

DIVISION OF THE
HUMANITIES AND SOCIAL SCIENCES

2018 IN REVIEW



Caltech



Greetings

FROM THE CHAIR

Among the joys of 2018 for me were remarks by Ben Rosen (BS '54) on the occasion of his accepting the Institute's highest honor, the Robert A. Millikan Medal, in October. Rosen highlighted an essential element of a Caltech education since its early days: "Millikan felt strongly that Caltech students would be much better equipped to face the world had they more than just a technical education. As a result, starting in the 1920s, he incorporated humanities into the curriculum."



After citing examples of this principle in action, Rosen concluded: "In the early 1960s, C. P. Snow wrote in his book *The Two Cultures* of the breakdown between the sciences and the humanities as a major hindrance to solving the world's problems. Though we're far from solving these problems, I am encouraged—thanks in large part to Robert Millikan—that at Caltech we're making progress."

Building bridges across the two cultures is a foundational mission of HSS. As you will see, we do this not only in our instruction of Caltech students but also in our research across the humanities and social sciences—from literature to neuroscience, in political economy and philosophy, in finance and our new program in visual culture. Fostering meaningful interdisciplinary conversations is, to me, both the great challenge and the great opportunity for the future of HSS.

Wishing you joy and success in 2019.

JEAN-LAURENT ROSENTHAL

Rea A. and Lela G. Axline Professor of Business Economics
Ronald and Maxine Linde Leadership Chair
Division of the Humanities and Social Sciences

2018

IN REVIEW

— WINTER —



Caltech Alum Reflects on Career Path from Physics to Finance

THOMAS LUKE (BS '86) had every intention of pursuing a career in physics, expecting to become a professor or research physicist. After graduating from Caltech, Luke went to MIT to continue his studies, but an unexpected setback in the lab delayed his PhD for a year. He used the time to take a few business classes, which piqued his interest, and then went on to earn an MBA in finance in 1994 before receiving a PhD in physics the following year. “At the time,” Luke explains to Caltech News, “Wall Street was at the tail end of a hiring spree for technical people to work on derivatives and options—another type of financial contract—and I got offers from almost every bank on the Street.” He has worked for some of the world’s most well-known financial firms, including J.P. Morgan, Goldman Sachs, and Merrill Lynch, and today he oversees risk management for Alphadyne Asset Management, a \$4.5 billion investment management firm with offices in New York, London, and Tokyo.



Holland’s Humanities Class: The Human Animal

Caltech News highlighted a unique course taught by **JOCELYN HOLLAND**, professor of comparative literature, titled *The Human Animal*. Holland led students on a literary, historical, and philosophical journey to explore the blurry line between humans and animals. Students in the discussion-based course read works such as *Gulliver’s Travels*, *The Dialogue of the Dogs*, and a collection of seventeenth-century French fables. “We focus on a time period with big debates about the distinction between the human and the animal: whether they have souls, whether we are responsible for treating them ethically, and whether they can reason or are little more than machines,” Holland explains. “My goal is for the students to understand that an animal is a complex entity.”

2018 IN REVIEW



Mobbs Lab Uncovers How the Human Brain Processes Fear

Assistant Professor of Cognitive Neuroscience **DEAN MOBBS** and graduate student **SONG QI** released a study that shows there are two areas of the brain involved in processing fear. The areas, which they call “fear circuits,” split up the responsibility for dealing with threats. Distant threats, which allow more time for thinking and strategic behavior, are handled by the cognitive-fear circuit, located near the front of the brain. Immediate threats, which require a quick “fight or flight” response, are handled by the reactive-fear circuit, located near the center of the brain. To acquire this information, Mobbs and his team developed a “virtual predator” video game and used functional magnetic resonance imaging (fMRI) scans to observe brain activity while the volunteers played. The study, titled “How Cognitive and Reactive Fear Circuits Optimize Escape Decisions in Humans,” appeared in the *Proceedings of the National Academy of Sciences* in March.



Einstein Papers Project, Princeton University Press Release 15th Volume of Einstein Papers

In April, the Einstein Papers Project published the latest curated volume of Albert Einstein’s scientific and personal papers, *Volume 15: The Berlin Years: Writings & Correspondence, June 1925 – May 1927*. This collection covers Einstein’s thoughts on quantum theories emerging in the late 1920s, his unwitting collaboration with an academic fraud, and letters to a woman who may have been his first love. **DIANA KORMOS-BUCHWALD**, Robert M. Abbey Professor of History and director of the Einstein Papers Project, describes the two years covered in this volume as an “extraordinarily busy, engaged, and, at times, turbulent” period in Einstein’s life. For this volume, the international team of collaborators collected, transcribed, translated, and researched roughly 100 writings by Einstein and 1,400 letters.

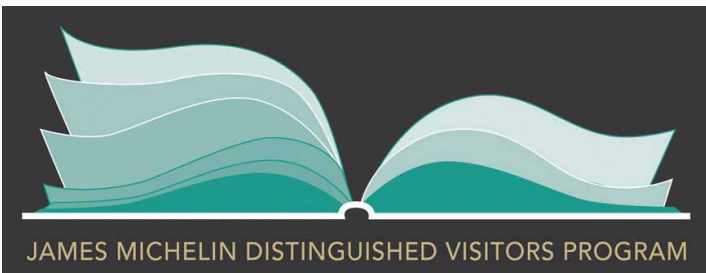


SPRING



The Huntington's Dan Lewis Joins HSS to Expand Course Offerings

DAN LEWIS, Dibner Senior Curator of the History of Science & Technology at The Huntington Library, Art Collections, and Botanical Gardens, joined the HSS faculty as a lecturer to teach new courses on extinction and ecology. The classes, *History of Extinction* and *Humanistic Ecology*, ask students to examine humanity's relationship with the natural world around them. In *History of Extinction*, which has proven to be a popular class, students explore biological extinctions as well as extinctions of languages, cultures, and technologies. In *Humanistic Ecology*, students look at how human perspectives on nature have changed through history and how ecology affects uniquely human creations like politics, law, and culture, in addition to how those creations affect ecology. Lewis says that his interests in the natural world and extinction are rooted in his childhood: he grew up in Hawaii, which has an especially high proportion of endangered species.



