Graduate School of Arts and Sciences

Commencement Convocation

Yale University
Sunday, May 19, 2019
THE SHIELD OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES

The design for the Graduate School shield was drawn by Yale art professor Theodore Sizer and approved by the University. Four themes are symbolized in the arms of the School. The background of the “chief” (the place of honor) is Yale blue, with Roman numerals in white representing 1847, the year of the founding of the Department of Philosophy and the Arts, the earliest formal organization for graduate study at Yale and, in fact, in the entire United States. Below, on a white background, is a black Y-shaped device representing the “pallium,” a garment worn by philosophers in ancient Rome, and frequently used as a symbol for Yale. The three red crosses are derived from the arms of Bishop George Berkeley, who established in 1732 an endowment for Yale College graduates “reading for the second degree.” These were the first scholarships exclusively for graduate study at Yale.

THE MACE OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES

The mace is carried at the head of ceremonial processions by the School’s marshal and displayed at such events as the annual Matriculation ceremony, awards Convocation, and Commencement.

The shaft of the mace is turned red mahogany. Inset near the top of the shaft on two sides is the shield of the Graduate School, rendered in cloisonné-enamedel metal. For description of the shield, see above. The shaft is topped by a disk of grained red and black macasser ebony, on which sits a large, faceted crystal orb, the chief design element of the mace. The orb symbolizes several characteristics of advanced study in the arts and sciences. The global shape suggests the ambition of advanced study to be comprehensive in its inquiry. The transparent clarity of the fine Austrian lead crystal of which the orb is made alludes to the motto of Yale University, Lux et Veritas, and to the enlightenment that scholars seek in their research and teaching. Finally, the many facets of the orb symbolize the complexity of advanced learning in the arts and sciences and the importance of approaching its subjects from many intellectual directions.

In addition to the large ceremonial school mace described above, there are four smaller maces that are carried by faculty and staff marshals. These marshals’ batons each have a similarly turned shaft of mahogany. At their tops is a single enameled shield.
Order of Exercises

COMMENCEMENT CONVOCATION
Sunday, May 19, 2019

**Academic Procession**
Lynn Cooley
*Dean of the Graduate School of Arts and Sciences*
*C.N.H. Long Professor of Genetics*
*Professor, Cell Biology and Molecular, Cellular, and Developmental Biology*

Jasmina Besirevic Regan
*Associate Dean*

Michelle Nearon
*Associate Dean for Graduate Student Development and Diversity*

Richard Sleight
*Associate Dean for Graduate Student Academic Support*

Lisa Brandes
*Assistant Dean for Student Affairs*

Robert Harper-Mangels
*Assistant Dean*

Stephen Gaughran
*Chair, Graduate Student Assembly*

Anna Barry
*Chair, Graduate School Alumni Association*

Inderpal Grewal
*Professor of Women’s, Gender, and Sexuality Studies, and of American Studies*

Maureen Long
*Professor of Geology and Geophysics*

Jennifer Richeson
*Philip R. Allen Professor of Psychology*

**Welcome**
Lynn Cooley

**Student Prizes**
Presented by Richard Sleight

**Prize Teaching Fellows**
Presented by Richard Sleight

**Graduate Mentor Awards**
Presented by Stephen Gaughran

**Welcome to the Graduate School Alumni Association**
Anna Barry
Graduate School Student Prizes

**Departmental Awards**

The *Marston Anderson Prize* is awarded on an occasional basis to truly outstanding dissertations in the field of East Asian Languages and Literatures in memory of Professor Anderson for his contribution to the intellectual and pedagogical mission of the department.

**SAMUEL MALILSA**
*East Asian Languages and Literatures*
Advisers: Seth Jacobowitz, John Treat

“Japanese-motivated Translation of Japanese Literature into English, 1880–1940”

A tightly focused but highly original contribution to the study of modern practices of literary translation, significant not only for its empirical investigation of the role of Japanese translators of Japanese literature into English in the late 19th and early 20th centuries, but also for its conceptual framing of their work.

The *Henry Prentiss Becton Prize* for exceptional achievement in research is awarded to a graduate student within the Council of Engineering.

**LILI WANG**
*Electrical Engineering*
Adviser: Stephen Morse

“Problems in Distributed Computation and Estimation”

Lili’s research deals with devising decentralized algorithms for estimating the state of a dynamical system from signals acquired by a distributed network of sensors.

The *Frederick W. Beinecke Prize* is awarded upon the recommendation of the History Department for an outstanding doctoral dissertation in the field of Western American History.

