

# 2021

# IN REVIEW

(AND BACK ON CAMPUS!)







## GREETINGS FROM THE CHAIR

**T**he past year was one of repeated problem solving for which most of us were untrained and often bereft of tools. It brought back the axiom my college adviser offered at the start of every class he taught: “Every important problem in history is a problem in diplomatic history.” The axiom, while ridiculous at first mention, improves with repetition. I cherish it because it reminds us that each of our fields can help address important challenges faced by humans and their societies.



A few weeks ago, I received an email that suggested my leadership qualified me to open a pizza franchise. The internet, it seemed, was generously offering me a change of pace from the recent academic grind. A rich future beckoned, one that included putting round disks in square boxes—a short hop, I presume, from many of my recent activities. Moreover, pizza is the ultimate outside-the-box food: the dough can lead to pretty much anything, and you can put whatever you want on top (just wear a mask). As you can see from my photo, the shop uniforms would be striking.

Looking back on 2021, working together, mostly distanced and often under stress, required a commitment of diplomacy and purpose from everyone. I am deeply grateful to have had the opportunity to serve the faculty, staff, postdocs, and graduate students who make up the Division of the Humanities and Social Sciences. Despite all the challenges, as you can discover in this Year in Review, HSS continues to innovate and think outside the box. The range of topics we attack continues to grow, as does our engagement across campus and with society at large.

Looking forward to 2022, we will continue our return to in-person engagement. There are bright opportunities for new endeavors, whether they be in pure theory, in understanding the world around us, or in changing it. The new year beckons us to renew our creative application of diplomacy and outside-the-box thinking in our research and teaching. 'Tis the season when gifts are exchanged. Like pizza, they come in boxes, and giving and receiving are exercises in diplomacy.

### 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

# 2021 IN REVIEW

## NEW FACULTY – NEW IDEAS



### Introducing Dana Murphy

In 2021, we welcomed several new faces to Dabney, including **Dana Murphy**, who joined the division as an assistant professor of English and Black studies. She specializes in the study, theorizing, and teaching of Black expressive cultures, literatures, and women's and gender studies. In an interview with *Caltech News*, Murphy shared, "I'm interested in Black peoples' stories of survival: stories of not being seen by their communities and doing good work anyway, and of doing work that wasn't really popular in their time but which ends up being legible centuries down the road." Murphy earned degrees in English from UC Berkeley (BA '11) and UC Irvine (MA '15, PhD '18), and during her undergraduate studies she also participated in Caltech's Summer Undergraduate Research Fellowship (SURF) program with **Kevin M. Gilmartin**, the William R. Kenan, Jr., Professor of English and vice president for student affairs. Her current book project explores the work of 18th-century poet Phillis Wheatley, who, according to Murphy, "can be very challenging to read but who is experiencing a kind of renaissance at the moment, [and] there is a lot more that needs to be said about her contributions to the Black radical tradition."

### The Mechanics of Temptation and Procrastination with Charlie Sprenger

While the standard economic models of behavior state that one's actions are generally consistent with one's plans, Professor of Economics **Charlie Sprenger** has demonstrated that the models are not always consistent with how people act in real-life settings. Sprenger designs experiments to test how people behave when faced with various decisions, ranging from food choices to the implementation of vaccination programs. "A chunk of my research over the past 10 years has been about investigating procrastination and trying to design experiments to precisely estimate the parameters of models that permit procrastination," Sprenger explained in an interview with *Caltech News*. "One question we are exploring is whether people really recognize that they are procrastinators or that they fall prey to temptation. We suspect [the] people that have the biggest problems with this don't think they have a problem." Prior to joining HSS in the summer of 2020, Sprenger served on the economics faculties at Stanford (2011–14) and UC San Diego (2015–20).





### Nielsen Among First Group of William H. Hurt Scholars

This fall, the William H. Hurt Scholars Program named its inaugural cohort of faculty members, which includes **Kirby Nielsen**, an assistant professor of economics who joined the division in 2020. A \$75 million gift from the late William (Bill) H. Hurt endowed the early-career professorships with the goal of sparking collaborative, interdisciplinary, and cutting-edge research. Nielsen’s research interests include experimental economics, microeconomic theory, and decision theory with a focus on individual decision-making and decisions under uncertainty. “I am excited about the prospect of multidisciplinary work and combining ideas across fields, which is really where Caltech excels and what the William H. Hurt Scholars Program provides,” Nielsen said. “It is incredible to be in a place that values the exchange of ideas across fields to the extent that there is a formal infrastructure to facilitate this.”



### Envisioning a Sustainable Future with Brian Jacobson

Professor of Visual Culture **Brian Jacobson** is a historian of media, art, and technology. He joined Caltech in the summer of 2020 from the University of Toronto, where he taught cinema studies and history. His latest research delves into the degree to which different energy industries relied on visual technologies and visual techniques to do the work they did: for example, engineers in France in the 1950s relied on aerial photographs and seismographic analysis to map out their oil and gas pipelines. He is also interested in how the oil and gas corporations presented themselves to the world through visual data like logos and commercials, and how other groups (such as Greenpeace) represent the same industry through a different lens. In an interview with *Caltech News*, Jacobson recognized that his work aligns with the desire to utilize more sustainable forms of energy moving forward. He explained, “That’s part of how I imagine my research, as building a kind of toolkit for a new way of creating worlds for the future.”



