ZANVYL KRIEGER SCHOOL OF ARTS AND SCIENCES

Doctoral Hooding Ceremony, May 25, 2021
Order of Events

National Anthem
E. Lukas Schmidt
Graduate Student (Peabody Institute)

Welcome
Sunil Kumar
Provost and Senior Vice President for Academic Affairs
The Johns Hopkins University

Keynote Address
Percy A. Pierre, PhD ’67
Adjunct Professor and Glenn L. Martin Endowed Professor
University of Maryland, A. James Clark School of Engineering

Remarks
Nancy E. Kass, ScD
Vice Provost for Graduate and Professional Education

Christopher S. Celenza, PhD
James B. Knapp Dean
Zanvyl Krieger School of Arts and Sciences

Presentation of Doctoral Recipients

Greetings from the Alumni Association
Anika Penn, MA ’10 (SAIS)
President
The Johns Hopkins Alumni Association

Congratulatory Remarks
Graduate Representative Organization
Shane Arlington
Co-chair

Conor Bean
Co-chair

Reception
Percy A. Pierre, PhD ’67, is adjunct professor and Glenn L. Martin Endowed Professor at the University of Maryland, A. James Clark School of Engineering. In fall 2020, Pierre was named chair of the Racial Justice and Equity Committee of the National Academy of Engineering.

Pierre earned his PhD in electrical engineering at The Johns Hopkins University and is recognized as the first African American to earn a doctorate in electrical engineering. He subsequently published research on stochastic processes in communications systems. His work focused on characterizing non-Gaussian random processes, including commonly used “linear processes.” He also developed results in signal detection, central limit theorems, sample function properties, and conditions for stochastic independence.

Upon leaving Hopkins, he did a postdoctoral year of study at the University of Michigan. He was a researcher at the RAND Corporation when he was selected to be a White House Fellow, serving on the Urban Affairs Council in the Office of the President for a year. Upon leaving RAND, he became dean of Engineering at Howard University. While at Howard, he helped lead the Minority Engineering Effort, serving as chair of the National Academy of Engineering Committee on Minorities in Engineering and as a program officer of the Alfred P. Sloan Foundation. This effort led to a five-fold increase in the number of African Americans earning bachelor’s degrees in engineering from 1974 to 2011.

In 1977, he received a presidential appointment as Assistant Secretary of the Army for Research, Development, and Acquisition. He managed the development of major Army weapons systems, including the Abrams tank, the Apache helicopter, and the Patriot missile system. It was for this work that he later was elected to the National Academy of Engineering. Later, he served as president of Prairie View A&M University in Texas, vice president of research and graduate studies at Michigan State University, and professor of Electrical and Computer Engineering at Michigan State University.

He is a Hesburgh Trustee of the University of Notre Dame, a member of the President’s Advisory Committee of Xavier University of New Orleans, and chair of the Racial Justice and Equity Committee of the National Academy of Engineering.
Swayam Bagaria  Advisor: Veena Das. *Immortal Bodies: Between Widow Burning and Hinduism*

Onder Celik  Advisor: Veena Das. *Life Underground: Hunting for Armenian Treasure in a Post-Genocide Landscape*

Gregoire Hervouet-Zeiber  Advisor: Veena Das. *Finding Oneself in Civilian Life: Ex-combatants in Putin’s Russia*


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**DEPARTMENT OF BIOLOGY**

Erica Boehm  Advisor: Rejji Kuruvilla. *Neuron-Satellite Glial Cell Interactions In Sympathetic Nervous System Development*

Justin Brodie-Kommit  Advisor: Samer Hattar. *Atoh7-independent specification of retinal ganglion cell identity*

Charlotte Choi  Advisor: John Kim. *Sex-Specific Regulation in PiRNA Biogenesis During Germline Development*

Peter Deford  Advisors: Vincent Hilser, James Taylor. *Development and Applications of Shape-Based DNA motifs*

Riti Gupta  Advisor: Christian M. Kaiser. *Investigating SEC-Mediated Translocation*

Elizabeth Kahney  Advisor: Xin Chen. *Characterizing the inheritance of epigenetic information in the Drosophila germline.*

Leda Lotspeich-Cole  Advisor: Sarah Woodson. *Ascorbate-Sensing uORF Controls GDP-L-Galactose Phosphorylase (GGP) mRNA Translation*