**JOHNS GRAHAM**
*History*
Adviser: Stewart Schwartz

“Environmental, Social, and Political Change in the Otomi Heartland: A Hydraulic History of the Ixmiquilpan Valley”

A remarkable piece of scholarship that crosses many fields. Jonathan brings together the most important environmental/hydrological and ethnohistorical questions that have impacted Mexico’s Central Valley over the centuries. A work of huge strengths and difficult limits. An extraordinary achievement.

The *Frances Blanshard Fellowship Fund Prize* is awarded annually for the outstanding doctoral dissertations submitted to the History of Art Department.

**MAGDALENE BREIDENTHAL**
*History of Art*
Adviser: Robert Nelson

“Leaving ‘Heaven on Earth’: The Visual Codes of Middle Byzantine Church Exits”

This research offers new insight into the Middle Byzantine church interior by concentrating on the imagery surrounding the exit—imagery that gives meaning to the passage from the sacred interior back into the external world. With significant attention to Byzantine churches throughout the eastern Mediterranean, the dissertation does not merely fill a gap in the literature; rather it groups evidence in highly original chapters held together not by chronology or provenance but by conceptual categories of her own creation.
KIRSTY DOOTSON  
*History of Art, Film Studies*  
Advisers: Tim Barringer, Dudley Andrew  
“Industrial Colors: Chromatic Technologies in Britain, 1856–1969”  

This is a pioneering study that moves between hitherto separate discursive spaces: the histories of painting, print, photography, film and television, linking all of them in a rich historical study of the emergence of controls over color in Britain under modernity.

The *Sylvia Ardyn Boone Prize* is awarded annually in memory of Sylvia Boone, a noted scholar of African art, who was the first tenured African-American woman on the Yale faculty. In her memory, Vera Wells, Yale ’71, has established a prize to honor Sylvia Boone’s life and work.

CLAIRE SCHWARTZ  
*African American Studies, American Studies*  
Adviser: Kobena Mercer  
“A Sidelong Glance: Art, Archives, and Visions of Blackness in the Postmodern City”  

Numerous studies have exposed modernism’s racial exclusions, but in bringing poetry, visual art, and urbanism together, Claire Schwartz’s dissertation puts forward a distinctive interdisciplinary method whose insights advance our understanding of dynamic tensions in the archive that was created by the social conditions of modernity. Claire has produced a truly original set of arguments that could well alter our collective understandings of black aesthetic production in the domains of poetry and the visual arts, conceived through urbanism, understood as disciplinary formation that corresponds with the geographic and social shifts marked by the global tendency of people to live in cities.

The *George Washington Egleston Historical Prize*, established in 1901, is awarded annually to a research student who discovers new facts of importance for American history or gathers information or reaches conclusions which are useful from a historical, literary, and critical point of view.

CATHERINE MAS  
*History of Science and Medicine*  
Adviser: Naomi Rogers  

An extraordinarily bold and insightful historical study. Innovative in several ways, this dissertation relocates Miami as a pivotal center of modern medicine. A distinguished demonstration of historical method and a brilliant act of interpretive insight.

The *English Department Dissertation Prize* is awarded for the best dissertation in the current year.

SEO HEE IM  
*English Language and Literature*  
Advisers: Joe Cleary, Katie Trumpener, Marta Figlerowicz  
“After Totality: Late Modernism and the Globalization of the Novel”  

Seo Hee Im’s research combines rigorous historical research, attentive formal analysis, and elegant argumentation. This brilliant dissertation shows how twentieth-century novels engaged with new technologies of record-keeping and accounting to reimagine human life on a global scale.
The **Estwing Hammer Prize** is awarded by the Estwing Manufacturing company to outstanding geology or geophysics graduate students.

**JANET BURKE**  
*Geology and Geophysics*  
Adviser: Pincelli Hull

**ZHENG GONG**  
*Geology and Geophysics*  
Adviser: David Evans

**JASMINA WIEMANN**  
*Geology and Geophysics*  
Adviser: Derek Briggs

The **Excellence in Teaching Prize** is given in recognition of a student’s outstanding contribution to the teaching process at the Department of Geology and Geophysics.

**ANWAR MOHIUDDIN**  
*Geology and Geophysics*  
Adviser: Shun-ichiro Karato

**NICOLAS MONGIARDINO KOCH**  
*Geology and Geophysics*  
Adviser: Derek Briggs

The **Harry Burr Ferris Prize** is awarded to a doctoral candidate in Cell Biology for a distinguished record of academic accomplishments. A distinguished record is evidenced by many of the following criteria: publications, a scholarly and well-written dissertation, fellowships and other awards, leadership and service activities that benefit the Department or the University.