Michelin Distinguished Visitors Program Continues to Bring Notable Authors to Caltech

The Michelin Distinguished Visitors Lecture Series was established in 1992 by Bonnie Cashin in memory of her uncle, James Michelin, to promote creative interaction between the arts and sciences at Caltech. The program has featured a wide range of high-profile visitors over the years, and this year was no exception.

- In April, historian and best selling author Hampton Sides lectured on his 2015 book *In the Kingdom of Ice*. He shared the true story of the USS *Jeannette's* journey in 1879 to the Arctic, the booming national pride that propelled it, and the pseudoscientific thinking that doomed it.

- In May, Leslie Jamison visited to talk about her latest book, *The Recovering: Intoxication and Its Aftermath*, which explores her personal experience with alcohol addiction and the self-doubt that made her wonder if she could be a good writer without alcohol. The essayist and novelist spoke about substance abuse, recovery, and romantic notions of famous alcoholic writers, such as Jack London, William Faulkner, and Ernest Hemingway.
- Later in May, poet Mary Szybist gave a public reading from her book *Incarnadine*, winner of the 2013 National Book Award for Poetry.
- In October, award-winning journalist Dan Falk discussed his book *The Science of Shakespeare*. He considered the playwright's work in the context of the Scientific Revolution to explore what English literature's most towering figure might have thought or known about astronomy.
- The 2018 Michelin program concluded in November with a reading by Eavan Boland, poet, author, professor, and director of the creative writing program at Stanford University. She joins a growing list of well-known Irish poets who have visited Caltech through the Michelin program, including Seamus Heaney and Paul Muldoon.

2018 IN REVIEW



An Economist's Perspective on Negotiations and Group Decisions

Professor of Economics **MARINA AGRANOV** gave the Earnest C. Watson Lecture on April 25. In her talk, titled "Negotiations and Group Decisions: Passing Bills with Backroom Deals," Agranov demonstrated how the structure and rules of the negotiation process impact how money gets distributed. This work is part of Agranov's ongoing research into the ways in which communication affects outcomes in various strategic environments. Her work combines theory and experiments to study how institutions influence credible transmission of information. Agranov is the director of HSS's new Center for Theoretical and Experimental Social Sciences, part of The Ronald and Maxine Linde Institute of Economic and Management Sciences.



Frankenstein: Then and Now, 1818–2018

This year marks the 200th anniversary of the publication of Mary Shelley's novel *Frankenstein; or, The Modern Prometheus*. Caltech, The Huntington Library, Art Collections, and Botanical Gardens, the Keats-Shelley Association of America, and the Byron Society of America organized a three-day symposium in May to celebrate the bicentennial of this seminal work. The symposium brought together scholars and scientists to discuss the cultural milieu in which the novel was published, the science described in the novel, and the ethical questions humanity should be asking itself as it continues to develop technologies such as genetic engineering and artificial intelligence. "Mary Shelley's *Frankenstein* was engaged with developments in science and medicine," observes **KEVIN GILMARTIN**, dean of undergraduate students, William R. Kenan, Jr., Professor of English, and co-organizer of the conference. "I find very intriguing the ways in which this novel continues to resonate with our own anxieties around the life sciences."



Neuroscientists Track Eye Movement to Observe the Human Brain's Response

RALPH ADOLPHS, Bren Professor of Psychology, Neuroscience, and Biology, the Allen V. C. Davis and Lenabelle Davis Leadership Chair, and director of the Caltech Brain Imaging Center, collaborated with researchers from Cedars-Sinai Medical Center in Los Angeles and West Virginia University to reveal the human brain's response when a visual target is found. The resulting paper, published in *Current Biology*, describes how researchers were able to record the activity of individual visual-targeting neurons in patients with electrodes implanted in their brains for epilepsy treatment. The patients were asked to search for target images within pictures, similar to the game "I Spy," while the researchers tracked the patients' eye movements. When a patient found the target objects, neurons were activated in two specific areas of the brain: the medial temporal lobe, a region known to be involved in memory and object recognition, and the medial frontal cortex, a region known to be involved in control and decision-making.



Rosenkranz Publishes First Volume of Einstein's Travel Diaries

This spring, Senior Editor and Assistant Director of the Einstein Papers Project **ZE'EV ROSENKRANZ** released his latest book, titled *The Travel Diaries of Albert Einstein: The Far East, Palestine, and Spain, 1922–1923*. This volume documents Einstein's nearly six-month voyage with his then wife, Elsa, that included his inaugural lecture at the future site of the Hebrew University in Jerusalem, a garden party hosted by the Japanese empress, and an audience with the king of Spain. Einstein would go on to keep journals for all successive trips abroad.

Several news outlets, including Fox News, *Newsweek*, the *Washington Post*, the BBC, and the *New York Post*, covered the book's release and called out Einstein's prejudiced attitudes toward Chinese people. In an interview with *The Guardian*, Rosenkranz recognized that Einstein's comments in his travel logs "contrast [with] the public image of the great humanitarian icon." Rosenkranz also wrote an opinion piece for *Time*, titled "The Real Lesson of the Racial Slurs in Albert Einstein's Private Travel Diaries."