The Division of the Humanities and Social Sciences was also pleased to welcome Assistant Professor of Computing and Mathematical Sciences and Economics **Eric Mazumdar** and Assistant Professor of History **Lisa Ruth Rand** this fall. Mazumdar, who recently completed his PhD in electrical engineering and computer sciences at UC Berkeley, is interested in the intersection of machine learning and economics. Rand is a historian of technology, science, and the environment who comes to HSS from the Science History Institute in Philadelphia, where she was a Haas Postdoctoral Fellow. We look forward to sharing more about their research next year!

# ART & SCIENCE

## Earth Tones

Los Angeles-based painter **Sandy Rodriguez** joined HSS as the winter 2021 artist-in-residence in the Caltech-Huntington Program in Visual Culture, established in 2018 with a grant from The Andrew W. Mellon Foundation. Her work focuses on the intersections of history, social memory, contemporary politics, and cultural production, and she utilizes hand-processed pigments to tell those stories. As the COVID-19 pandemic continued to prevent in-person learning, Rodriguez mailed each of her students a “historic color box” filled with insects, mushrooms, and bark; gum arabic to bind the powder into paint; mussel shells for paint containers; and a variety of natural raw pigments native to Southern California. The students experienced processing the colors on their own and shared their results with the class over Zoom. “At the end of the day,” Rodriguez reflected, “we have to visualize how to tell our narratives and our stories with intentional colors that are conceptually tied to diverse ideas and places and share compelling moments of our present day through our lived experience.”



Abstract painting by Joseph Schillinger  
Credit: Smithsonian American Art Museum, Gift of Mrs. Joseph Schillinger

## Computers Predict People’s Tastes in Art

Individual taste in art can be enigmatic, but a study from the O’Doherty lab demonstrated that a simple computer program can accurately predict which paintings a person will like. The team, led by former postdoctoral scholar in neuroscience **Kiyohito Iigaya**, directed more than 1,500 volunteers to rate paintings in the impressionist, cubist, abstract, and color field styles. The volunteers’ answers were fed into a computer program, and after a training period, the computer could predict the volunteers’ art preferences much better than would happen by chance. “The main point is that we are gaining an insight into the mechanism that people use to make aesthetic judgments,” Fletcher Jones Professor of Decision Neuroscience **John O’Doherty** explained to *Caltech News*. “That is, that people appear to use elementary image features and combine over them. That’s a first step to understanding how the process works.”



Social and Decision Neuroscience graduate student **Sanghyun Yi** is among the co-authors listed on the study described above, which appeared in the journal *Nature Human Behaviour* in May 2021. The *Caltech Break Through* campaign featured a spotlight on Yi, highlighting this collaboration with the O’Doherty lab and describing how he hopes to use AI to reveal new insights into the inner workings of the brain.





## Shoddy and the Art and Science of Recycling

In May, the Caltech-Huntington Program in Visual Culture hosted a virtual event with author, filmmaker, and artist **Hanna Rose Shell**, who joined HSS as the Eleanor Searle Visiting Professor for fall 2020. Her webinar detailed her research into “shoddy,” which was the name given to the new material made from reclaimed wool and was one of the earliest forms of industrial recycling. “Shoddy has fertilized a kind of rebirth that goes even beyond the heap,” Shell said during her talk while describing photos she took of a 20-foot heap of modern-day shoddy in England. “At its origins, a textile woven and worn, shoddy is simultaneously a product, a process, a material, a metaphor.” Shell will return to the division in winter 2022 to continue her textile research at The Huntington Library, Art Museum, and Botanical Gardens and offer a second installment of her visual culture course Science on Screen to Caltech students.



Research Professor of Art and Design **Hillary Mushkin's** *Survey to Surveillance* video essay premiered in October. It is the first film in the “Voices from Places Journal” series presented by the Southern California Institute of Architecture. Mushkin’s work asks us to reconsider conceptions of the U.S.-Mexico border as a hard or definite line and instead to understand the border as a network diagram.

# THE CLASSROOM AND BEYOND

## New Visual Culture Minor Available to Students

With the start of the new school year this fall, Caltech undergrads were officially able to declare a minor in visual culture, the study of different forms of visual media used across history and in the present day. “There’s been a long-standing interest in this area from a lot of students,” said **Dehn Gilmore**, professor of English. “Students may want to go into film as an industry, video game design, or graphic design, for example. Or they may want to learn better ways of communicating their scientific discoveries and findings to the public.” The program’s classes include introductions to the field as well as deeper investigations into visual topics, such as old Hollywood cinema, cultural heritage, and art in Los Angeles. Among other courses, Gilmore will teach one on Charles Dickens’s London, in which students will explore the idea of the novelist as an alternative historian and the concept of the novel as a historical document. The minor is offered in connection with the Caltech-Huntington Program in Visual Culture and is led by **Brian Jacobson**.



Credit: Phil Armitage

## Teaching the Science of Extinction

Should scientists bring extinct species back to life? Lecturer in History **Dan Lewis** posed this question to the students in his History of Extinction course. While most students said yes at the start of class, the majority changed their minds after Lewis shared how dangerous and ill-advised it would actually be. “What it’s all about,” explained Lewis, who is also the Dibner Senior Curator for the History of Science and Technology at The Huntington Library, “is thinking about the consequences of the [species’] extinction and wondering, ‘What could possibly go wrong?’ Not in a *Jurassic Park* way, but in a serious way about the laws of unexpected consequences and trying to manage countless variables you just don’t have control over.” Using the ongoing climate crisis as an example, Lewis also challenged his students to consider the practical lessons that could be learned from the reasons behind a species’ extinction.