Maryam Mukhamedova  Advisor: Karen Beemon. *Genetic Characterization of Antibody Responses After Vaccination with a Prefusion-Stabilized Respiratory Syncytial Virus Fusion Protein Vaccine (DS-Cav1)*


Nathan Roach  Advisor: Michael Schatz. *Computational Analysis of the Transcriptome Using Long-Read RNA Sequencing*

Marla Tharp  Advisor: Alex Bortvin. *LINE-1 Retrotransposon Activation in Mouse Fetal Oocytes*
Michael Thomsen  Advisor: Samer Hattar. *A Molecular Toolbox for the Manipulation of Non-Image-Forming Visual Behaviors*

Michael Tisza  Advisor: Jocelyne DiRuggiero. *Rendering the Unseen Virome Visible*

Gherman Uritskiy  Advisors: Jocelyne DiRuggiero, James Taylor. *Microbial community adaptations and dynamics in extremophile microbiomes of the Atacama Desert*

**DEPARTMENT OF BIOPHYSICS**

Amirhossein Ghanbari Nia  Advisor: Sua Myong. *RNA-protein interaction mechanism underlying liquid-liquid phase separation*

Emily Grasso  Advisor: Vincent Hilser. *Characterizing the Interactions Between Disorder and Structure in the D-isoforms of the Human Glucocorticoid Receptor*

Christos Kougentakis  Advisor: Bertrand Garcia-Moreno. *Electrostatic effects in proteins are governed by redistribution of the conformational ensemble.*


Michael Paul  Advisor: Kalina A. Hristova. *Using Quantitative Fluorescence Microscopy to Study the Interactions of Receptor Tyrosine Kinases in Live Cells*

Matthew Sternke  Advisor: Doug Barrick. *Biophysical Investigations of Protein Consensus Sequence Design and Other Sequence-based Design Strategies*

**DEPARTMENT OF CHEMISTRY**

Avery Baumann  Advisor: Van Sara Toi. *Metal-Organic Frameworks: A Multidisciplinary Platform to Improve the Performance and Fundamental Understanding of Lithium-Sulfur Batteries*

Mayukh Bhadra  Advisor: Kenneth D. Karlin. *Diocygen and Nitric Oxide Activatin at Synthetic Copper Complexes: Relevance to Unique Structural Aspects of Metalloprotein Active Sites*

Nicolas Blando  Advisor: Kit H. Bowen, Jr. *Investigating the Reactivity of Size-Selected Metal Oxide Clusters for Organophosphorus Nerve Agent Decomposition*


Juan Chamorro  Advisor: Tyrel McQueen. *An Exploration Into The Chemistry of Quantum Materials*

Francis Claire  Advisor: Thomas Kempa. *Structurally and Electronically Responsive Metal–Organic Frameworks Assembled from a Modular Building Unit*

John Ferguson  Advisor: Rebekka Klausen. *Synthesis of Organosilane and Organoborane Materials*
Benjamin Frank  Advisor: D. Howard Fairbrother. *Environmental Transformations of Next-Generation Carbon Nanomaterials*

Jesse Gordon  Advisor: David P. Goldberg. *Dioxygen Activation by Molecular Analogues of Thiolate-ligated, Oxidative Nonheme Iron Enzymes*

Xu Han  Advisor: Van Sara Toi. *Realizing Selective Electrochemical CO2 and N2 Reduction by Interfacial Engineering and Rational Catalyst Design*

Hyun Kim  Advisor: Kenneth D. Karlin. *Heme-Iron and Heme/Copper Oxygen Chemistry of Metalloenzyme Active Sites with Bio-Inspired Synthetic Model Systems*

John Mallon  Advisor: Scott Bailey. *Self/Non-Self Discrimination and Interference Activation in a 1-B CRISPR-Cas System*

Zachary Mazanek  Advisor: Jungsan Sohn. *(re)Defining the mechanism and specificity of inflammasome regulation by POPs*

Christopher Pasco  Advisor: Tyrel McQueen. *Electronic and magnetic properties of layered two-dimensional materials*

Shelby Yuhas  Advisor: Marc Greenberg. *Identification of Irreversible Inhibitors of DNA Polymerase β*