Congratulations to the Class of 2018

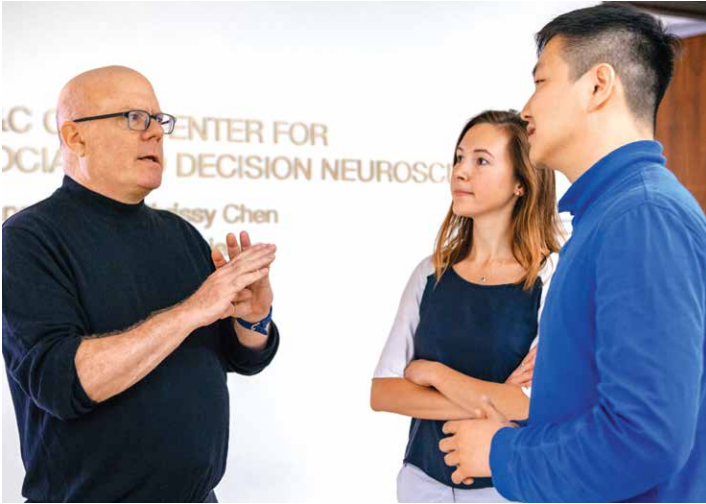
On the occasion of Caltech's 124th commencement ceremony, the Division of the Humanities and Social Sciences was pleased to present another group of outstanding PhD recipients (listed with their dissertations):

- Ryo Adachi ("Computational and Neural Mechanisms Underlying Decision-Making in Humans")
- Jun Chen ("Essays on Early-Stage Financing and Firm Behavior")
- Marcelo Fernandez ("Essays on Market Design")
- Lucas Núñez ("Unobserved Heterogeneity in Observational Studies of Political Behavior")
- Li Song ("Three Essays on Mechanism Design")
- Pengfei Sui ("Essays on Investor Beliefs and Asset Pricing")
- Mali Zhang ("Information and Strategic Decision-Making in the Oil and Gas Industry: An Empirical Assessment")



2018 IN REVIEW

SUMMER



Camerer Research Links Testosterone and Luxury Purchases

A study published in *Nature Communications* shows that men with increased testosterone levels have a greater preference for goods that are considered status symbols. "In the animal kingdom, testosterone promotes aggression, but the aggression is in service of status," explains study co-author **COLIN CAMERER**, Robert Kirby Professor of Behavioral Economics and the T&C Chen Center for Social and Decision Neuroscience Leadership Chair, executive officer for the social sciences, and director of the T&C Chen Center for Social and Decision Neuroscience. "A lot of human behaviors are repurposed behaviors seen in our primate relatives. So, here, we're replacing physical aggression with a sort of 'consumer' aggression." Over 200 male volunteers who participated in the study were randomly selected to receive a dose of either testosterone gel or placebo gel before participating in certain tasks. The final data showed that the men who received testosterone had a stronger preference for luxury brands and goods than did the men who received the placebo. *Newsweek* cited this finding in an article titled "Five Ways High Testosterone Impacts Men's Behavior."



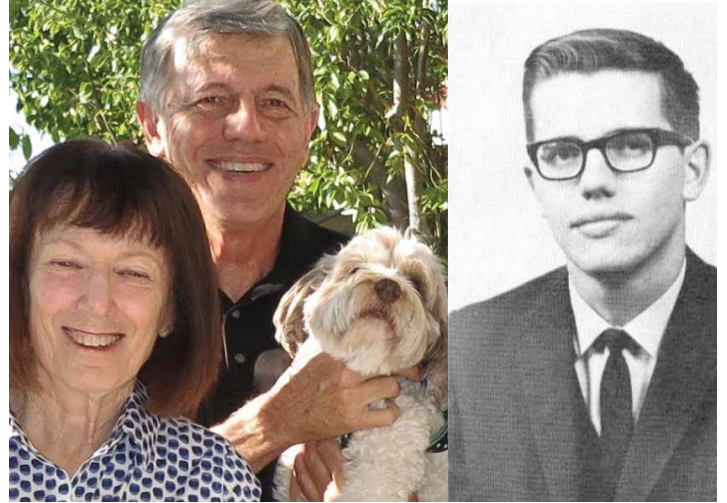
Meet Postdoctoral Instructor Melanie Masterton Sherazi

Howard E. and Susanne C. Jessen Postdoctoral Instructor in the Humanities **MELANIE MASTERTON SHERAZI** was featured in an interview with *Caltech Magazine*. Her research focuses on the literature, visual culture, and performance art produced by African Americans in Rome during the Cold War. Sherazi became interested in this area through the work of the late African American expatriate author William Demby, whose final completed manuscript, *King Comus* (published in 2017), she edited. Sherazi explains, "I had the pleasure of inventorying Demby's papers from Rome in his son's residence in Italy; this rich material opened onto a broader postwar cultural milieu that inspired my current book project." The book is tentatively titled *Nero e Rosso: Desegregationist Aesthetics in Cold War Rome (1947–1965)*.



Gibilisco Explains the Dynamics of War and Peace

Leaders of democratic nations have stronger incentives to start and exacerbate conflicts with other countries than their autocratic counterparts, according to a study by **MICHAEL GIBILISCO**, assistant professor of political science. In the study, which was published in the *American Journal of Political Science*, Gibilisco and his co-author developed a mathematical model of dispute initiation between countries and then fit the model to data of actual conflicts that occurred among 125 countries between 1993 and 2007. They concluded that the difference in reactions from the two types of leaders boils down to public pressure. Because of pressure from voters to not back down and appear weak, democratic leaders tend to act more aggressively in international conflicts. An autocrat, on the other hand, can back down from a conflict without facing the same audience costs.