## Caltech Student Investment Fund Passes Million-Dollar Mark

More than four decades and hundreds of student investment managers later, the Caltech Student Investment Fund has exceeded \$1 million. The fund was established in 1978 after alumnus J. Stanley Johnson (BS '33, MS '34) and his wife, Mary Johnson, donated 2,500 shares of H&R Block stock with the goal of giving Caltech students the experience of managing a portfolio. **Michael Ewens**, professor of finance and entrepreneurship and faculty adviser to the fund, commented, "There's a remarkable amount of freedom the students have in terms of buying and selling and how they build portfolios." He encourages the students to keep a balanced portfolio and challenges them to think like investment managers. Ewens also asks for quarterly presentations about the fund's performance. Each year, a percentage of the fund's earnings are used to support Caltech student clubs and organizations.



## What Can We Learn from Epidemics Past?

When Professor of Social Science History **Tracy Dennison** proposed a class on the history of epidemics for the winter term of 2021, she had no idea we would still be in the grip of COVID-19—nor did she realize that so many students would be interested. The two-part course turned out to be wildly popular, with **Diana Kormos Buchwald**, the Robert M. Abbey Professor of History, focusing on the medical history of past epidemics in the spring section. "It's been really interesting for the students to see just how many of the concerns we have today are evident in various public-health crises starting in the mid-14th century up through the 21st century," Dennison said to *Caltech News*. She pointed out the common themes of lockdowns, scapegoating, and even vaccine hesitancy. Dennison also noted that when the smallpox vaccine was first introduced, around 1800, there were strong anti-vaccination movements in the United States and Britain. Despite data that showed the vaccine's efficacy, "people [of the time] still viewed it as new and risky."





# NEW FRONTIERS IN NEUROSCIENCE

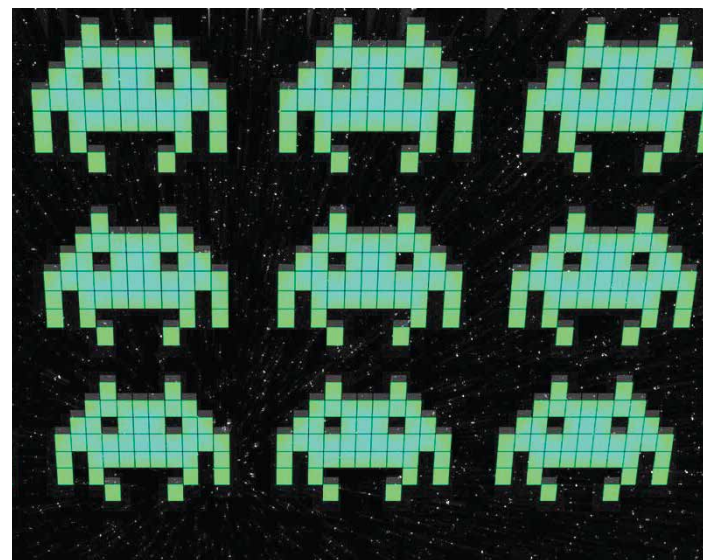


## What Is Personality?

A group of HSS researchers with expertise in the fields of neuroscience, psychology, and philosophy came together to explore what exactly makes up a personality. While previous studies measured personality in various ways, they were often ambiguous about what it really is: Is it the behaviors themselves, or is it in the genes, the brain, or all of these? “We believe that genes and environment are causes of personality and that behavior results from personality, but personality itself is located in the brain,” stated Professor of Philosophy **Frederick Eberhardt**. The study, led by alumnus and former neuroscience postdoc **Julien Dubois** (PhD ’13), proposed specific models outlining the relationship between personality, genes, and behaviors and ways of testing those models using the tools of neuroscience. Senior research scientist **Lynn K. Paul** and Bren Professor of Psychology, Neuroscience, and Biology **Ralph Adolphs** are co-authors on the study, which appeared in the November 2020 issue of *Nature Human Behaviour*.

## What AI Networks Playing Video Games Teach Us about Our Own Brains

The journal *Neuron* published a study by HSS and computation and neural systems (CNS) neuroscientists that compares brain scans of humans playing classic Atari video games to sophisticated artificial intelligence (AI) networks that have been trained to play the same games. Researchers in the O’Doherty lab compared the trained AI’s behavior with that of humans and discovered that the activity in the artificial “neurons” in the AI looked quite similar to activity in the human brain. “The interaction between AI and neuroscience goes both ways,” said **John O’Doherty**. “If we can find out how similar AI algorithms are to the brain, this helps us better understand how the brain solves these kinds of hard problems, but conversely if we can understand why and how the brain can solve these games much more efficiently compared to an AI, this may help guide the development of smarter and more humanlike AI algorithms in the future.” CNS graduate student **Logan Cross** is the lead author on the study, and, in addition to O’Doherty, the other co-authors are postdoctoral scholar **Jeff Cockburn** and EAS faculty member Yisong Yue.



# OTHER RESEARCH NEWS



## “What Is a Short Squeeze?” Economist Offers Stock Market Insight

In early 2021, the stock market went wild when armchair traders banded together and put a “squeeze” on hedge funds that try to profit off struggling companies like GameStop. This moment in financial history was made possible by online forums like Reddit and trading platforms such as Robinhood that allow users to buy and sell stocks for free. In an interview with [Caltech News](#), Robert Kirby Professor of Behavioral Economics **Colin Camerer** explained what it means to short a stock and that, while it’s a risky business, it’s actually very common. He predicted that hedge funds would try to hire some of those successful armchair traders as advisers. “The smartest companies probably had been aware of this kind of Reddit risk for a while,” Camerer said. “Now they all are. The best hedge funds are sophisticated and are going to be smarter about this type of thing in the future.”

