

# COMMENCEMENT EXERCISES

SOUTHWESTERN GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

OF

THE UNIVERSITY OF TEXAS

SOUTHWESTERN MEDICAL CENTER



THURSDAY, MAY 16

TWO THOUSAND TWENTY-FOUR

SEVEN P.M.

TOM AND LULA GOOCH AUDITORIUM

DALLAS, TEXAS



## **THE VERNIE A. STEMBRIDGE, M.D. ACADEMIC MACE**

UT Southwestern's Vernie A. Stembridge, M.D., Academic Mace is carried in processions and displayed on ceremonial occasions. This symbol of the authority of the faculty to grant degrees, like much of our current academic pageantry, dates from the Middle Ages. The Stembridge Mace was designed by a UT Southwestern alumnus in memory of Vernie A. Stembridge, M.D., a much admired and respected member of UT Southwestern's faculty from 1959 to 2000. The execution of the design was by the Wm. B. Schieffer Studio; the work was completed in 2003.

At the top of the Stembridge Mace sits a Grecian amethyst. The amethyst is traditionally associated with healing of mind, body, and spirit; and service and humility. Some of this amethyst's crystalline facets remain rough and natural while others are smooth and polished to suggest the effect of education upon human attributes.

The Stembridge Mace exhibits a head with seven *bas-relief* cameos: the Aesculapian staff represents the healing arts; the interwoven star indicates the close relationship of the health care professions, the health care team, and the Lone Star State; the dawn offers the promise of a new beginning, or "commencement;" the pyramid symbolizes the creative intellect; the silhouette of Texas (with Dallas indicated) stands for our State and city commitment to education, and the concurrent responsibility of students and faculty to serve our city and State; the double helix (DNA molecule) exemplifies modern biomedical discovery; and the scroll symbolizes the passing of knowledge from teacher to student over the generations.

The overall configuration of the Stembridge Mace suggests the torch of learning. The wooden shaft is made of American Black Walnut, turned and shaped to a classical fluted columnar form.

### **MACE BEARER**

The Mace is carried by Maralice Conacci-Sorrell, Ph.D., the holder of the John Perkins Distinguished Professorship.

John Perkins, Ph.D. was a transformative Dean of the Graduate School of Biomedical Sciences at UT Southwestern whose career was tragically cut short by amyotrophic lateral sclerosis. His legacy is honored by The John Perkins Distinguished Professorship, an endowed chair awarded to a faculty member who has made outstanding contribution to the Graduate School.

## ORDER OF EXERCISES

**Presiding** ..... Andrew R. Zinn, M.D., Ph.D.  
*Dean*  
*The University of Texas Southwestern Graduate School of Biomedical Sciences*

### ACADEMIC PROCESSION

#### **Deans and Marshals** **Southwestern Graduate School of Biomedical Sciences**

Deirdre L. Brekken, Ph.D.  
Arnaldo Díaz Vázquez, Ph.D.  
Lisa P. Gardner, Ph.D.  
Rueyling Lin, Ph.D.  
Stuart E. Ravnik, Ph.D.  
Joyce J. Repa, Ph.D.

#### **Mace Bearer**

Maralice Conacci-Sorrell, Ph.D.

*The audience is requested to stand as the procession enters and remain standing for the National Anthem.*

**Introduction of Speaker** ..... Andrew R. Zinn, M.D., Ph.D.

**Commencement Address** ..... Russell A. DeBose-Boyd, Ph.D.  
*Professor of Molecular Genetics*  
*The University of Texas Southwestern Medical Center*

**Conferring of Degrees** ..... Daniel K. Podolsky, M.D.  
*President*  
*The University of Texas Southwestern Medical Center*

### PROGRAM DESCRIPTIONS AND HOODING

*The audience is requested to delay applause until all candidates have received diplomas.*

**Closing Remarks**..... Andrew R. Zinn, M.D., Ph.D.

### RECESSIONAL

*The audience is requested to stand during the Recessional and to remain standing in place until the graduates have exited.*

## **BIOLOGICAL CHEMISTRY**

Program Director: Benjamin P. Tu, Ph.D.