Davisson Donation Promotes HSS Teaching and Research

Roger Davisson (BS '65, MS '66) and his wife, Marjorie, built on decades of support for Caltech with a new \$3 million endowment pledge to the *Break Through* campaign. As a student at Caltech, Davisson enjoyed the literature, history, and economics classes that made his education feel more complete. He was also extremely grateful to be a scholarship recipient, so he and his wife wanted to “pay it forward.” The Davissons’ gift fuels three different initiatives that benefit students directly: In addition to expanding the Roger and Marjorie Davisson Scholarship fund for undergraduates established in 1993, the couple created two new graduate fellowships (the Roger and Marjorie Davisson Fellowship and the Lance E. Davis Fellowship) and established the Davisson Fund for Excellence in Teaching in HSS, which will help the HSS Chair pursue top priorities and emerging opportunities.

Neuroscientists Predict Intelligence from Resting Brain Scans



Professor **RALPH ADOLPHS**, Senior Research Scientist **LYNN PAUL**, and former Caltech postdoctoral scholar **JULIEN DUBOIS** collaborated on the design of a new computing tool that can predict a person’s intelligence from functional magnetic resonance imaging (fMRI) scans of their resting-state brain activity. The Adolphs lab researchers used data collected by the Human Connectome Project (HCP), funded by the National Institutes of Health (NIH), to train an algorithm on the complex patterns of activity in the human brain. After processing the data, the algorithm was able to predict intelligence at statistically significant levels across the 900 subjects. Adolphs and his colleagues said they would like to see MRIs be able to diagnose conditions like autism, schizophrenia, and anxiety as they currently do for tumors, aneurysms, or liver disease. *The Daily Mail*, among other outlets, featured this research, which was published in *Philosophical Transactions of the Royal Society B* in August.

2018 IN REVIEW

HSS WELCOMES NEW FACULTY



Charles "Chip" Sebens, Assistant Professor of Philosophy

Sebens studies the philosophy of physics, focusing on the foundations of quantum theory. He returned to HSS from the philosophy department at UC San Diego, where he started as an assistant professor in 2016 after a year at Caltech as an Ahmanson Postdoctoral Instructor in the History and Philosophy of Physics. He earned his undergraduate degree from MIT, a master's from the University of Oxford, and his PhD from the University of Michigan.



Danielle Wiggins, Assistant Professor of History

Wiggins earned her PhD in history from Emory University in June, where she focused on African American political history and urban political economy. Her dissertation examines the politics of capital development and crime control among Atlanta's black middle classes during the 1970s and 1980s. She received her BA in history from Yale University. Wiggins is spending the 2018–2019 academic year as a visiting fellow at the University of Virginia's Jefferson Scholars Foundation before coming to Caltech in the summer of 2019.



Yi Xin, Assistant Professor of Economics

Xin is interested in industrial organization, econometrics, and applied microeconomics. Her research investigates how the desire for future loans increases performance on current loans in online unsecured debt markets. Xin joined HSS this summer after earning her PhD in economics from Johns Hopkins University, and she holds undergraduate degrees in economics and psychology from Peking University in Beijing, China.

FALL



Research Shows Politicians with Wider Faces Are Perceived as More Corrupt

CHUJUN LIN, social science graduate student, led a study that shows observers have a knack for picking out corrupt politicians based on portrait photos alone, and they tend to perceive politicians with wider faces as more corruptible. “There is no doubt that people form first impressions from faces all the time,” says Lin. “For example, on dating sites people often reject potential matches based on pictures without reading the profile.” As part of the study, the researchers digitally manipulated politicians’ photos to create a wide and narrow version of each, and the volunteers judged the wide-faced versions of the politicians to be more corruptible than their thin-faced counterparts. *Science Daily* and the *Boston Globe* shared the findings of Lin’s paper, titled “Inferring Whether Officials Are Corruptible from Looking at Their Faces,” after it was published in *Psychological Science* in September, with **RALPH ADOLPHS** and **MICHAEL ALVAREZ** as co-authors. The Caltech *Break Through* campaign also produced a one-minute video of Lin describing her research.



Weinstein Takes a Humanist’s Perspective to Understand the Science of Alzheimer’s Disease

Eli and Edythe Broad Professor of English **CINDY WEINSTEIN**’s current book project approaches Alzheimer’s disease from three angles: the personal, the literary, and the scientific. This academic year, Weinstein is working on the project with her co-author Bruce Miller, the A.W. and Mary Margaret Clausen Distinguished Professor in Neurology at UC San Francisco and co-director of the Global Brain Health Institute (GBHI), while she is an Atlantic Fellow at GBHI. The fellowship allows her to work alongside doctors, research scientists, psychologists, and others to develop a better understanding of how dementia affects the brain and society. “My goal for this fellowship is to write a book that uses my own experience of watching the progression of my father’s Alzheimer’s as a way for caregivers to think about and articulate their experience of watching someone they love change before their very eyes,” she says. “Bringing together the humanistic with the scientific, I hope to share the compelling languages that can be used to make sense of Alzheimer’s.”