Reuters included Camerer in an article about internet memes becoming a new form of financial literacy and their contribution to the events that rocked the stock market. “Social media makes it possible to coordinate these mass actions,” he said, imagining the millions of Reddit traders “all in a stadium cheering together.”

Around this same time, [Pasadena Now](#) published an interview with Lecturer in Economics **Kenneth Winston** in which he explained that the flurry of internet-driven stock trading of GameStop and AMC Entertainment was not likely to have lingering effects on the stock market as a whole.





## Clearing Up the Murky Rules around “Self-Plagiarism”

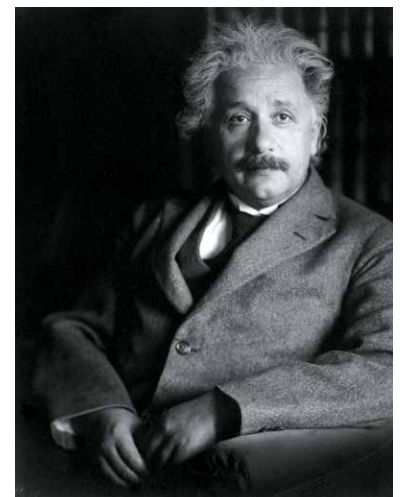
Being caught reusing your own previous writings in academia can have major repercussions, depending on what kind of text you are reusing and the purpose of the writing. The Text Recycling Research Project, which *Science* reported on in June, involves representatives from several universities, including HSS’s Teaching Professor of Writing **Susanne Hall**. The project hopes to change the perception of recycling one’s own writings, which some people consider to be self-plagiarism. Hall, who also serves as director of the Hixon Writing Center, told *Caltech News* that the project began with a research phase that looked at three aspects of text recycling: attitudes, analytics, and legalities. “We’re now taking the research that we did and building out these guidelines, recommendations, and models so we can support journals, research-integrity offices, and mentors who are tackling this topic,” Hall said. The team’s “Best Practices for Researchers” and “Understanding Text Recycling: A Guide for Researchers” documents were released earlier this year and can be found on the project’s website. The Text Recycling Research Project is funded by the National Science Foundation.

## The Golden Age of Social Science

Some of the most challenging problems facing our world require not just one field of expertise but a unified interdisciplinary approach. Recent graduate **Anastasia Buyalskaya** (PhD ’21) and her collaborators, **Colin Camerer** (director of the T&C Chen Center for Social and Decision Neuroscience in the Tianqiao and Chrissy Chen Institute for Neuroscience) and SDN graduate student **Marcos Gallo**, refer to our time as the “golden age of social science.” In a report published in the *Proceedings of the National Academy of Sciences*, the team found that researchers are increasingly turning to new sources of data, analytic methods, and interdisciplinary tactics to solve societal problems. Lead author Buyalskaya gave the following example: “The COVID-19 pandemic has illustrated how large-scale complex problems will only be solved by many scientists contributing what they know best.” While there are still obstacles left to conquer in this “golden” era, Buyalskaya hopes this report will create more opportunities for funding interdisciplinary social science research in the future.

## Einstein Papers Project Releases 16th Volume of Einstein Papers

Earlier this year, the Einstein Papers Project released the 16th volume of its massive scholarly collection of Albert Einstein’s scientific and nonscientific writings and correspondence. The volume covers the period from June 1927 to May 1929 and contains 1,600 letters by and to Einstein, many more than contained in previous volumes (due in part to the fact that Einstein turned 50 on March 14, 1929, and received a flood of congratulatory wishes). The new collection follows Einstein on his continuing quest for a unified field theory and his aim to discover whether one could derive the electron’s equations of motion from its surrounding gravitational and electromagnetic fields. During the time covered by this volume, Einstein hired Helen Dukas as his assistant. Dukas worked with Einstein until the end of his life and was instrumental in the preservation of his written legacy.





## Gerard Graduate Fellowship Endows Independent Research in the Social Sciences

When James Gerard (MS '83, PhD '85) endowed the [James and Karen Gerard Graduate Fellowship](#) late last year, he became the first HSS alum to create a graduate fellowship to support social sciences students. Now a team lead for global asset allocation investment research at Fidelity Investments, Gerard realized he wanted to give students in HSS the kind of freedom that propelled his career. Gerard was supported by a fellowship during the second year of his graduate studies at Caltech, which was when he discovered his passion for researching the properties of markets with incomplete information—a hot topic in economics in the 1980s that focused on how consumers make decisions when they don't know everything they need to know about a product or an investment. This independent work, performed under the guidance of former HSS faculty members Jennifer Reinganum, Louis Wilde, and the late Kim Border, sparked in Gerard a lifelong interest and long career in financial markets.

## The Long View

**Thayer “Ted” Scudder**, professor emeritus of anthropology, is regarded as a leading expert on dams and their long-term effects on communities and global ecosystems. He joined the Caltech faculty in 1964 and retired from teaching in 2000, having been a three-time recipient of the Associated Students of the California Institute of Technology (ASCIT) Teaching Award. Throughout his tenure, Scudder balanced his passion for field research in anthropology with his passion for teaching Caltech students. He shared his appreciation for the Institute's trust in him in an interview for the [Caltech Break Through campaign](#). As a researcher who always focused on longitudinal impact, he said he couldn't imagine any other institution that would have afforded him the freedom to embark on projects nearly 50 years in scope. That freedom inspired Scudder and his wife to endow the new Eliza and Thayer Scudder Professorship in the Social Sciences. With their sights set on long-term impact, they view their gift as an investment that will enable scholars to undertake ambitious, yet-to-be-defined inquiries for generations to come.