**SARAH HILL**  
*Cell Biology*  
Adviser: Daniel A. Colón-Ramos  
“Autophagy at the Synapse: From Biogenesis to Breakdown”

The process of autophagy is important in neurons to break down damaged components of the cell, and defects in the process have been associated with neurodegenerative disease. Yet how autophagy is regulated in neurons is not well understood. In her thesis, Sarah Hill provided the first description of how autophagosomes, in neurons of living animals, are born at the synapse and degraded in the cell body, identifying new genes and mechanisms critical for the important process of neuronal autophagy.

**NIKIT KUMAR**  
*Cell Biology*  
Adviser: Karin Reinisch  
“Structural and Functional Investigation of Vps13 and Pikfyve Complex Proteins in the Regulation of Organelle Membrane Homeostasis”

Nikit Kumar made the fundamental discovery that the Vps13-like proteins, which are conserved in all eukaryotes, are lipid transporters that play a role in organelle membrane growth and homeostasis. Identification of the lipid transport function of the Vps13 proteins themselves implicates defects in membrane lipid homeostasis in neurological disorders that result from the dysfunction of these proteins in humans.

**The Miguel Ferreyros Memorial Award** is awarded to the joint-degree student in Global Affairs with the highest academic achievement.

**MIKE CHIECO**  
*Global Affairs, Management*
MENGXIAO MA  
Cell Biology  
Adviser: Christopher Burd  
“SNX-BAR Proteins in Endosomal Sorting, Autophagy, and Lipid Homeostasis”

The thesis research elucidated roles of a family of coat proteins that form endosome-derived transport carriers that mediate trafficking of a SNARE protein and the lipid phosphatidylycerine.

The William Ebenezer Ford Prize was established in 1963 by gift from Mary Ford in memory of her husband, Professor William E. Ford, Ph.B. 1899, Ph.D. 1903. It is awarded to students who have distinguished themselves in study or research in mineralogy.

SARAH ARVESON  
Geology and Geophysics  
Adviser: Kanani Lee

MATTEO FABBRI  
Geology and Geophysics  
Adviser: Bhart-Anjan Bhullar

The Hans Gatzke Prize is awarded upon the recommendation of the History Department for the outstanding dissertation or dissertations in a field of European history.

ANER BARZILAY  
History  
Adviser: Marci Shore  
“Michel Foucault and First Philosophy: A Nietzschean End to Metaphysics in Postwar France, 1952–1984”

An exquisite analysis of Michel Foucault’s philosophical development during three decades. An excellent and indeed pathbreaking study. A very impressive account; a monumental achievement.

KATE BRACKNEY  
History  
Adviser: Carolyn Dean  
“Phantom Geographies: An Alternative History of Holocaust Consciousness”

A highly sophisticated meditation on cultural responses to the Holocaust since 1945. Highly original, beautifully written, it will change the way that we think about the cultural history of the Holocaust and its aftermath.

The Award for Academic Excellence in Global Affairs is given to the master’s student in Global Affairs with the highest academic achievement.

SOPHIE BROACH  
Global Affairs

The James B. Grossman Dissertation Prize was established in memory of a doctoral student in Psychology. It is given to the author of an outstanding Ph.D. dissertation in Psychology, with preference for research embodying some of the characteristics of James Grossman’s scholarship, such as creativity, use of other disciplines, and clinical work with children.

DAVID MELNIKOFF  
Psychology  
Adviser: John Bargh  
“Towards a Goals-First Framework of Cognition and Action”

In his dissertation, Melnikoff argues and finds that a person’s currently active goal or motive changes our belief structure, even our long-term attitudes and even strongly held ones such as dislike towards a guilty murderer, to be whatever best suits that goal pursuit. For example, playing the role of a defense attorney for that guilty murderer temporarily causes a person to have unconscious, automatic, implicit positive attitudes towards
him—because that helps the goal of defending him as best as possible. Melnikoff argues, based on historical principles of functionalism, that internal attitudes and beliefs are instead always in the service of adaptive behavior.

The **Annie Le Fellowship** is awarded each year to one or more Ph.D. students in the biological and biomedical sciences whose demonstrated commitment to bettering the world around them and outstanding record in research exemplify the life and career of Annie Marie Le, a Yale graduate student between 2007 and 2009.