2018 IN REVIEW



Camerer Lab Explores Choice Overload

A study led by **COLIN CAMERER** reveals new insights into choice overload. Subjects participated in a choice exercise while the functional magnetic resonance imaging (fMRI) machine recorded their brain activity. Researchers found that activity in two specific brain regions was highest in subjects who had 12 options to pick from and lowest in those with either 6 or 24 items to choose from. As the number of options increased, the potential reward was perceived as increasing, but then it leveled off due to diminishing returns. “Essentially, our eyes are bigger than our stomachs,” Camerer says. “When we think about how many choices we want, we may not be mentally representing the frustrations of making the decision.” The results of the study, titled “Choice Overload Reduces Neural Signatures of Choice Set Value in Dorsal Striatum and Anterior Cingulate Cortex,” were covered in *Business Insider*, among other outlets, after it was published in *Nature Human Behavior*.



Alvarez Partners with Orange County to Assess Integrity of Midterm Elections

During this busy election year, Professor of Political Science **MICHAEL ALVAREZ** collaborated with the Orange County Registrar of Voters as an outgrowth of research conducted by the Caltech/MIT Voting Technology Project. They began by collecting and analyzing election data prior to the primaries in June, looking for signs of untoward activity. The project’s organizers also made available an online election-integrity dashboard that shared statistics and analytics related to voter rolls, large-scale changes in voting behavior, and firsthand reports about problems and wait times at polling places. “Questions about the integrity of elections arise in periods of history when elections are close,” Alvarez says. “We are now in one of those periods.” Among the project researchers are social science graduate students **NICHOLAS ADAMS-COHEN**, **SEO YOUNG “SILVIA” KIM**, and **YIMENG LI**, along with Caltech SURF student and sophomore **SPENCER SCHNEIDER**.

Dams and the Damage They Do: A Q&A with Ted Scudder



THAYER “TED” SCUDDER, professor emeritus of anthropology, is a leading world authority on dams. Caltech News recently interviewed Scudder in connection with the release of his latest book, titled *Large Dams: Long Term Impacts on Riverine Communities and Free Flowing Rivers*. The book chronicles a long career spent studying overlooked peoples in Africa, the Middle East, and Asia and reveals Scudder’s growing disillusionment with the dam projects on which he consulted. “In the book, we estimate that today about half a billion people downstream from large dams are worse off because of them,” Scudder says. “Another 40 to 50 million have been forcibly relocated. That’s a significant number of people who are being disadvantaged by these projects.”



Eberhardt Teaches High School Students about Causation and Correlation

Over the last two years, Professor of Philosophy **FREDERICK EBERHARDT** gave a series of presentations on the relationship between causation and correlation to students at Blair High School in Pasadena. His sessions began with an interactive puzzle that challenged students to deduce the causal relations in a toy system, and afterwards he would review various reasoning and experimental strategies to explain why they work. According to Eberhardt, “I [also told] them about some of the work we are currently doing on causal discovery in zebrafish brains, . . . a much more complicated version of the toy puzzle they solved, but where we use essentially the same reasoning strategies that they used.” He conducted this outreach at Blair as part of a grant he was awarded by the National Science Foundation, with Caltech colleagues Pietro Perona, Allen E. Puckett Professor of Electrical Engineering, and Yisong Yue, assistant professor of computing and mathematical sciences.

Mellon Foundation Grant Funds Creation of New Visual Culture Program at Caltech



Camerer Discusses the Replication Crisis

New evidence is emerging that suggests biases and small errors are finding their way into scientific research more often than might be expected, with the result being that many scientific findings don't stand up to scrutiny. **COLIN CAMERER** has been at the forefront of research into this phenomenon, known as the replication crisis. This summer, he and colleagues published a paper that outlined their attempts to replicate social science papers that appeared in *Nature* and *Science* over a five-year period. They examined 21 papers and were only able to replicate the findings of 60 percent of them. Camerer says that results like these are especially common in psychology and the social sciences, but replication can present issues in many other fields as well. He favors a range of responses to encourage replication, including the Open Science Framework, in which researchers share all their data, methods, and materials publicly; preregistration, which is publicly explaining how one selects and analyzes data before beginning an experiment; and the creation of auditing organizations that will randomly select peer-reviewed papers for replication.

Things are about to get a lot more colorful in HSS. The division is rolling out a new program in visual culture, funded by a grant of nearly a million dollars from the Andrew W. Mellon Foundation. With a new faculty member dedicated to visual culture (expected to arrive in the summer of 2019), artists-in-residence, guest lecturers, and new courses and student-focused activities, the program is designed to nurture engagement between humanists and scientists within Caltech and beyond. The program also includes collaborations with The Huntington Library, Art Collections, and Botanical Gardens, connecting the Caltech community with The Huntington's extensive collections of visual materials. Professor of English **DEHN GILMORE** and **HILLARY MUSHKIN**, research professor of art and design in mechanical and civil engineering, have taken an active role in organizing the new program.

WHERE ARE THEY NOW?

AFTER EARNING THEIR PHDS IN 2018 . . .

RYO ADACHI is a data analyst at DeNA in Tokyo, Japan.

JUN CHEN is an assistant professor of finance at Renmin University of China School of Business.

MARCELO FERNANDEZ is an assistant professor of economics at Johns Hopkins University.

LUCAS NÚÑEZ is an assistant professor of political science in the Schar School of Policy and Government at George Mason University.

LI SONG is a business development consultant at Xenon Health.

PENGFEE SUI is an assistant professor of finance in the School of Management and Economics at Chinese University of Hong Kong, Shenzhen.

MALI ZHANG is a consultant at Boston Consulting Group.

AFTER COMPLETING THEIR POSTDOCTORAL APPOINTMENTS IN 2018 . . .

JURI MINXHA is a postdoctoral scholar in the department of neuroscience at Columbia University.

WOLFGANG MARTIN PAULI is an artificial intelligence developer at Microsoft Research AI.