# GIVING THANKS

The Division of the Humanities and Social Sciences thanks our friends for their generosity over the years. Philanthropy is a critical pillar that supports our teaching and research ambitions. In addition to the Gerard and Scudder donations, HSS is grateful to acknowledge the following recent endowment gifts of \$100,000 or more:

## **Alan L. Lewis Graduate Fellowship**

Dr. Alan Lewis (BS '72, physics) established a new graduate fellowship in the social sciences through a gift from his estate.

## **A. Michael and Ruth C. Lipper Graduate Fellowship Fund**

Trustee Michael Lipper and his wife, Ruth, established a second graduate fellowship, which doubled the impact of their original fellowship commitment from 2016. These fellowships are intended to benefit HSS PhD students, with a preference for those studying neuroeconomics.

## **Stephen A. Ross Memorial Fellowship**

An anonymous donor, who in 2019 established a graduate fellowship intended for those studying in the areas of economics, finance, or scientific communications in HSS, directed an additional gift to the fellowship's endowment this year. The donor also specified that it shall be named the Stephen A. Ross Memorial Fellowship, in honor of alumnus and senior trustee Stephen A. Ross (BS '65), whose work helped shape the development of the field of financial economics.

## **Charles R. Plott Fund for Experimental Economics and Political Science**

Established in 2019, this fund honors the pioneering work and remarkable career of Charlie Plott, the William D. Hacker Professor of Economics and Political Science, who joined the HSS faculty in 1971. The fund's principal value exceeded \$125,000 as of September 30, through gifts from colleagues, former students, and other supporters.



# WHERE ARE THEY NOW?

## AFTER EARNING THEIR PHDS IN 2021 . . .

**Anastasia Buyalskaya** is a behavioral scientist at Alpha Edison.

**Saba Devdariani** is a postdoctoral researcher (instructor rank) at the University of Chicago's Harris School of Public Policy.

**Xiaomin Li** is a postdoctoral scholar in behavioral economics and neuroeconomics in the Camerer lab at Caltech.

**Shiyu Zhang** is an associate consultant at McKinsey & Company.

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## AFTER COMPLETING THEIR POSTDOCTORAL APPOINTMENTS IN 2021 . . .

**Kiyohito Iigaya** is an assistant professor in neurobiology at the Irving Medical Center at Columbia University.

**Chujun Lin** is a postdoctoral researcher in psychology at Dartmouth College.

**Joseph Root** is an assistant professor in the Kenneth C. Griffin Department of Economics at the University of Chicago.

**Toby Wise** returned to the Max Planck UCL Centre for Computational Psychiatry and Ageing Research at University College London to continue his Sir Henry Wellcome Postdoctoral Fellowship.



# HONORS & CONGRATULATIONS

Flintridge Foundation Professor of Economics and Political Science **Thomas R. Palfrey III** (PhD '81) received the 2021 William H. Riker Prize for Political Science. The prize is awarded every other year to a social scientist in recognition of a body of research that exemplifies and advances the scientific study of politics.

In May, the American Philosophical Society elected **Diana Kormos Buchwald**, the Robert M. Abbey Professor of History, to its ranks.



On the occasion of Caltech's 127th commencement exercises, the Division of the Humanities and Social Sciences was pleased to present two outstanding PhD recipients (listed with their dissertations):

- **Anastasia Buyalskaya** ("Investigating Drivers of Repeated Behaviors in Field Data")
- **Xiaomin Li** ("Attention, Strategy, and the Human Mind")

Caltech named **John O'Doherty** its Fletcher Jones Professor of Decision Neuroscience. Chaired professorships are considered the Institute's most distinguished award for individual faculty.

In September, the Econometric Society announced the election of **Matthew Shum**, the J. Stanley Johnson Professor of Economics, as a fellow.

The HSS student prize winners recognized at Caltech's commencement in June included:

- **Hrishika Basava** (Mary A. Earl McKinney Prize in Literature – Prose Fiction)
- **Andrew Chan** (Hallett Smith Prize)
- **Myra Cheng** (Eleanor Searle Prize in Law, Politics, and Institutions)
- **Bradley (Kaulana) Chun** (Alexander P. and Adelaide F. Hixon Prize for Writing)
- **Saehui Hwang** (Gordon McClure Memorial Communications Prize in History)
- **Anthony (Tony) Kukavica** (David M. Grether Prize in Social Science)
- **Po Hsuan Lin** (John O. Ledyard Prize for Graduate Research in Social Science)
- **Victoria Liu** (Gordon McClure Memorial Communications Prize in English)
- **Shiva Mudide** (Mary A. Earl McKinney Prize in Literature – Poetry)
- **Anirudh Rangaswamy** (Rodman W. Paul History Prize)
- **James (Jamie) Vinson** (David M. Grether Prize in Social Science)
- **Ryan White** (Gordon McClure Memorial Communications Prize in Philosophy)

Also, the Institute honored these students who completed an HSS option or minor:

- **Laura Daisy Hu** (Senior Undergraduate Thesis Prize)
- **Xueer "Sherry" Liang** (Fritz B. Burns Prize in Geology and the Residential Experience Team Award, as part of the Science Olympiad Team)
- **Ariel Jacob Rosner** (Student Residential Life Award)
- **Maya Sharanya Srikanth** (The Bhansali Family Prize in Computer Science)