- **Gabriela Bosque-Ortiz**
  Interdepartmental Neuroscience Program
  Adviser: Marcelo Dietrich

- **Veronica Galvin**
  Interdepartmental Neuroscience Program
  Adviser: Amy Arnsten

The **Elias Loomis Prize** is awarded for excellence in studies of physics of the earth. Elias Loomis was a professor of natural philosophy and astronomy in Yale College.

- **Chhavi Jain**
  Geology and Geophysics
  Adviser: Jun Korenaga

- **Bowen Zhao**
  Geology and Geophysics
  Adviser: Alexey Fedorov

The **James G. March Award** was established in 2018 by Professor Jim March (Ph.D. ’53). This prize is awarded annually to an outstanding dissertation from any field of Political Science.

- **Nikhar Gaikwad**
  Political Science
  Adviser: Steven Wilkinson

  “Identity Politics and Economic Policy”

  *This dissertation develops a formal model of political competition in culturally divided societies to explicate the link between identity politics and policies over economic policymaking. It then tests the*
theoretical argument by using survey experimental, qualitative, and historical quantitative data from India, Brazil, and the United States. Its findings explain how identity politics can systematically influence regulatory capture in multi-ethnic democracies.

ELIZABETH WELLMAN
Political Science
Advisers: Elisabeth Wood, Susan Hyde (UC Berkeley)
“Citizenship Beyond Borders: The Politics of Emigrant Enfranchisement in Africa”

Since 1990, nearly 100 countries extended voting rights to citizens abroad, including 32 in sub-Saharan Africa. This dissertation documents the extensive variation in the actual ability for diasporas to vote following legal enfranchisement. Combining analysis of an original dataset of external voting in Africa, with archival and interview data collected during fieldwork, the dissertation finds that partisan interests drive both adoption and implementation of emigrant enfranchisement.

The John Spangler Nicholas (Ph.D. 1921) Prize was established in 1972 by bequest of Helen Brown Nicholas in memory of her husband. The prize is awarded annually to outstanding doctoral candidates in experimental zoology.

ARUN CHAVAN
Ecology and Evolutionary Biology
Adviser: Gunter Wagner
“Evolutionary Origin of Cell Types: A Case Study of Decimal Cells in Mammalian Pregnancy”

This dissertation presents groundbreaking conceptual work on an important evolutionary question, with insights into the evolutionary cooption of the maternal immune system inflammatory response to the implanted embryo in placental mammals.

These discoveries open up a breadth of new clinical and therapeutic possibilities in human reproductive biology.

ANN FEKE
Molecular, Cellular, and Developmental Biology
Adviser: Josh Gendron
“The Decoy Technique Unveils Novel Biochemical and Generic Function of E3 Ligases in Circadian Clock & Flowering Time Regulation”

Ann studies the role of protein degradation in the circadian clock of the model plant Arabidopsis thaliana. Her thesis focused on the development and application of a library of dominant negative E3 ubiquitin ligase decoys that allow for their rapid characterization in the face of widespread functional redundancy.

IGNACIO QUINTERO
Ecology and Evolutionary Biology
Adviser: Walter Jetz
“The Evolutionary Tapestry: Insights on the Processes Behind the Origin and Maintenance of Biodiversity”

Quintero presents a novel and unique appraisal of the evolution of biological diversity in relation to geography and climate on a global scale. His analyses are based on: novel, detailed, empirical species distributions for several groups of organisms; sophisticated mathematical modeling of the processes involved in species diversification; and a deep appreciation for the extensive literature on patterns of species richness.

JENNIFER SUN
Molecular, Cellular, and Developmental Biology
Adviser: John Carlson
“Humidity Response Depends on the Small Soluble Protein Obp59a in Drosophila”

Jennifer discovered that humidity-detecting sensory hairs in the Drosophila antenna express and rely on a small, highly-localized protein,
Obp59a. Mutants lacking Obp59a are defective in hygroscopic behaviors and demonstrate increased desiccation resistance. Her findings suggest that antennal Obps play diverse roles, and have identified a new target for controlling insect vectors that rely on humidity for host-seeking and egg-laying.

The *Philip M. Orville Prize* was established in 1981 in memory of Philip M. Orville. The prize is awarded to graduate students in geology and geophysics in recognition of outstanding research and scholarship in the earth sciences.