KEITH PLUYMERS is an assistant professor of history at Illinois State University.

DIRK SCHEELE is a postdoctoral scholar in the Klinik und Poliklinik für Psychiatrie und Psychotherapie at University of Bonn.

ANITA TUSCHE is an assistant professor at Queen's University.

CONGRATULATIONS

HSS recognizes and congratulates its faculty, students, and alumni for the following honors and awards bestowed in 2018.

The American Academy of Arts and Sciences, one of the nation's oldest honorary societies, elected **MICHAEL ALVAREZ** into its 238th class of fellows.

Two HSS staff members were recognized at the 63rd annual **CALTECH STAFF SERVICE AND IMPACT AWARDS** in May. **LAUREL AUCHAMPAUGH**, the division's option manager for undergraduate and graduate programs, has been with HSS for 30 years. Administrative Assistant **MARY MARTIN** has worked at the Institute, first in the Division of Biology and Biological Engineering and since 2014 in HSS, for a combined 15 years. The division thanks them both for their years of dedicated service!

The **HSS STUDENT PRIZE WINNERS** honored at Caltech's commencement in June included:

- **JONATHAN CHAN** (Gordon McClure Memorial Communications Prize – Philosophy)
- **ROOHI DALAL** (Eleanor Searle Prize in Law, Politics, and Institutions)
- **REETI GULATI** (Hallett Smith Prize)
- **LAURA HU** (Mary A. Earl McKinney Prize in Literature – Poetry)
- **TIMOTHY LIU** (Mary A. Earl McKinney Prize in Literature – Prose Fiction)
- **TRISTAN MURPHY** (Rodman W. Paul History Prize)
- **MAITREYI NAIR** (Gordon McClure Memorial Communications Prize – English)
- **TARA SHANKAR** (Gordon McClure Memorial Communications Prize – History)
- **GALILEA VON RUDEN** (Alexander P. and Adelaide F. Hixon Prize for Writing)
- **SHIYU ZHANG** (John O. Ledyard Prize for Graduate Research in Social Science)

ROOHI DALAL (BS '18), who double majored in astrophysics and history, was awarded a Fulbright fellowship to spend a year at Leiden University in the Netherlands, where she is now researching methods of testing Einstein's theory of general relativity at cosmological scales.

MARINA AGRANOV was honored with a 2017–2018 Associated Students of the California Institute of Technology (ASCIT) Teaching Award, determined by a vote of the undergraduate students and recognizing those who demonstrate exceptional commitment to teaching and concern for their students' learning.

Two HSS faculty members received chaired professorships in 2018, which are considered the Institute's most distinguished award for individual faculty. **DIANA KORMOS-BUCHWALD** was named the Robert M. Abbey Professor of History, and **KEVIN GILMARTIN** was named William R. Kenan, Jr., Professor of English.

The following HSS graduate students were awarded internal fellowships to pursue their studies during Caltech's 2018 fiscal year:

- **HAMED HAMZE BAJGIRAN** (Repetto-Figueroa Family Graduate Fellow, 2017–2018)
- **ANASTASIA BUYALSKAYA** (Chen Graduate Fellow, 2017–2018)
- **JUN CHEN** (Linde Institute Graduate Fellow, 2017–2018)
- **MARCELO FERNANDEZ** (HSS Chair's Council Graduate Fellow, 2017–2018)
- **LUCAS NÚÑEZ** (HSS Chair's Council Graduate Fellow, 2017–2018)
- **ALEJANDRO ROBINSON-CORTÉS** (Linde Institute Summer Fellow, 2018)
- **PENGFEI SUI** (Linde Institute Graduate Fellow, 2017–2018)
- **HAO ZHAO** (Resnick Fellow, 2016–2018)

2018 IN REVIEW

The National Science Foundation selected alumnus **ARTHUR LUPIA** (PhD '91) to serve as assistant director in the NSF's Directorate for Social, Behavioral, and Economic Sciences.

The Caltech Alumni Association named **CINDY WEINSTEIN** an honorary member, in recognition of her advancement of the Alumni Association's mission "to promote the interests of Caltech as a world standard of academic excellence by strengthening the ties of goodwill and communication between the Institute, its alumni, and its students, and by maintaining programs to serve their needs."

The University of Melbourne awarded **CHARLES PLOTT**, William D. Hacker Professor of Economics and Political Science, an honorary Doctor of Commerce degree to acknowledge his "successful development of the scientific method for economics and political science" and, in particular, for translating "insights obtained in [his] laboratory experiments into effective resource allocation and information aggregation mechanisms that have benefited many, including in Australia."

Caltech named Bing Professor of Neuroscience, Behavioral Biology, and Economics **ANTONIO RANGEL** the Institute's Head Faculty in Residence, with the aim of fostering informal interactions between faculty and students and a sense of community that extends beyond the classroom and laboratory.