# HONORS & CONGRATULATIONS



Six HSS staff members were celebrated for the important work they do to advance the mission of the Institute at the 66th annual Staff Service and Impact Awards on June 2. The honorees included:

- **Sheryl Cobb** (35 years), Administrative Assistant
- **Victoria Cruz** (25 years), Staff and Facilities Manager
- **Letty Diaz** (15 years), Administrative Assistant
- **Sabrina Hameister** (20 years), Administrative Assistant
- **Gail Nash** (25 years), Academic Affairs Manager
- **Lynn Paul** (15 years), Senior Research Scientist

The following HSS graduate students received internal fellowships to pursue their studies during Caltech's 2020–21 academic year:

- **Shunto Kobayashi** (Linde Institute Graduate Fellowship)
- **Aldo Lucia** (Lance E. Davis Fellowship)
- **Sumit Goel** (Repetto-Figueroa Family Graduate Fellow)
- **Joanna Huey** (Stephen A. Ross Memorial Fellowship)
- **Jeffrey Zeidel** (A. Michael and Ruth C. Lipper Fellowship)
- **Shiyu Zhang** (Roger and Marjorie Davisson Graduate Fellowship)

In the fiscal year 2021, the research of several HSS faculty members and scholars was recognized with competitively awarded external funding:

- Professor of Political and Computational Social Science **Michael Alvarez**, for “Detecting and Detering Harmful Online Speech Directed at American Election Officials,” from the National Science Foundation; and, with Christian Frankenberg (GPS), Michael Lamb (GPS), Ruby Fu (EAS), and Woody Fischer (GPS), for “The Caltech Critical Zone Initiative,” from the Resnick Sustainability Institute.
- Senior Postdoctoral Scholar Research Associate in Neuroscience **Caroline Charpentier**, for “Neuro-computational Mechanisms of Social Learning and Variation Along Psychiatric Symptom Dimensions and in Autism,” from the National Institutes of Health.
- **John O’Doherty**, with Mriganka Sur (MIT), Alexander Rakhlin (MIT), Alfonso Araque (UMN), Pulkit Agrawal (MIT), and Ann Graybiel (MIT), for “Rethinking Reinforcement Learning with Astrocyte-Neuron Computations,” from the Department of Defense.
- **Kirby Nielsen**, with John Rehbeck (OSU), for “Experiments on Procedures and Prediction in Economic Decision Making,” from the National Science Foundation.
- Caltech undergraduate and member of the Adolphs lab **Jennifer Yu**, for “Smartphone-Based Eye-Tracking for Assessing Autism Spectrum Disorder,” from the Autism Science Foundation.



**Jaksa Cvitanic**, Richard N. Merkin Professor of Mathematical Finance and director of The Ronald and Maxine Linde Institute of Economic and Management Sciences, became co-editor of the newly established journal *Frontiers of Mathematical Finance*.

The Society for Political Methodology named **Michael Alvarez** its vice president/president-elect. He will serve as vice president for two years, then as president for the next two.



Since the 1970s, undergraduates have bestowed the Associated Students of the California Institute of Technology (ASCIT) Teaching Award on instructors who demonstrate exceptional ability to inspire and motivate. For the 2020–21 academic year, the students recognized Assistant Professor of Finance **Lawrence Jin**.

At the 81st annual meeting of the Economic History Association, Rea A. and Lela G. Axline Professor of Business Economics and History **Philip Hoffman, Jean-Laurent Rosenthal**, and co-author Gilles Postel-Vinay won the Gyorgy Ranki Biennial Prize for their book *Dark Matter Credit: The Development of Peer-to-Peer Lending and Banking in France* (Princeton University Press, 2019). The prize is awarded for an outstanding book on the economic history of Europe. The trio previously received the prize in 2001 for *Priceless Markets: The Political Economy of Credit in Paris, 1660–1870*, and Hoffman also received the prize in 1997 for his book *Growth in a Traditional Society: The French Countryside, 1450–1815*. Hoffman is the first person to have won the Ranki Prize three times.

The Brass Division Awards honor service to HSS and recognize teaching, mentoring, or other activities that enhance learning among Caltech students. The 2021 winners, who received their awards at the December 2 HSS holiday lunch, include:

- **Brenden Eum**, Graduate Student and Teaching Assistant
- **Megumi Fujio**, Lecturer in Japanese
- **Sabrina Hameister**, Administrative Assistant
- **Catherine Jurca**, Professor of English and Visual Culture
- **Charles Kollmer**, Ahmanson Postdoctoral Instructor in History of Biology

In 2021, for the first time, the division bestowed additional Brass Division Awards based on the recommendations of its Diversity, Equity, and Inclusion (DEI) committee to “two people who have shown themselves unusually talented at creating collaborative networks and setting new things in motion”:

- **Caroline Charpentier**, Senior Postdoctoral Scholar Research Associate in Neuroscience
- **Maura Dykstra**, Assistant Professor of History



# ALSO IN THE NEWS

In an op-ed piece for the [Sacramento Bee](#), **Michael Alvarez** and colleague Kimberly Alexander addressed the growing concern that California's recent gubernatorial recall election would not be secure.

[Slate](#) published an article in April on possible consequences of Georgia's new voter laws in historical context and referenced work by Caltech/MIT Voting Technology Project researchers, which found that as many as three million voters across the country may have been disenfranchised due to voter-registration mishaps in the year 2000.

The February 2021 issue of [The Caltech Effect](#) featured a series of short videos in which Chen Institute researchers talked about work by their fellow scientists that they find inspiring. **Colin Camerer** used the opportunity to applaud the contributions of **Michael Tyszka**, associate director of the Caltech Brain Imaging Center.