**DEPARTMENT OF CLASSICS**

Ryan Franklin  Advisor: Silvia Montiglio. *Body-Texts: Heroines, Authors, and the Materialities of Romance in the Ancient Greek Novel*

Laura Hutchison  Advisor: Alan Shapiro. *Retrospection in Classical Athens: Notions of the Past in the Late Fifth Century*

Adam Tabeling  Advisor: Alan Shapiro. *Dea Virtus: Martial Glory as Divinity in the Literary and Visual Culture of Ancient Rome*

**DEPARTMENT OF COGNITIVE SCIENCE**

Thitaporn Chaisilprungraung  Advisor: Michael E. McCloskey. *Axes in Object-Centered Shape Representation: Insights from Mirror-Image Reflection Errors*

Celia Litovsky  Advisor: Brenda C. Rapp. *Structural Connectivity Underlying Executive Processing in Post-Stroke Aphasia*

Carolyn Lutken  Advisor: Geraldine Legendre. *Cross-Linguistic Investigations of Syntactic Creativity Errors in Children's Wh-questions*
DEPARTMENT OF COMPARATIVE THOUGHT AND LITERATURE

Lucy Bergeret  Advisor: Yi-Ping Ong. Reading in Trance: Hypnosis and the Novelistic Imagination

Michel Davidoff Cohen  Advisor: Paola Marrati. Metaphysical Themes in Kant’s Theoretical Philosophy

DEPARTMENT OF EARTH AND PLANETARY SCIENCES

Gaige Kerr  Advisor: Darryn Waugh. Elucidating the relationships between surface-level ozone and meteorology

Mahmoud Osman  Advisor: Benjamin Zaitchik. Flash Droughts in The United States: Definitions, Drivers, Patterns, and Trends

DEPARTMENT OF ECONOMICS

Sung Ah Bahk  Advisor: Robert A. Moffitt. ESSAYS ON LABOR MARKET TRANSITIONS AND WELFARE

Luigi Durand  Advisor: Olivier Jeanne. Essays in International Macroeconomics

Hanchen Jiang  Advisor: Robert A. Moffitt. ESSAYS ON HOUSING AFFORDABILITY, CHILD DEVELOPMENT AND ECONOMIC MOBILITY


Osama Khan  Advisor: Robert A. Moffitt. Essays on Public Choice and Political Competition

DEPARTMENT OF ENGLISH

Aaron Begg  Advisor: Christopher Nealon. THE POET AND THE HEGEMON: ESSAYS IN THE LITERARY HISTORY OF CAPITALISM, 1850-1950

Noelle Dubay  Advisor: Jared W. Hickman. Works like a Charm: The Occult Resistance of Nineteenth-Century American Literature

Tobias Huttner  Advisor: Christopher Nealon. On Occasion: American Poetry at the Margins of the Wage, 1865-1973


DEPARTMENT OF HISTORY

JOHN BANDY  Advisor: Tobie Meyer-Fong.  Making Waves: Academy Activists and the Maritime Frontier in Early 19th Century Fujian and Taiwan


MEREDITH GAFFIELD  Advisor: Michael Kwass.  Whiteness on Credit: Migration, Race, and Social Capital in France and the Caribbean, 1763-1791


ASMIN OMEROVIC  Advisor: Gabrielle M. Spiegel.  Between Islam, Christianity, and Bogomil Heresy: The Slave Trade in the Bosnian Slaving Zone, 1280-1464


MORRIS ELMER SPELLER  Advisor: Nathan D. Connolly.  Reckoning with Redlines: Racism, Housing, Finance, and the Boundaries of Rehabilitation


SARAH TEMPLIER  Advisor: Toby L. Ditz, Philip Morgan.  The Power of Consumer Desire: The Trade and Consumption of Textiles and Clothing in French and British North America, 1713-1760

JENNIE WILLIAMS  Advisor: Philip Morgan.  “Oceans of Kinfolk”: the Coastwise Traffic of Enslaved People to New Orleans, 1820-1860

DEPARTMENT OF HISTORY OF ART

ELIZABETH BERNICK  Advisor: Stephen Campbell.  Drawing Connections: Cesare da Sesto’s Sketchbook and the Production of Style between Milan and Messina

MARIA LUMBRERAS CORUJO  Advisor: Felipe Pereda.  The Facture of Evidence: Portraits, Painting and Artistic Knowledge in Spain, 1590-1640