**JIE DENG**  
**Geology and Geophysics**  
Adviser: Kanani Lee

**TERRY TANG**  
**Geology and Geophysics**  
Adviser: David Evans

The *George Gaylord Simpson Prize* was established in 1984 in honor of Professor Simpson and is awarded to graduate students and recent Ph.D. recipients for an exceptional paper concerning evolution and the fossil record.

**DANIEL SMITH-PAREDES**  
**Geology and Geophysics**  
Adviser: Bhart-Anjan Bhullar  
“Dinosaur Ossification Centers in Embryonic Birds Uncover Developmental Evolution of the Skull”

The skull of birds has been drastically modified compared to that of their non-avian dinosaur ancestors. By looking at embryos of modern birds we realized that bones supposedly lost in evolution are still present early in embryonic development, but end up fusing to other bones without leaving a trace, clarifying the evolutionary steps of bone reduction and loss in avian evolution.

**CHRISTOPHER WHALEN**  
**Geology and Geophysics**  
Adviser: Derek Briggs  
“The Palaeozoic Colonization of the Water Column and the Rise of Global Nekton”

With his lab, Christopher Whalen documented the biotic changes in the global oceans throughout the Paleozoic era (~541–252 million years ago), with a particular focus on nekton (swimming animals). The results suggest that ecologically modern marine ecosystems developed earlier and more gradually than previously thought. This is inconsistent with ideas of rapid, escalatory-feedback driven evolution, necessitating new explanations for the origins of high-energy animal lifestyles.

**NASIMA WIEMANN**  
**Geology and Geophysics**  
Adviser: Derek Briggs  
“Dinosaur Egg Color had a Single Evolutionary Origin”

Birds are the only living animals with colored eggs, long considered an avian innovation. The variation in avian egg color is based on only two pigments, the red protoporphyrin, and the blue biliverdin. Since these two pigments have been extracted from dinosaur eggshells, it is unclear if egg color had a single evolutionary origin, or appeared multiple times independently. The researchers analyzed eggshells across the dinosaur tree of life for preserved traces of the two pigments, and found that all eumaniraptoran dinosaur eggs were colored. Egg color had a single evolutionary origin in dinosaurs (including birds), corresponding to the origin of open nesting habits.

The *Carolyn Slayman Prize* in Genetics recognizes the remarkable achievements of our best students in the Department of Genetics, based on their body of work, the impact of
their findings in the field of Genetics and their commitment to the Genetics Graduate Program and graduate education at Yale.

Carolyn W. Slayman, Ph.D. was an outstanding teacher and scientist who became a member of the Department of Human Genetics when it was established in 1972, and the first woman to become department chair at the Yale School of Medicine, leading the Department of Human Genetics in 1984.

EDWARD MARSH
Genetics
Adviser: Valentina Greco
“The Homeostasis of the Structure-Makers of our Skin”

This research discovered fundamental new biology in the behavior of skin cells called fibroblasts. These cells maintain their distribution throughout the skin by modulating their shape, rather than by movement or proliferation. This behavior plays out during aging as fibroblasts are lost. Homeostasis is maintained by the remaining cells expanding to fill the vacated space.

PARKER SULKOWSKI
Genetics
Adviser: Peter Glazer
“Identification and Mechanistic Understanding of Oncometabolite-induced DNA Repair Deficiency”

This research shows that alterations in a cancer cell's cellular metabolism can drive changes to the cell's own DNA. By identifying a new paradigm in cancer metabolism, this work identifies the molecular Achilles heel of certain cancers that can be therapeutically exploited, while leaving the normal cells of the body unharmed.

The Edwin W. Small Prize was established in memory of Edwin W. Small (B.A. 1930, M.A. 1934) and is awarded in recognition and furtherance of outstanding work in the field of American history.

CATHERINE MAS
History of Science and Medicine
Adviser: Naomi Rogers

An extraordinarily bold and insightful historical study. Innovative in several ways, this dissertation relocates Miami as a pivotal center of modern medicine. A distinguished demonstration of historical method and a brilliant act of interpretive insight.

BEN ZDENCANOVIĆ
History
Adviser: Jennifer Klein
“From Cradle to Grave: The United States in a World of Welfare, 1940–1953”

A richly textured, multinational history of social security politics and welfare state development, it tackles a historically and politically important subject. Rich archival work underlays this dissertation. A truly excellent dissertation, the strengths of this work are legion.

The George Trimis Prize was established in May 2003 in memory of a doctoral student in Economics who succumbed to cancer. In recognition of the extraordinary example that Trimis set, the prize is awarded to students whose dissertations demonstrate exceptional and distinguished achievement.