After a handwritten letter by Albert Einstein featuring the famous  $E = mc^2$  equation sold for \$1.2 million earlier this year, archivists from the Einstein Papers Project revealed that this is one of just four known examples of the equation in the physicist's own handwriting. This news was covered by several outlets, including [The Guardian](#), [Live Science](#), and [the Los Angeles Times](#).

One of the uses for census data is the decadal charge to redraw the boundaries of legislative districts. **Jonathan N. Katz**, the Kay Sugahara Professor of Social Sciences and Statistics, explained how "fairness" is measured and applied in that effort on the [Caltech Science Exchange](#).

Professor of History and Social Science, Emeritus, **J. Morgan Kousser**'s book *The Shaping of Southern Politics: Suffrage Restriction and the Establishment of the One-Party South, 1880–1910* was extensively quoted in a [New York Times](#) opinion piece on voter suppression in Georgia.

New England Cable News interviewed alumnus **Jetson Leder-Luis** (BS '14, applied and computational mathematics and economics) on the price tag, potential fraud, and politics behind the Biden administration's infrastructure bill.



The summer edition of [Caltech](#) magazine featured “The Transformative Power of Failure,” a story that included observations and reflections from several faculty members on campus, including **John O’Doherty** and Professor of Economics and Mathematics **Omer Tamuz**.

A [Los Angeles Times](#) article that addressed increasing diversity, equity, and inclusion at The Huntington Library, Art Museum, and Botanical Gardens included mention of winter 2021 artist-in-residence **Sandy Rodriguez** and her “[Borderlands](#)” exhibit. Rodriguez produced an 8-foot-by-8-foot watercolor painting to serve as the thematic anchor in the exhibit, which debuted at The Huntington in November 2021.

**Ze’ev Rosenkranz**, assistant director and senior editor of the Einstein Papers Project, was quoted in an article from [Discover](#) magazine about a disastrous interview Albert Einstein gave upon returning from a trip to America.

Eli and Edythe Broad Professor of English **Cindy Weinstein**’s latest book, *Finding the Right Words: A Story of Literature, Grief, and the Brain*, appeared on the [Los Angeles Times Bestsellers List](#) shortly after its September release. [Pasadena Weekly](#) published an interview with Weinstein about her book in connection with a Behind the Book discussion organized by Caltech’s Public Programming office. Weinstein also appeared in the [Wall Street Journal](#), which featured her selections for the top-five books on grief.

A feature article in [Nature](#) examined how Caltech confronted its history in deciding to remove the names of eugenicists from its buildings and programs. A key and early driver of that initiative was a petition circulated by **Michael Suk-Young Chwe** (BS ’85, economics) after he learned of Robert A. Millikan’s connections to the Human Betterment Foundation, one of the most prominent eugenics groups of its time. Professor of History **Nicolás Wey Gómez**, a member of Caltech’s Committee on Naming and Recognition, is quoted several times in the article, which also mentions **Daniel Kevles**, the J. O. and Juliette Koepfli Professor of the Humanities, Emeritus, who served as an adviser to the committee. In November, [Caltech announced](#) new names for the impacted campus assets and honors.



## David Grether (1938–2021)

Frank Gilloon Professor of Economics, Emeritus, Dave Grether passed away on September 12 at the age of 82. A member of the Caltech faculty for over five decades, he served as executive officer for the social sciences from 1978 to 1982 and as chair of the Division of the Humanities and Social Sciences twice, from 1982 to 1992 and again from 2006 to 2007. Philip Hoffman described Grether as “the person you’d turn to for advice” and “one of the best division chairs we’ve ever had.”

Grether was trained in econometrics, a field that applies statistical methods to economic data in an effort to determine economic relationships. His research into individual decision-making helped to develop what was then a new field, experimental economics, which examines economic questions through the use of experiments of auctions, games, and markets.

Some of Grether’s work at Caltech was conducted with Charlie Plott. Plott said Grether helped pave the way for the use of statistical methods for the



David Grether (left) with economist Roger Noll (right) in 1982.

study of economics in laboratories, calling his work “a key link” from fieldwork to the lab.

“[Dave] was able to extract the empirical essence of some of the profession’s oldest and most challenging ideas,” Plott reflected. “His tests of classical preference theory and subjective—Bayes’ law—probabilities are examples. He was able to pioneer the delicate, structural, econometric connections between complex field data and laboratory data. His ideas are clearly among those that create the roots of economics in laboratory methods.”

Grether earned a bachelor’s degree from UC Berkeley in 1960, and he served as a second lieutenant in the U.S. Army in 1960 and 1961. He then went to Stanford University to pursue a PhD, which he received in 1969. After working at Yale University and its Cowles Foundation for Research in Economics, Grether joined HSS as an associate professor in economics in 1970, and he was promoted to professor of economics in 1975.



Grether at the HSS picnic in 1984.