AMY MIRANDA  Advisor: Marian Feldman.  Relational Spaces of the Roman Empire: Spatial Experiences of Architecture in Rome’s Provinces During the Antonine Principate, 138-192 CE

JAMES PILGRIM  Advisor: Stephen Campbell.  Jacopo Bassano and the Environment of Painting

DEPARTMENT OF HISTORY OF SCIENCE AND TECHNOLOGY

JOANNA BEHRMAN  Advisor: Joris Hans Angele Mercelis.  The Other Physicists: Female Physicists at U.S. Women’s Colleges, 1870-1940
DEPARTMENT OF MATHEMATICS

Daniel Fuentes-Kuethan  Advisor: Emily Riehl. Goodwillie Towers of Infinity-Categories and Desuspension

Hanveen Koh  Advisor: Brian Smithling. Towards a conjecture of Pappas and Rapoport on a scheme attached to the symplectic group

Jordan Paschke  Advisor: Christopher Sogge. Uniform Weyl Asymptotics for Off-Diagonal Spectral Projections

DEPARTMENT OF MODERN LANGUAGES AND LITERATURES

Eric Avila Ponce de Leon  Advisor: William Egginton. Segunda Tlazolteotl: hacia la mujer en la obra de Juan García Ponce como diosa moderna del siglo XX en México

Eric Bulakites  Advisor: Derek Schilling. Screening the Classroom: Cinema and Education in France (1996-2019)

Alfredo Cumerma  Advisor: Eduardo Gonzalez. Cuba’s Nation Brand: War and Intelligence in the Fiction of Norberto Fuentes

Catherine Freddo  Advisor: Walter E. Stephens. Vox Populi: Vernacular Politics in Early Modern Italy

Chiara Girardi  Advisor: Eugenio Refini. Talking to Women, Advising Men: The Female Elderly Advisor in Late Medieval and Renaissance Italian Literature

Christina Hinz  Advisor: Katrin Pahl. Broken Bodies at Play: Physical Comedy and Ironic Bodies in Heinrich von Kleist’s Dramas

Nicole Karam  Advisor: Wilda Anderson. Poetry in the Praetorium: Legal Eloquence in Prerevolutionary France


DEPARTMENT OF NEAR EASTERN STUDIES


Lingxin Zhang  Advisor: Richard Jasnow. Writing Her Fate: Women’s Astrological Manuals from Roman Egypt (PSI inv. D 35 + P. Carlsberg 684 and P. Carlsberg 100)

DEPARTMENT OF PHILOSOPHY

Nikola Andonovsk  Advisor: Steven Gross. On Episodic Memory: Preservation, Reconstruction, and Modeling
Kim Berghaus  Advisor: David Kaplan. *Minimal Thermal Friction in Cosmology*

Michael Bjerngaard  Advisor: Oleg V. Tchernyshyov. *Neutron Scattering off WEYL Semimetals*

Sumit Dahal  Advisor: Charles L. Bennett. *Detectors for the Cosmology Large Angular Scale Surveyor (CLASS)*

Sayak Dasgupta  Advisor: Oleg Tchernyshyov. *Aspects of the Micromagnetic Lagrangian: Dualities, Gauge Structure and Spin Waves*

Marco Aurelio Galvani Cunha  Advisor: Mark O. Robbins. *Nonequilibrium Dynamics in Polymers Near Interfaces and Fluids Under Flow*

Kirsten Hall  Advisor: Nadia Zakamska. *Understanding Galaxy Evolution and Large-Scale Structure Formation Through (Sub-)Millimeter Eyes*

Yajing Huang  Advisor: Charles L. Bennett. *Statistical Analysis of the Cosmic Microwave Background*

Jeffrey Iuliano  Advisor: Tobias Marriage. *Cryogenic Receiver Development for the Cosmology Large Angular Scale Surveyor Telescopes*

Cristina Ana Mantilla Suarez  Advisor: Petar Maksimovic. *Probing new physics using Initial State Radiation Jets at the Large Hadron Collider*

Joseph Monti  Advisor: Mark O. Robbins. *Contact and Friction for Surfaces with Roughness on Atomic to Macroscopic Scales*

Evan Plunkett  Advisor: Daniel Reich. *Electronic Effects of Charge Trapping in Functionalized Polymer Dielectrics*