### **DOCTOR OF PHILOSOPHY**

#### **Christopher Luis Cervantes**

B.S., 2014, Massachusetts Institute of Technology

Ph.D. Dissertation: *“Investigating the Mechanism and Mode of Action of Golgi Toxins”*

Degree Awarded: December 15, 2023

Deepak Nijhawan, M.D., Ph.D., Mentor

#### **Krystal Courtney Johnson**

B.S., 2018, The University of Texas at Austin

Ph.D. Dissertation: *“Dynamic Shuttling of AGO2 to the Nucleus Relieves MicroRNA Repression”*

Degree Awarded: December 15, 2023

David R. Corey, Ph.D., Mentor

#### **Michael Alexander Pontikos**

M.S., 2014, Oxford University

Ph.D. Dissertation: *“Metabolomic Approaches in Parasitology”*

Degree Awarded: August 4, 2023

Margaret A. Phillips, Ph.D. and Noelle S. Williams, Ph.D., Mentors

## **BIOMEDICAL ENGINEERING**

Program Director: W. Matthew Petroll, Ph.D.

### **DOCTOR OF PHILOSOPHY**

#### **Paul Humberto Acosta**

B.S., 2018, University of Arizona

Ph.D. Dissertation: *“Using Tissue Morphology to Infer Intra-tumor Variation in Molecular State and Response”*

Degree Awarded: May 3, 2024

Satwik Rajaram, Ph.D., Mentor

**Zachary Thomas Bennett**

B.S., 2017, The University of Texas at Austin

Ph.D. Dissertation: *“An Ultra-pH-Sensitive Logic Decodes Cancer Imaging and Immunotherapy”*

Degree Awarded: December 15, 2023

Jinming Gao, Ph.D., Mentor

**Carlos Jesus Brambila**

B.S., 2016, San Diego State University

Ph.D. Dissertation: *“Enhancing Nanoparticle Drug Delivery to Brain Tumors with Focused Ultrasound”*

Degree Awarded: December 15, 2023

Ian R. Corbin, Ph.D., Mentor

**Sean A. Dilliard**

B.A., 2017, William Marsh Rice University

Ph.D. Dissertation: *“Elucidating the Impact of Endogenous Proteins on Lipid Nanoparticle Organ-Targeting Outcomes”*

Degree Awarded: August 4, 2023

Daniel J. Siegwart, Ph.D., Mentor

**Yin Gao**

B.S., 2016, State University of New York, Stonybrook

M.S., 2020, Duke University

Ph.D. Dissertation: *“Intelligent Automatic Treatment Planning for Radiation Therapy”*

Degree Awarded: May 3, 2024

Xun Jia, Ph.D., Mentor

**Sheng Qing Lin**

B.S., 2017, The University of Texas at Austin

Ph.D. Dissertation: *“Efficient Fat/Water Separated MRI: Applications in Musculoskeletal Imaging and Whole-Body Imaging in Multiple Myeloma”*

Degree Awarded: May 3, 2024

Ananth J. Madhuranthakam, Ph.D., Mentor

**Elizabeth Marie Polsdofer**

B.S., 2013, Iowa State University

M.S., 2016, Oregon State University

Ph.D. Dissertation: *“Challenging the Rigor of Alpha/Beta and Relative Biological Effectiveness in Tumor Control Probability Determinations via in Silico Modeling that Incorporates Individualized Biological and Pathologic Data”*

Degree Awarded: May 3, 2024

Michael Story, Ph.D., Mentor

**Limin Zhou**

B.S., 2018, Wuhan University

Ph.D. Dissertation: *“Quantitative Non-Contrast Perfusion Measurements Using Arterial Spin Labeled MRI-Evaluation of Therapy Response in Brain Tumors and Technical Advancements in Kidneys”*

Degree Awarded: May 3, 2024

Ananth J. Madhuranthakam, Ph.D., Mentor

**CANCER BIOLOGY**

Program Director: Rolf A. Brekken, Ph.D.