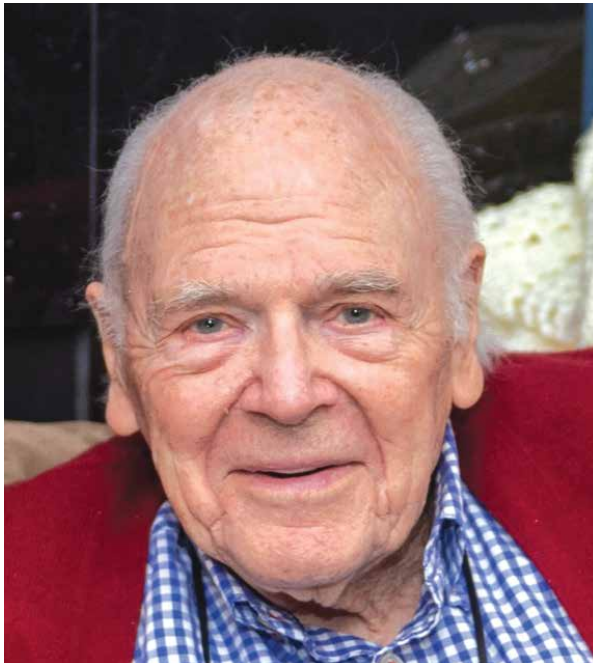
## James Quirk (1926–2020)

James “Jim” P. Quirk, a former professor of economics noted for his research into the economics of sports, passed away in June 2020 at the age of 93. He held a master’s and doctorate of economics from the University of Minnesota. Quirk joined the HSS faculty in 1971 and was among the group of Caltech professors who pushed for the creation of a PhD program in economics, which was established in 1972. According to Charlie Plott, “Throughout the 1980s, [Quirk’s] research and textbooks led the transition of economics into modern mathematical economics, and his work with students was important for the development and success of the social sciences at Caltech.” Quirk retired from Caltech in 1987.

## William H. Hurt (1927–2021)

Businessman, philanthropist, community leader, and Caltech supporter William (Bill) H. Hurt passed away in September at the age of 94. He was a longtime member of the Caltech Associates and a founding member of the HSS Chair’s Council. In addition to the new William H. Hurt Scholars Program described earlier in this publication, Hurt and his late wife, Sarah (Sally), privately supported other important initiatives, including two specific to HSS: the Robert Kirby Professorship of Behavioral Economics, currently held by Colin Camerer, and the Eleanor Searle Visiting Professorship in History. Jean-Laurent Rosenthal said, “Through his tremendous generosity [Hurt] has ensured that Caltech can continue to attract the singular talent that has placed it at the apex of excellence in science and engineering for over a century, and that Caltech can continue to foster the spirit of interdisciplinarity that was dear to Bill and the secret sauce of our success.”



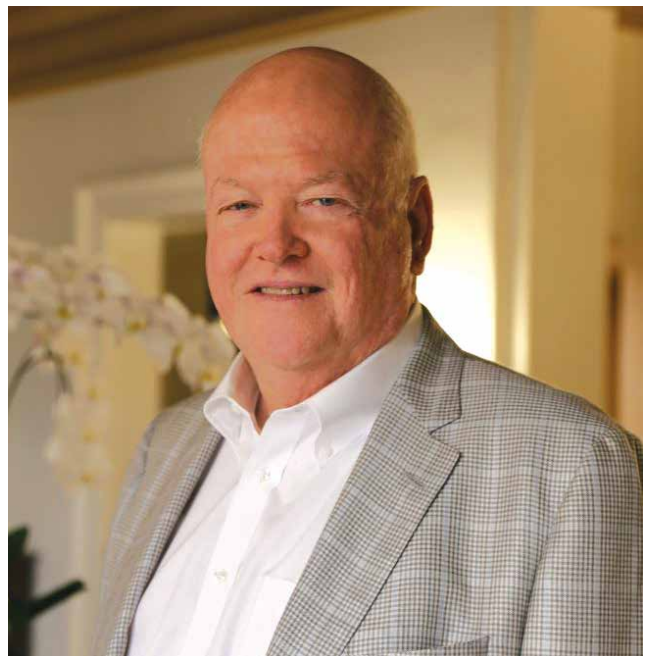


## Howard E. Jessen (1925–2021)

Howard E. Jessen came to Caltech through the U.S. Navy’s V-12 officer college-education program and earned his undergraduate degree in engineering in 1946. In an interview for the *Caltech Break Through* campaign, Jessen said, “I want[ed] to repay Caltech for all that it did for me in the way of learning, culture, and friendships—quite a package of good things.” His gifts to the division are notable for their impact and their generosity. In endowing the Howard E. and Susanne C. Jessen Postdoctoral Instructorship in the Humanities, to match endowed funds from The Andrew W. Mellon Foundation, Jessen made it possible for the division to welcome many more young scholars in the humanities. In 2020, Jessen also endowed the Banks-McKelvey Memorial Lecture series to honor two late HSS colleagues who made seminal contributions to political economy. Through his Caltech Alumni Association membership and his involvement with the Caltech Associates, Jessen continued his 70-year connection to the Institute into his 90s. He passed away at the age of 96.

## Stephen E. Rogers (1947–2021)

In October, friend of the Institute Stephen E. Rogers passed away at the age of 74. Rogers was a longtime member of the Caltech Associates and served as the group’s 49th president. He was also a member of the Chair’s Council for the Division of Biology and Biological Engineering and served on the Board of Governors for The Huntington Library, Art Museum, and Botanical Gardens. In 2019, Rogers, an avid history buff, combined his love of Caltech and his love of The Huntington with a foundational gift to launch the Research Institute for the History of Science and Technology (RIHST) at Caltech and The Huntington. His gift funded the institute’s first three years of operation.



# HSS BOOKS

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### Albert Einstein

VOLUME 16 / BAND 16

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WRITINGS & CORRESPONDENCE / SCHRIFTEN UND BRIEFWECHSEL  
JUNE 1927–MAY 1929



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a story of literature, grief, and  
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## AND

DECISION SYSTEMS

## AUTONOMY

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