In fiscal year 2018, the research of several HSS faculty members and scholars was recognized with competitively awarded external funding, including:

- Graduate student **NICHOLAS ADAMS-COHEN**, recipient of a Haynes Lindley Doctoral Dissertation Fellowship
- **RALPH ADOLPHS**, for "NeuroDataRR: Predicting Intelligence from Resting-State fMRI: Parcellation, Pipelines, and Models," from the National Science Foundation
- **MICHAEL ALVAREZ** and **NICHOLAS ADAMS-COHEN**, for "From Criminal to Recreational: How

- California's Legalized Marijuana Policy Impacts Public Opinion," from the John Randolph Haynes Foundation
- **COLIN CAMERER**, for "Collaborative Research: Meta-Analysis of Empirical Estimates of Loss Aversion," from the National Science Foundation; and for "A Neuroeconomic Theory of Habit in Repeated Choices," from the Alfred P. Sloan Foundation
- Richard N. Merkin Professor of Mathematical Finance and Director of The Ronald and Maxine Linde Institute of Economic and Management Sciences **JAKSA CVITANIC**, for "Mathematical Models for Delegated Portfolio Management," from the National Science Foundation
- **FREDERICK EBERHARDT** and **RALPH ADOLPHS**, for "Using fMRI to Revise Psychological Variables," from the National Science Foundation, Early-Concept Grants for Exploratory Research (EAGER)
- **JEAN ENSMINGER**, Edie and Lew Wasserman Professor of Social Sciences, for "Fiscal Decentralization, Development, and Governance," from the National Science Foundation, Early-Concept Grants for Exploratory Research (EAGER)
- Research Assistant Professor of Neuroscience and Lecturer in Neuroscience **CINDY HAGAN**, for "Multivariate Brain Representation and Food Valuation in Individuals with Anorexia Nervosa," from the Brain & Behavior Research Foundation
- Assistant Professor of English **JENNIFER JAHNER**, recipient of a Graves Award in the Humanities, for "Pharmacopia: Medicinal Economies and the Medieval Therapeutic Imagination"
- **LYNN PAUL** and **RALPH ADOLPHS**, for "Early Development of Agenesis of the Corpus Callosum," from the National Institutes of Health
- **JEAN-LAURENT ROSENTHAL**, for "What the Eye Beholds: The Caltech-Huntington Joint Program in Visual Culture," from the Andrew W. Mellon Foundation

The Social Science History Association elected Rea A. and Lela G. Axline Professor of Business Economics and History **PHILIP HOFFMAN** to serve as its vice president.

The **BRASS DIVISION AWARDS** honor service to HSS and recognize teaching, mentoring, or other activities that enhance learning among Caltech students. The 2018 winners, who received their awards at the December 6 HSS holiday lunch, are:

- **WARREN BROWN**, Professor of History
- **TIFFANY KIM**, HSS Business Manager
- **TOM NEENAN**, Lecturer in Music

ALSO IN THE NEWS

After publication of his latest book *The Neuroscience of Emotion* (co-authored with BBE's David Anderson), **RALPH ADOLPHS** explained to *The Verge* that, when it comes to the neuroscience of emotion, there is still much to explore. *Science* also covered the new book, referring to it as "compelling and engaging."

ADOLPHS was also interviewed by Futurism.com on the interesting topic of whether a head transplant is possible and how it might affect who a person is and how that person thinks.

MICHAEL ALVAREZ spoke with local NPR station KPCC several times throughout this election year, including as a panelist in the October "Voter Cram Session," moderated by Larry Mantle.

HAMED HAMZE BAJGIRAN (MS '10), social science graduate student and Repetto-Figueroa Family Graduate Fellow, was the subject of a Caltech *Break Through* campaign story, which covered his research into economic theory and his use of math to study how people make decisions.

Postdoctoral Scholar in Neuroscience and lead author **CAROLINE CHARPENTIER** was interviewed by Earth.com about her study "Valuation of Knowledge and Ignorance in Mesolimbic Reward Circuitry," which was published in the July 2018 *Proceedings of the National Academy of Sciences*.

The Caltech *Break Through* campaign also featured **CHARPENTIER**'s research at the intersection of behavioral economics, neuroscience, psychology, and psychiatry. She spoke about developing computational models to help social scientists explain how people learn and make decisions.

Earlier in the year, the Caltech *Break Through* campaign interviewed then Anne Rothenberg Postdoctoral Instructor in the Humanities **LEAH KLEMENT** on societal struggles in the Middle Ages, her undergraduate course Ethics of War, and the Caltech-Huntington Humanities Collaborations.

Following the June election, in a story on the growing number of voting-rights lawsuits filed by Latinos in the United States, NPR interviewed **J. MORGAN KOUSSER**, professor of history and social science, about the challenges faced by such suits in the wake of the 2013 US Supreme Court case *Shelby County v. Holder*, which invalidated part of the Voting Rights Act.

In a *Newsweek* article meant to debunk a myth from the 1997 film *Titanic*, **DEAN MOBBS** spoke about his research into the brain's ability to process and react to fear in crisis situations.

Professor of Philosophy **STEVE QUARTZ** was interviewed for a *PBS News Hour* story on the booming sneaker resale market, and he shared the history behind youth-driven markets.

ALEJANDRO ROBINSON-CORTÉS, social science graduate student, was featured in a video on the Caltech *Break Through* campaign website, in which he described his research on the economics of matching in foster care—with foster children as the demand and willing families and their homes as the supply.

