



HARVARD UNIVERSITY
Faculty of Arts and Sciences

2021 Thomas Temple Hoopes Prize Winners

for excellent undergraduate work and excellence in the art of teaching

- Marwah Aman for her submission entitled “3D Tactile Pin Matrix for Autonomously Reconstructing Environments in Realtime”—supervised and nominated by Dr. Michelle Rosen
- Che Applewhaite for his submission entitled “A New England Document: Proto-Cinematic Practice against Genocidal Acceptability”—supervised and nominated by Dr. Zoe Eddy
- Eva Cai for her submission entitled “EarFlow: A Transtympanic Drug Delivery Device towards Treating Otitis Media”—supervised and nominated by Professor Samir Mitragotri and Dr. Nicole Black
- Alessandra Canta for her submission entitled “Unlocking the Key to Life: Observation and Formation of Nitriles in Protoplanetary Disks”—supervised and nominated by Professor Karin Öberg
- Stephen Casper for his submission entitled “Efficient and Insidious Adversaries in Deep Reinforcement Learning”—supervised and nominated by Professor Gabriel Kreiman
- Carissa Chen for her submission entitled “‘Though Dwelling in a Land of Freedom’: An Intergenerational Biography of Harvard Enslaved and Their Descendants in Boston, 1734–2020”—supervised and nominated by Professor Sven Beckert
- Jennifer Chen for her submission entitled “Media Representation and Racial Prejudice: Evidence from *The Amos ‘n’ Andy Show*”—supervised and nominated by Professor Desmond Ang
- Smit Chitre for his submission entitled “Wounded Healers: Burnout in Detroit Doctors before and during the Covid-19 Pandemic”—supervised and nominated by Professor Arthur Kleinman
- Ashley Cooper for her submission entitled “Racism’s Health Harm on Black Youth Mental Health: From (Neuro)Scientific Orthodoxy to Neuroscience as a Vessel of Visibility”—supervised and nominated by Professor Byron Good and Dr. Marisa Silveri
- Katherine Deng for her submission entitled “Toward a Latent Space Understanding of Regional Identity and Social Connectedness in the United States”—supervised and nominated by Professor Benjamin Golub and Professor Tracy Ke
- Elijah DeVaughn for his submission entitled “Tactician, Theorist, and Trailblazer: Shirley Chisholm’s Black Power in Practice”—supervised and nominated by Dr. Andrew Pope
- Hannah Ellery for her submission entitled “Big Names, Bigger Barriers: Firm Reputation and Its Role as a Barrier to Entry”—supervised and nominated by Professor Myrto Kalouptsidi and Professor Scott Kominers

- Ralph Estanboulieh for his submission entitled “Deep Learning Models for Variant Pathogenicity Prediction”—supervised and nominated by Professor Arjun Manrai
- Koji Everard for his submission entitled “The Political Ecology of Sugar: Beet Agriculture and the Limits of State Power in Interwar Hokkaido”—supervised and nominated by Professor Ian Miller
- Olivia Ferdinand for her submission entitled “When Mercy Seasons Justice: Examining State Pardon Power in the United States, 1990–2020”—supervised and nominated by Professor Jon Rogowski
- Gabrielle Fernandopulle for her submission entitled “Hidden Diversity Disparities in Elite College Athletics: Race, Belonging, and the Purpose of Sports in the Ivy League”—supervised and nominated by Mr. Ethan Raker
- Alden Fossett for his submission entitled “Rotimi Fani-Kayode’s (no-place): A Spiritual Offering for an Empty World”—supervised and nominated by Professor Robin Kelsey
- Owen Foulkes for his submission entitled “‘Out of the Dust and Mire’: Settler Colonialism and City Planning in 1920s Tulsa”—supervised and nominated by Dr. Caitlin Casey
- Ella Frigyyik for her submission entitled “Phylogeographic investigation into the New Zealand harvestman genus *Algidia* (Arachnida: Opiliones: Triaenonychidae)” —supervised and nominated by Professor Gonzalo Giribet
- Lily Gao for her submission entitled “The Deep Breath before the Plunge: Thoracic Adaptations for Increased Ventilation in Swimmers during Physical Activity”—supervised and nominated by Professor Daniel Lieberman
- Archibald Hall for his submission entitled “‘Jerusalem among the Satanic Mills’: Politics, Industrialization, and the Changing Face of Religion in Eighteenth-Century Britain”—supervised and nominated by Professor Edward Glaeser
- Ciara Hervás for her submission entitled “Seeing Beyond the Binary: The Photographic Construction of Queer Identity in Interwar Paris and Berlin”—supervised and nominated by Dr. Briana Smith
- Maryam Hiradfar for her submission entitled “A fast and dense magneto-optical trap of potassium atoms loaded from a cold buffer gas beam”—supervised and nominated by Professor John Doyle
- Frances Hisgen for her submission entitled “‘We Don’t Know What to Do with the Likes of You’: Racializing Britishness during the Civilian Evacuation of Hong Kong, 1939–1941”—supervised and nominated by Professor Maya Jasanoff
- Wyatt Hurt for his submission entitled “Global Eyes, Global Waters: Remote Sensing and the Politics of Transboundary Water Governance”—supervised and nominated by Professor Sheila Jasanoff
- Kenz Kallal for his submission entitled “The Arthur-Selberg trace formula and some applications to arithmetic statistics”—supervised and nominated by Professor Mark Kisin
- Isabel Kendall for her submission entitled “I Know How the Caged Bird Tweets: Online Dissent and Physical Repression in Saudi Arabia, 2015–2020”—supervised and nominated by Professor Melani Cammett and Professor Malika Zeghal
- Anselm Kizza-Besigye for her submission entitled “States of Panic: Anti-Queer Affects and Frames of Crisis in Uganda”—supervised and nominated by Professor George Paul Meiu