**DOCTOR OF PHILOSOPHY**

**Ester Alvarez Benedicto**

B.S., 2018, University of Puerto Rico, Rio Piedras

Ph.D. Dissertation: *“Engineering Lipid Nanoparticle-Mediated Delivery of Nucleic Acids to Lymphoid Organs and Immune Cells”*

Degree Awarded: August 4, 2023

Daniel J. Siegwart, Ph.D., Mentor

**Joseph Louis Bower**

B.S., 2016, University of Arizona

Ph.D. Dissertation: *“Dual Receptor Uptake of Low-Density Lipoprotein Docosahexaenoic Acid (LDL-DHA) Elicits Differential Sensitivity across Breast Cancer Subtypes”*

Degree Awarded: August 4, 2023

Ian R. Corbin, Ph.D., Mentor

**Yan Fang**

B.S., 2015, Tsinghua University

M.S., 2018, Tsinghua University

Ph.D. Dissertation: “*The Mechanism of cGAMP-induced Antitumor Immunity*”

Degree Awarded: May 3, 2024

Zhijian “James” Chen, Ph.D., Mentor

**Mauricio Antonio Marquez Palencia**

B.S., 2017, University of California, San Diego

Ph.D. Dissertation: “*AXL-WRNIP1 Mediated Replication Stress Response Promotes Therapy Resistance and Metachronous Metastasis in HER2+ Breast Cancer*”

Degree Awarded: December 15, 2023

Srinivas Malladi, Ph.D., Mentor

**Carla Sofia Rodriguez Tirado**

B.S., 2018, University of Puerto Rico, Rio Piedras

Ph.D. Dissertation: “*UBE2J1 is the E2 Ubiquitin-Conjugating Enzyme Regulating Androgen Receptor Degradation and Antiandrogen Resistance*”

Degree Awarded: May 3, 2024

Ping Mu, Ph.D., Mentor

**Mingrui Zhu**

B.S., 2017, Wuhan University

Ph.D. Dissertation: “*Targeting and Modeling Immune Resistance in Lung Cancer*”

Degree Awarded: August 4, 2023

Esra A. Akbay, Ph.D., Mentor

**CELL AND MOLECULAR BIOLOGY**

Program Director: Angelique W. Whitehurst, Ph.D.

**DOCTOR OF PHILOSOPHY****Julita Chlebowicz**

B.S., 2015, Warsaw University of Technology

M.S.E., 2017, Warsaw University of Technology

Ph.D. Dissertation: “*Decoding Sequence Determinants of Alpha Synuclein Aggregation*”

Degree Awarded: August 4, 2023

Marc I. Diamond, M.D., Mentor

**Bianca Catriona Field**

B.A., 2013, Barnard College

Ph.D. Dissertation: *“Systemic Impact of Insulin-Sensitized Adipocytes and their Precursors”*

Degree Awarded: December 15, 2023

Phillipp E. Scherer, Ph.D., Mentor

**Atossa Ghorashi**

B.S., 2014, Stockton State College

Ph.D. Dissertation: *“Fucose in the Time of Cholera: Host Cell Glycoproteins and Glycolipids Play Opposing Roles in Cholera Intoxication”*

Degree Awarded: August 4, 2023

Jennifer J. Kohler, Ph.D., Mentor

**Mehmet Oguz Gok**

B.A., 2015, Sabanci University

B.S., 2018, Sabanci University

Ph.D. Dissertation: *“Investigating the Regulation of Receptor-Mediated Mitophagy”*