TAHA CHOUKHMANE
Economics
Advisers: Nicholas Barberis, James Choi, Costas Meghir, Cormac O’Dea
“Essays on Retirement Savings”
Choukhmane explains two perplexing facts about saving behavior, high savings rates in China and the tendency for employees to choose the default retirement savings option. By careful analysis of novel data, he concludes that employees offset high automatic savings by reducing personal saving and Chinese households increase saving to offset the impact of the one-child policy on old age support.

Fabian Eckert
Economics
Advisers: Costas Arkolakis, Samuel Kortum, Giuseppe Moscarini, Michael Peters
“Economic Geography, Structural Change, and Human Capital”

Eckert provides a novel explanation for the recent increase in the wage premium for U.S. college graduates. The information technology revolution has reduced the cost of transporting business services. This change has allowed regions to specialize in these activities and export them to other regions, at the same time increasing the wages of the skilled workers that provide the services.

Wayne Gao
Economics
Advisers: Xiaohong Chen, Philip Haile, Peter Phillips, Larry Samuelson
“Essays on Network and Panel Modeling”

Gao studies models with many individuals linked by a network, sharing risk, and having local information about each other. He derives theoretical properties of the models and methods for their statistical verification. He applied his methods to data on Thai villages. An example of a qualitative result is that people centrally located in a risk sharing network tend to bear risk.

Joachim Hubmer
Economics
Advisers: Per Krusell, Giuseppe Moscarini, Tony Smith
“Essays on Macroeconomics and Inequality”

Hubmer verifies empirically explanations he provides for increasing inequality in the U.S. distribution of income and wealth. The aggregate labor share of income has declined because of a fall in the price of labor saving capital goods. Individual workers suffer severe drops in income from job loss. Wealth inequality increases because of high asset returns and a decrease in tax progressivity.

Yukun Liu
Economics
Advisers: Stefano Giglio, William Goetzmann, Andrew Metrick, Toby Moskowitz, Aleh Tsyvinski
“Labor-Based Asset Pricing”

Liu links job search with asset-pricing to gain insights that he tests empirically using an original data source. A filled job vacancy generates a shared rent. The expected present value of the firm’s share of this rent is an asset with a value depending on the firm’s discount rate. Hence we may infer this rate from the firm’s search effort for employees.

The Karl K. Turekian Prize is awarded for excellence in geochemical or cosmochemical studies.

Yoshinori Miyazaki
Geology and Geophysics
Adviser: Jun Korenaga

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Yoshinori Miyazaki
Geology and Geophysics
Adviser: Jun Korenaga
The Richard Wolfgang Prize was established in 1971 in memory of Richard Leopold Wolfgang, M.A. Hon. 1962, and member of the faculty from 1956 to 1971. It is awarded each year for the best doctoral theses of graduating chemistry students.

Daniel Derosha
Chemistry
Adviser: Patrick Holland
“Investigations of Diketiminate-Supported Iron and Cobalt Chalcogenide Complexes: Small Molecule Activation and Electronic Structure”

Dr. DeRosha’s dissertation involved the preparation and characterization of new, highly reactive compounds containing iron and cobalt. Natural systems use iron-sulfur clusters for reactions such as nitrogen reduction, and Dr. DeRosha’s research uncovered new kinds of iron-sulfur clusters that have reactivity that gives insight into the natural systems.

Christopher Shugrue
Chemistry
Adviser: Scott Miller
“Development of Phosphothreonine (pThr)-Embedded Peptides as Bronsted Acid Catalysts for Stereoselective Transformations”

Dr. Shugrue’s dissertation described the reactivity of small peptides that control the outcomes of organic reactions. These demonstrate the ability of well-tuned catalysts to give exquisite control over multiple substrates for a number of coupling, oxidation, and reduction reactions in an efficient manner.

Zachary Vealey
Chemistry
Adviser: Patrick Vaccaro
“Tunneling Dynamics and Hydrogen-Bonding Motifs in Model Proton-Transfer Systems”

Dr. Vealey’s dissertation work studied how low barrier hydrogen bonded complexes transfer protons. Using sophisticated laser spectroscopy, Dr. Vealey revealed how both quantum tunneling and molecular vibrations contribute to proton transfer, and showed that this migration occurs on an astonishingly rapid timescale in model systems relevant to both chemical and biochemical catalysis.

The Arthur and Mary Wright Prize is awarded upon the recommendation of the History Department for the outstanding dissertation or dissertations in the field of history outside the United States or Europe.

