, associate professor emeritus of history in USC Dornsife and a leading historian in African American studies and American intellectual and social history, died at home in Pasadena, Calif., on Dec. 9, 2011. He was 72.

Cox began his 29-year tenure at USC Dornsife in 1982 as assistant professor of history. He published extensively on African American and social history and taught a range of courses. He became emeritus associate professor of history in 2008. While at USC, Cox received many honors and distinctions. He wrote Everything but the Fenecpots: The Great Plains Grassland Collapse of 1874–1877 (Figueroa Press, 2010).

Prior to his arrival at USC, Cox obtained his bachelor’s degree from the University of Kansas and a Ph.D. from Princeton University.

A mentor to young USC Dornsife politicos, Pineda was respected as a valued and trusted public opinion researcher. He served as the chief Latino pollster for President Barack Obama’s 2008 campaign. In Spring 2009, Pineda taught the political science course “Political Attitudes and Behavior” in USC Dornsife.

Pineda was respected as a valued and trusted public opinion researcher. His work as owner of Pineda Consulting spanned more than 20 years of professional expertise in both private and public sectors and national and international borders.

CARL QUIMBY CHRISTOL

Distinguished Professor Emeritus of Political Science in USC Dornsife and pioneer in the field of international space law, died at home in Santa Barbara, Calif., on Feb. 22. He was 98.

He began his 38-year tenure at USC Dornsife in 1949 as professor of political science after earning a bachelor’s degree in history from the University of South Dakota, a Ph.D. in political science from the University of Chicago and a law degree from Yale Law School. Christol was appointed Distinguished Professor Emeritus in 1990.

Christol advanced the theory of international law of outer space and was among the first to promote human rights as a field of study. His book The Modern International Law of Outer Space (Pergamon Press, 1982) was the first of its kind to be written by an American on the topic.

He continued to publish extensively on international space law after his retirement from USC in 1987.
USC Distinguished Professor Emeritus of Chemistry, Sidney W. Benson, who became scientific co-director of USC Dornsife’s Loker Hydrocarbon Research Institute when it opened in 1977, died Dec. 30, 2011, at his home in Brentwood, Calif. He was 93.

He joined USC Dornsife in 1943 after earning a bachelor’s degree from Columbia College, and his Ph.D. from Harvard University. Among the world’s most-cited chemists, Benson rose through the ranks at USC, becoming scientific co-director of the USC Dornsife’s Loker Hydrocarbon Research Institute in 1977 — the same year he helped to recruit George Olah, now Distinguished Professor of Chemistry and Donald P. and Katherine B. Loker Chair in Organic Chemistry.

Benson published more than 500 scientific papers and books on physical chemistry. After a 13-year stint at the Stanford Research Institute, he returned to USC in 1976 and retired in 1994.

In 1981, Benson became the second scholar at USC elected to the National Academy of Sciences.

A Cherished Chemist

Distinguished Professor Emeritus of Chemistry Sidney W. Benson was among the first at USC elected to the National Academy of Sciences.
Like most of my fellow Trojans, I lived off the I-10 Freeway during my four years at USC. I took it to the beach on beautiful afternoons; I followed it to countless reporting assignments for Annenberg classes and the Daily Trojan. I feel like I’ve driven it a thousand times across Los Angeles.

I never thought I would take the 10 to its intersection at Claiborne Avenue, nearly 2,500 miles away in New Orleans, La.

Yet, through a series of unforeseen circumstances, every morning I followed the I-10 Claiborne Avenue off-ramp down into the depths of subterranean New Orleans, past the topsy-turvy devastation of the 9th Ward and into St. Bernard Parish. There, every single home was destroyed by Hurricane Katrina in 2005. A far cry from the shimmering skyscrapers I remembered off the 10 in L.A.

For my first two years as a USC alumna, I served as an AmeriCorps member working for a rebuilding nonprofit in the Orleans and St. Bernard parishes. Along with my 68 colleagues from around the country, I found myself in the midst of the slow, painful recovery of a great American city. Besides this fact, we all had a couple things in common: We didn’t know what we were in for, and none of us had imagined ourselves at the intersection of two back alleyways, in a former appliance repair shop that still bore the evidence of a 12-foot-high water line.

Together, we completed more than 100 homes, raised the funding to complete at least 100 more and met residents who would forever change our lives and our perspectives. Even now, as I write this back on the West Coast, I think often of Miss Elizabeth and Joycelyn, who lost everything — family members, their home, their community — and came back to rebuild and work in the nonprofit’s mental health and wellness clinic to counsel others still struggling.

Now that I’m back in California, when my experiences in New Orleans come up in conversation, I’m often asked why we should rebuild in these areas where flooding could happen again. It’s not smart, right? Aren’t we setting these neighborhoods up for another disaster? I asked these same questions of Elizabeth and Joycelyn and many other New Orleanians who we helped, and their answer was universal: It’s home.

For them, home is more than just a house or a block. It’s tight-knit community. For them, success is defined by living in a home you own on the same street as your mom and dad ... and cousins and aunts and uncles and nephews.

That always stuck with me, because it is so different from the definition of success I laid out for myself long ago, which focused more on my career and assumed my happiness would be derived from that.

While at USC, I attempted to map out my paths and crossroads to success. I would write for a newspaper at first, go back to grad school and specialize in international public policy, then return to journalism as a special correspondent. My impact on the world would be to inform the public of critical events. I pictured that all of this would occur in a major metropolis.

So when the possibility of New Orleans threatened to disrupt this map, I was eager to dismiss it. I asked one of my professors for back-up, instead receiving the response: “You should do it. But you’re going to have to learn to talk slower.”

I never did. But I did learn how to eat crawfish, dress up for Mardi Gras, catch the best throws from a float and dance to brass bands. New Orleans taught me that success is much more than a series of paths to a distinguished career.

I’m now in San Francisco where they can understand what I say and don’t point out my “California accent.” Though I’ve crisscrossed my way back west, I carry my memories of New Orleans with me. They act as a reminder that life presents you with intersections all the time. Maybe you should take a chance on the one you never considered, because it might just change your perspective for the better.

Catherine Lyons ‘09 is a policy associate at the Bay Area Council, a business-sponsored public policy advocacy organization in San Francisco. She graduated from USC Dornsife and the USC Annenberg School for Communication & Journalism with degrees in international relations and print journalism.
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