- Elida Kocharian for her submission entitled “Amine-mediated CO₂ hydration as a potential carbonic anhydrase alternative in marine Thaumarchaeota”—supervised and nominated by Professor Ann Pearson
- Rick Li for his submission entitled “Oncofetal RNA-Binding Proteins IGF2BP3 and LIN28B Cooperatively Regulate Fetal-to-Adult Hemoglobin Switching”—supervised and nominated by Professor Vijay Sankaran
- Isaac Longobardi for his submission entitled “Why Home Health Aides Clean”—supervised and nominated by Professor Steven Caton
- Katherine Lou for her submission entitled “Motives Unmasked: Examining What Mask-Wearing Means to Americans during Covid-19”—supervised and nominated by Mr. Sean Bock
- Patrick Magee for his submission entitled “Knowledge and Explanation: What Physics Tells Us about the World”—supervised and nominated by Professor Edward Hall
- Ethan Manninen for his submission entitled “Cluster Analysis of N₂O Enhancements Observed by ATom”—supervised and nominated by Professor Steven Wofsy
- Lorenzo Manuali for his submission entitled “Addiction Excuses: Why Addicts Lack Control, Agency, and Foresight through No Fault of Their Own”—supervised and nominated by Professor Eric Beerbohm
- Emily Markowitz for her submission entitled “Hate the Players or Hate the Game? Process Innovation in Western Europe”—supervised and nominated by Professor Jeffrey Frieden
- Sophia Mautz for her submission entitled “Degeneration”—supervised and nominated by Professor Jorie Graham
- Alexis Mealey for her submission entitled “The Not-So-Innocent Threat: A Libertarian Justification for the Expansion of the Minimal State”—supervised and nominated by Dr. Emilio Mora
- Veronika Melnik for her submission entitled “Thioredoxin-interacting protein (TXNIP) couples redox state to hepatic glucose metabolism through a single amino acid”—supervised and nominated by Professor Richard T. Lee
- Lainey Newman for her submission entitled “Rust Belt Union Blues: The Changing Social Identities and Political Loyalties of Industrial Union Workers in Southwestern Pennsylvania”—supervised and nominated by Professor Theda Skocpol
- Juliet Nwagwu Ume-Ezeoke for her submission entitled “Optimization Process for Multi-family Residential Housing Designed with Earth and Concrete”—supervised and nominated by Professor Joost Vlassak
- Sally O’Keeffe for her submission entitled “Buildings Made of Bones”—supervised and nominated by Dr. Josh Bell
- Malia Obama for her submission entitled “Yellow Light”—supervised and nominated by Mr. Musa Syeed
- Larisa Owusu for her submission entitled “Iconic Market Women: The Unsung Heroines of Post-Colonial Ghana (1960s–1990s)” —supervised and nominated by Dr. Beatrice Wayne
- Pranati Parikh for her submission entitled “Dharma as Saṃkāṭa: Reading Crisis across South Asian Literature”—supervised and nominated by Professor Parimal Patil and Mr. Tyler Richard