Timothy Lorek
History
Adviser: Gilbert Joseph

Exceptionally well-researched and supported, Lorek makes a forceful intervention to reimagine agricultural development and modernization as a tangled transnational process. Sophisticated and important, this dissertation is painstakingly researched and of the highest quality.

Santiago Munoz Arbelaez
History
Advisers: Stuart Schwartz, Gilbert Joseph

This is a meticulously researched, effectively crafted, and pathbreaking study of the role of indigenous peoples in the early modern Spanish empire. An impressive work, it is ambitious in scope, thematically rich, historiographically sophisticated, and methodologically innovative. Highly original and beautiful, it is an inspiring dissertation that has many merits.
University Awards

The Theron Rockwell Field Prize was established in 1957 by Emilia R. Field in memory of her husband, Theron Rockwell Field, Ph.B. 1889. It is awarded for poetic, literary, or religious works by any students enrolled in the University for a degree. This prize is awarded by the Office of the Secretary of Yale University.

Luisa Cortesi
Anthropology, Forestry & Environmental Studies
Advisers: Kalyanakrishnan Sivaramakrishnan, Michael Dove
“Living in Unquiet Waters: Knowledge and Technologies in North Bihar”
Awarded for a beautifully written exploration of the multi-faceted meaning of ecology. An ethnographic exploration of how people in rural North Bihar, India, live among dangerous waters, and a study of the mechanisms of environmental knowledge formation and negotiation.

Flynn Cratty
History
Advisers: Bruce Gordon, Carlos Eire
“The Soul in Paraphrase’: Prayer and the Changing Mental Worlds of Early Modern France and England”
A groundbreaking study of the evolution of prayer through the centuries. A historical analysis of prayer as a means of discourse in the early-modern world of Catholics and Protestants in Britain and France, from the late fifteenth century to the French Revolution.

The John Addison Porter Prize, named in honor of Professor John Addison Porter, B.A. 1842, is awarded for a work of scholarship in any field where it is possible, through original effort, to gather and relate facts or principles, or both, and to present the results in such a literary form as to make the project of general human interest. This prize is awarded by the Office of the Secretary of Yale University.

Catherine Mas
History of Science and Medicine
Adviser: Naomi Rogers
For a timely study of the influences of immigrants on U.S. medical practices. A history of Cold War medical anthropology and the making of modern global health centered on Miami, Florida—a crossroads between the U.S. and Latin America and a crucial locus for examining the interplay of ethnicity, geopolitics, and health.

Alexandra Morrison
History of Art
Adviser: Carol Armstrong
“Copying at the Louvre”
For the in-depth archival work convincingly demonstrating how copying develops artistic identity. A comprehensive study of copying at the Louvre, a ubiquitous and formative practice in nineteenth-century France, and the possibilities it entailed for artists.

Adele Ricciardi
Biomedical Engineering (M.D./Ph.D.)
Adviser: Mark Saltzman
“Nanoparticles for Site-Specific Gene Editing in Utero”
For a pathfinding development of in utero gene therapy with the potential to cure a number of genetic diseases before birth. A demonstration of the feasibility, technique, and efficacy of site-specific in utero gene editing in mammalian disease models, potentially providing the basis for a safe and versatile translational method of fetal gene editing for the treatment of human monogenic disorders.
Public Service Awards

The Graduate School Community Service Award honors a graduate student’s volunteer work in the local community while enrolled at Yale.

DURGA THAKRAL
Genetics (M.D./Ph.D.)

Durga Thakral is president and founder of the Yale University Chapter of AYUDH, a youth-run organization dedicated to the United Nations Sustainable Development Goals and a word that means “Peace.” Durga has spearheaded several dozen wellness workshops and community events that creatively incorporate principles of sustainability and humanitarian efforts, collectively bringing together hundreds of Yalies and community members in actionable service initiatives to share her love of service and nature. Durga has also represented AYUDH at the United Nations Economic and Social Council Youth Forum and continues to share ideas for initiatives with other young motivated agents for change and university chapters at the International Youth Parliament of the AYUDH Americas Annual Youth Summit.

The Disciplinary Outreach Service Award recognizes a student who has applied specific knowledge of his or her own field in performing voluntary service within the local community.

DAVID CAIANIELLO
Chemistry

David has volunteered as a chemistry teacher with Beacon Self-Directed Learning, an organization that provides home-schooled students with organized academic offerings, throughout his time in graduate school. He has also participated in and organized numerous outreach events that teach biology and chemistry to middle and high school students.