David Rivas  Advisor: Robert Leheny. *Investigations into Quasi-Two-Dimensional Active Matter Systems using Colloidal Probes*

Youcheng Wang  Advisor: N. Peter Armitage. *THz and microwave spectroscopy on strongly correlated conductors*

Michael Albert  Advisor: Daniel Horace Deudney. *Crisis and Individuation: Mapping and Navigating the Planetary Crisis Convergence*

Joseph Becker  Advisor: Steven R. David. *Institutions of Animosity: A New Lens for Explaining the U.S.-Iranian Relationship and the Roots of Intractable Conflict*

Jishnu Guha-Majumdar  Advisor: Jane Bennett. *Property’s Cry: Race, Animality, and Vulnerability*

**DEPARTMENT OF PSYCHOLOGICAL AND BRAIN SCIENCES**


Kurt Fraser  Advisor: Patricia Janak. *Setting the Occasion for Reward-seeking in Brain and Behavior*

Li Guo  Advisor: Jason Fischer. *The interaction of intuitive physics with attention and perception*

Kevin Himberger  Advisor: Christopher Honey. *Reconsidering Visual Statistical Learning: Effects of Attention, Assessment, and Associability*

Te Jones  Advisor: Cynthia Moss. *Environmental Clutter Elicits Behavioral Adaptations During Natural Behaviors in Echolocating Bats*

Sein Kim  Advisor: Marina Bedny. "*Visual" knowledge in the absence of visual experience*

You-Ping Yang  Advisor: Veit Stuphorn. *Primate anterior insular cortex represents economic decision variables postulated by Prospect theory*

**DEPARTMENT OF SOCIOLOGY**


Christine Jang  Advisors: Andrew J. Cherlin, Stefanie DeLuca, Kathryn Edin. *Managing Disinvestment: Race, Neighborhood, and Real Estate in Baltimore*


Smriti Upadhyay  Advisors: Rina Agarwala, Beverly Judith Silver. *Organized Labor and the Politics of Hindu Right-wing Hegemony*

Allison Young  Advisors: Stefanie DeLuca, Kathryn Edin. *Making it Count: Resources, High School Context, and the Life Course in Students’ College Decision Making*
History of Academic Regalia

The doctorate of philosophy is the highest academic degree offered by a university. It signifies years of hard work and creativity, resulting in noteworthy research and scholarship that advances the body of human knowledge. Today’s hooding ceremony honors our doctoral students, recognizing their tremendous achievement, as well as the mentorship of their devoted advisors.

The tradition of academic dress dates back to the 12th century, when universities were taking shape in Europe. Academic robes developed for a series of reasons, including ensuring the warmth of scholars, who toiled in poorly heated spaces. Because of the close connection between universities and the church, scholars were often clerics. Many scholars had tonsured—or shaved—heads so hoods were a practical way to keep them warm. Universities did not always have dedicated campuses, so clerical garb also served to set scholars apart. In the 14th century, the University of Coimbra issued the first formal order requiring their scholars to wear gowns. During the reign of King Henry VII in the 16th century, the universities of Oxford and Cambridge adopted a more comprehensive code of academic dress, the origin of what is used today.

The practice of wearing academic regalia in the United States dates to colonial times, when the schools that are today Columbia and Princeton universities continued England’s tradition of the daily use of academic costume for scholars. After the Civil War, the use of gowns was largely relegated to formal events, such as commencement. In 1887, Williams College had the first college-specific gowns designed for graduation. In 1895, the Intercollegiate Commission adopted a code of academic dress, regulating all aspects of gowns including their cut, style, color, and material. Today, the American Council on Education oversees the codification of academic regalia, last amended in 1987. Hoods for the doctoral degree are four feet in length, while those for bachelor’s and master’s degrees are three and three and a half feet respectively. Only the doctoral hood is lined, using the official colors of the university conferring the degree—sable and gold in the case of Johns Hopkins.

Today you are formally presented with your hood, the outward symbol of your accomplishments as a scholar. In donning this hood, you join a line of scholars dating back centuries, a line of scholars who have worked to advance the body of knowledge for humanity since the Middle Ages. Johns Hopkins is honored to present you with this hood, which proclaims to the world that you are the best of our university.

Congratulations.