- Sewon Park for her submission entitled “Jobs Saved by the Paycheck Protection Program (PPP): The Importance of Smaller Loans, Flexible Program Requirements, and Targeting”—supervised and nominated by Professor Robert Barro and Dr. Gregory Bruich
- Jamie Paterno Ostmann for her submission entitled “Scenes of Smoke and Scarlet: Cochineal and Tobacco in the Early Modern English Theater”—supervised and nominated by Dr. Reed Abigail Gochberg and Dr. Diana Loren
- Gabriela Pelayo for her submission entitled “Investigating β -cell stress and the protection of stem cell-derived β -cells for type 1 diabetes”—supervised and nominated by Professor Douglas Melton
- Kathleen Ran for her submission entitled “Identifying novel AD-risk genes implicated in microglia engulfment function using iPSC-derived Microglia (iMGLs)” —supervised and nominated by Dr. Beth Stevens
- Sydney Robinson for her submission entitled “(Pseudo)science and Physiognomy: Beauty, Virtue, and the Preservation of Social Hierarchies, 1770s to the Gilded Age”—supervised and nominated by Ms. Tiffany Nichols
- Matthew Rossi for his submission entitled “The Stranger Imaginary: Rape and Forensics in U.S. Congressional Hearings, 1999–2017”—supervised and nominated by Professor Malavika Reddy and Dr. Gloria Ayee
- Eliza Rubin for her submission entitled “Sacred Desire: Multiplicity and Mystery in Parmigianino’s Madonna of the Long Neck”—supervised and nominated by Professor Jeffrey Hamburger
- Lillian Seeligson for her submission entitled “Warfighter Recommended, Warfighter Tested, Warfighter Approved: The U.S. Army Quartermaster Corps and the Creation of Food Acceptability Science”—supervised and nominated by Mr. Aaron Van Neste
- Aarushi Shah for her submission entitled “‘We Run this City’: The Intertwining of Disposability, Precarity, and Essentiality amongst Chicago Transit Drivers amidst the Coronavirus Pandemic”—supervised and nominated by Professor Salmaan Keshavjee
- Serena Shah for her submission entitled “To Revive a World and Rebuild a Word: Classical Slave Names and Their Afterlives in the Antebellum U.S. South”—supervised and nominated by Professor Henry Louis Gates, Jr., and Professor Paul Kosmin
- Tamara Shamir for her submission entitled “No Exit: Stuck inside Trump’s Immigration Trap”—supervised and nominated by Ms. Jill Abramson
- Claire Shi for her submission entitled “A Story of Human Capital: Why the Paycheck Protection Program Had Huge Geographic Disparities”—supervised and nominated by Professor Edward Glaeser
- Raphaëlle Soffé for her submission entitled “Varieties of Austerity: Austerity-Induced Local Public Service Cuts in the United Kingdom and the Rise of the Far-Right”—supervised and nominated by Professor Marc Melitz
- Asher Spector for his submission entitled “Powerful Feature Selection under Dependence: Minimizing Reconstructability to Generate Knockoffs”—supervised and nominated by Professor Lucas Janson

- William Stainier for his submission entitled “The Natural Viral Environment of *Caenorhabditis elegans*: Interactions between RNA Interference, the Dauer State, and Orsay Virus Infection”—supervised and nominated by Professor Craig Hunter
- Avi Swartz for his submission entitled “Simultaneous Protein Coevolution and Phylogeny Prediction with a Differentiable Tree Structure”—supervised and nominated by Dr. Sergey Ovchinnikov
- Annabelle Tao for her submission entitled “Evolving Representations”—supervised and nominated by Professor Alison Simmons
- Matthew Thomas for his submission entitled “Striking Out: Obstacles to Unionization among Minor League Baseball Players”—supervised and nominated by Professor Jon Rogowski
- Alexandra Todorova for her submission entitled “‘The Evil Years’: Danish Archaeology in the Grip of National Socialism, 1935–1947”—supervised and nominated by Professor Mary Lewis
- Sofia Tong for her submission entitled “The Queer Good Place: Reading Henry James through Asexuality”—supervised and nominated by Professor Stephanie Burt and Mr. Alexander Creighton
- Nina Uzoigwe for her submission entitled “Engineering Pulmonary Monocusp Leaflets for Right Ventricular Outflow Tract Reconstruction in Neonates”—supervised and nominated by Dr. Peter Hammer and Dr. David Hoganson
- Garrett Walker for his submission entitled “A House Divided: The Rise of Hyperpartisanship in the House of Representatives, 1968–1989”—supervised and nominated by Professor Fredrik Logevall and Mr. Aaron Bekemeyer
- Pedro Paulo Weizenmann for his submission entitled “Catholic Human Rights Thought: The Latin American Contribution”—supervised and nominated by Professor Michael Rosen
- Michael Xie for his submission entitled “High-fidelity estimates of spikes and subthreshold waveforms from one-photon voltage imaging *in vivo*”—supervised and nominated by Professor Adam Cohen
- Elizabeth Yang for her submission entitled “Rural Roads and Consumption Smoothing”—supervised and nominated by Professor Emily Breza
- Oliver York for his submission entitled “Assessing the Impact of Rooftop Solar on Household Electricity Consumption”—supervised and nominated by Professor James Stock
- Jingyao (Lux) Zhao for her submission entitled “The History and Mathematics of the Axiom of Choice: A Story in Three Acts, 1904–1921”—supervised and nominated by Professor Ann Blair and Professor W. Hugh Woodin
- Anthony Zhong for his submission entitled “‘The Cheese Tastes like Plastic’: A Critical History of Nutrition and the National School Lunch Program”—supervised and nominated by Professor Rebecca Lemov
- Eli Zuzovsky for his submission entitled “Mazel Tov (or the Day I Became a Man)” —supervised and nominated by Ms. Claire Messud and Ms. Dominga Sotomayor