The Public Scholar Award recognizes research and activism pursued by a Yale graduate student that engages and betters the world at large.

DAMIAN VARGARA BRACAMONTES
American Studies

Damian is a scholar of Mexican and Central American migration to the U.S. in the twentieth and twenty-first centuries. His doctoral research exposes and warns of the dangers of the growing powers of immigration enforcement over the past 30 years for both non-citizens and citizens alike. With his research, Damian seeks to address the needs and concerns of local communities of color. In collaboration with key migrant serving organizations, these efforts include teaching ‘know your rights’ and community defense workshops, and leading educational tours of the San Diego-Tijuana border region.
Graduating Winners of Prize Teaching Fellowships

ALEXANDER ENGLER  
Biomedical Engineering  

JOSHUA GAILEY  
Music  
2019–2020

ETIENNE BEIJIA GREENLEE  
Molecular, Cellular, and Developmental Biology  
2017–2018

KEVIN TOBIA  
Philosophy  
2018–2019
Graduate Mentor Awards

This year, for the twenty-first time, the Graduate School honors faculty members at Convocation for their exemplary qualities as mentors. Many dissertation advisers were nominated, and the honorees were chosen by a committee of students and faculty. All letters of nomination were anonymous.

In the Humanities

INDERPAL GREWAL
Professor of Women’s, Gender, and Sexuality Studies, and of American Studies

“Professor Grewal’s example in progressing the culture of the academy is demonstrative also of her rigorous scholarship. Her acute work in the intersecting politics of gender, religion, race, and state security (for instance) has not only resulted in dynamic conferences (Fall/2017) and access to global scholarly networks for Yale but also incorporated teams of interdisciplinary graduate researchers, including myself.”

“From the start, she [Inderpal] believed in the importance of my interdisciplinary dissertation project, one that would sit at the intersections of the fields of South Asian diaspora studies and African diaspora studies and demonstrate that they had been tied together all along. To achieve this, she taught me the genres of academic writing: the seminar paper, the grant application, the journal article, the review essay, and the dissertation chapter.”

“As Inderpal sets out to retire, I know that her voice will be greatly missed by all who have been touched by her presence at Yale. She is an inveterate advocate for her students, many of whom feel out of place in their respective disciplinary “homes.” We tend to find her by chance, and not let go when we do, for she is one of those rare mentors equally at ease with advising dissertations on topics ranging from modern art to Palestinian displacement.”

In the Natural Sciences

MAUREEN LONG
Professor of Geology and Geophysics

“As an adviser, Dr. Long makes it clear that her students are her top priority. At scientific meetings, Dr. Long would promote my work to her colleagues, ensuring that I was well-known when it came time for me to apply for jobs. Her advisees have gone on to faculty positions at top universities in the U.S. and abroad, as well as scientific and research positions with the federal government. On a more personal level, Dr. Long is an unequivocal role model for women in science.”

“During the progress of projects, she [Dr. Long] always gave me full support to build confidence. In addition, she encouraged me to participate in academic conferences and helped me to establish my professional connections.”

“I worked with Maureen in a project that combined computational seismology with seismic anisotropy. She gave me the opportunity to independently develop and manage the computational aspects of our research project while at the same time providing strong guidance in the field of seismic anisotropy. Her patience, persistence and ability of always encouraging me, especially when results were far from meeting the expectations are the qualities that characterize a good mentor.”
In the Social Sciences

Jennifer Richeson
Philip R. Allen Professor of Psychology

“One of Dr. Richeson’s most important strengths is that she fosters a supportive, communal atmosphere in her lab and wherever she is in a leadership capacity. …Relatedly, it has been an honor to work with her and learn how to train students. Dr. Richeson tunes her advising to each student and has taught me to do the same. She believes in each of us, we each know and feel that, and she is committed to doing whatever work is necessary to help us operate in excellence.”

“Her weekly lab meetings are the event I look forward to most each week. Although it seems effortless, Dr. Richeson intentionally works to create a lab environment, where each individual feels supported in their work. I leave each meeting with her feeling like I have been mentored academically, professionally, and personally. Dr. Richeson works incredibly hard and sacrifices a lot to provide the best she can for her students, the department, the academic community, and the public-at-large.”

“Dr. Richeson fosters curiosity and independence in her graduate students by creating an atmosphere of total professional trust. She is incredibly encouraging and validating of the efforts we each make, while continuing to push us to reach beyond obvious answers.”