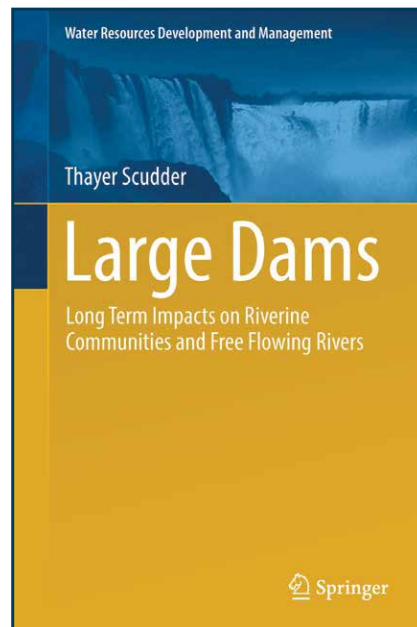
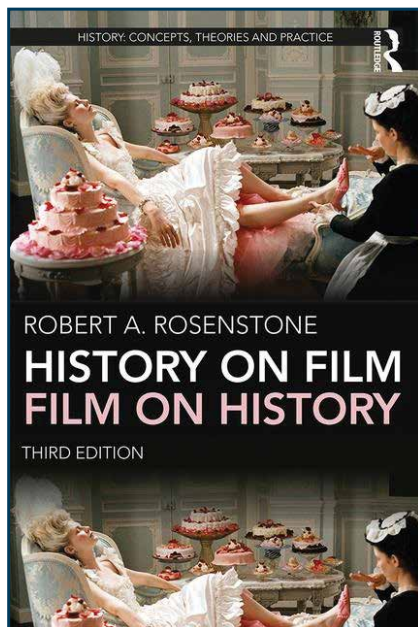
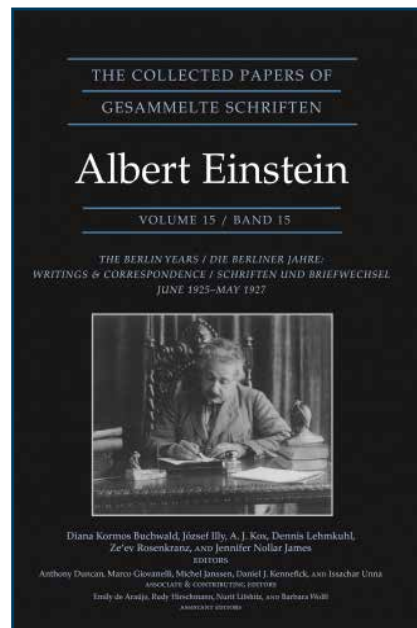
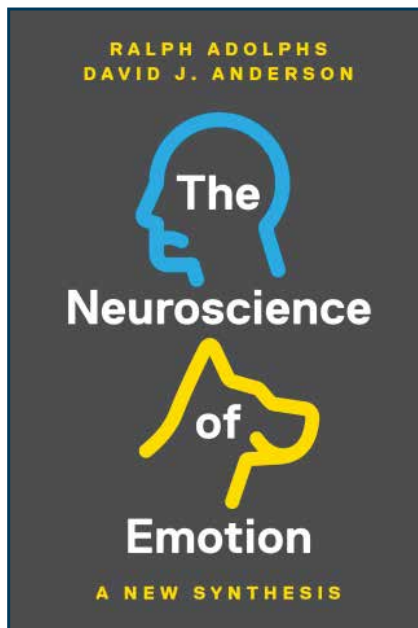
Patt Morrison of the *Los Angeles Times* interviewed Professor of History **NICOLAS WEY-GOMEZ** for her *Patt Morrison Asks* podcast, and the interview was published on the *Times*'s website. They spoke about how Columbus's explorations spurred religious discussions in Spain about slavery and new ideas about human rights.

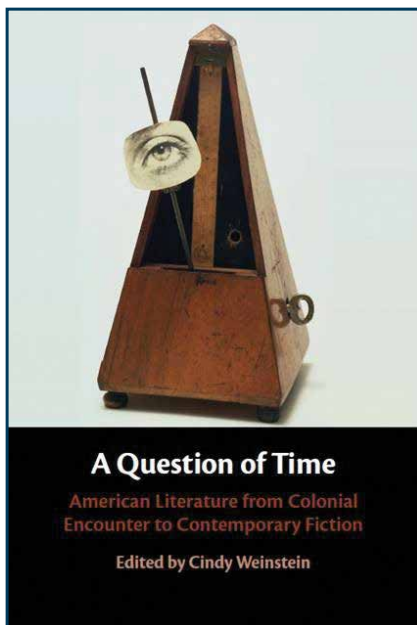
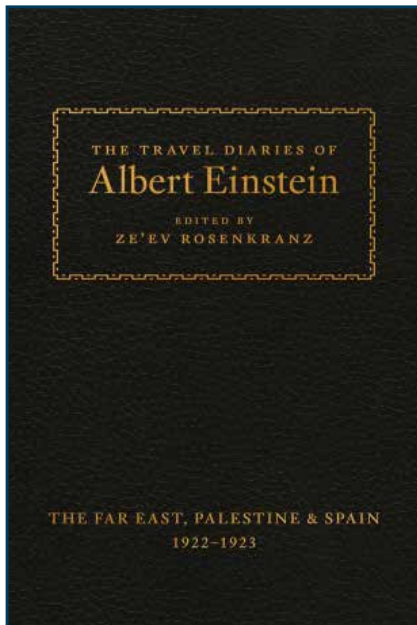
DANIELLE WIGGINS wrote an opinion piece for the *Washington Post*, titled "The Black Progressives Remaking the Democratic Party," in which she discussed the ideologies and platforms introduced by Rev. Jesse Jackson during his presentational runs in the 1980s that are influencing the black candidates and the Democratic Party of today.

2018 IN REVIEW

HSS BOOKS

PUBLISHED IN 2018





2019 EVENT PREVIEW

JANUARY 16, 2019

Earnest C. Watson Lecture Series:
Omer Tamuz, Assistant Professor
of Economics and Mathematics,
Caltech

April 15, 2019

James Michelin Distinguished
Visitors Program: Jessica Shattuck,
American Author

Check the calendar at
hss.caltech.edu for the latest
information on these and other
events in HSS.



For questions about this publication and HSS in general, please email hss@caltech.edu.

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The image on the cover is the first-ever group photo of (almost) everyone in Caltech's Division of the Humanities and Social Sciences. It was taken on October 4, 2018, by photographer Van Urfalian.