Degree Awarded: May 3, 2024

Jonathan R. Friedman, Ph.D., Mentor

**Amrita Shrikant Gokhale**

M.S., 2016, Savitribai Phule Pune University

Ph.D. Dissertation: *“Understanding the Role of Loner in Myoblast Fusion”*

Degree Awarded: August 4, 2023

Elizabeth H. Chen, Ph.D., Mentor

**Lizbeth Perez Castro**

B.S., 2017, University of Puerto Rico, Cayey

Ph.D. Dissertation: *“Discovery of Novel Functions of the Transcription Factor AHR and its Tryptophan-Derived Ligands in Cancer Cells”*

Degree Awarded: May 3, 2024

Maralice Conacci-Sorrell, Ph.D., Mentor

**Hande C. Piristine**

B.A., 2014, Wellesley College

Ph.D. Dissertation: *“The Role of Metabolic Inflexibility in Heart Failure”*

Degree Awarded: December 15, 2023

Joseph A. Hill, M.D., Ph.D., Mentor

**Luis Carlos Reza Herrera**

B.S., 2018, The University of Texas at El Paso

Ph.D. Dissertation: “*Analysis of Meiotic Cancer Testis Antigens and their Contribution to Tumorigenesis*”

Degree Awarded: August 4, 2023

Angelique W. Whitehurst, Ph.D., and Anthony J. Davis, Ph.D., Mentors

**Manolo Uriel Rios**

B.S., 2017, The University of Texas at Dallas

M.S., 2018, The University of Texas at Dallas

Ph.D. Dissertation: “*Molecular Mechanisms of Centrosome Assembly and Strength*”

Degree Awarded: May 3, 2024

Jeffrey B. Woodruff, Ph.D., Mentor

**Spencer Dewayne Shelton**

B.S., 2018, Texas State University

Ph.D. Dissertation: “*Consequences of Pathogenic Mitochondrial DNA Mutations in Cancer Progression*”

Degree Awarded: May 3, 2024

Prashant Mishra, M.D., Ph.D., Mentor

**Natalie Ortiz Speer**

B.S., 2019, University of California, San Diego

Ph.D. Dissertation: “*Molecular Dissection of Bsc2: a Novel Negative Regulator of Triglyceride Lipolysis for a Lipid Droplet Subpopulation*”

Degree Awarded: December 15, 2023

William M. Henne, Ph.D., Mentor

**CLINICAL PSYCHOLOGY**

Program Director: Richard C. Robinson, Ph.D.

**DOCTOR OF PHILOSOPHY**

**Ellen Marie Andrews**

B.A., 2017, Vanderbilt University

Ph.D. Dissertation: “*A Randomized Controlled Trial of a Cellphone-Based Intervention to Promote Lethal Means Safety in Suicidal Adolescents*”

Degree Awarded: August 4, 2023

Beth D. Kennard, Psy.D., ABPP, Mentor

**Haley Sora Brown**

B.A., 2015, Baylor University

MSW, 2017, Texas Christian University

Ph.D. Dissertation: *“Impact of Web-Based Psychosocial Intervention on Perceived Ability to Address Cancer-Related Concerns in Adolescents and Young Adults with Cancer”*

Degree Awarded: August 4, 2023

Brittany C. Hall, Ph.D. and Laura S. Howe-Martin, Ph.D., ABPP, Mentors

**Tanisha R. Clark**

B.A., 2009, Spelman College

M.Ed., 2016, Southern Methodist University

Ph.D. Dissertation: *“Racial Socialization Intervention for African American Children with Experiences of Racialized Trauma: Training Development and Pilot Among Community-Based Clinicians”*

Degree Awarded: August 4, 2023

Jill D. McLeigh, Ph.D. and Sunita M. Stewart, Ph.D., ABPP, Mentors

**Karen Atilagna Dorsman**

B.A., 2013, Universidad Católica del Uruguay

Ph.D. Dissertation: *“Adaptive Behavior in a Sample of Culturally and Linguistically Diverse Children with 22q11.2 Deletion Syndrome”*

Degree Awarded: August 4, 2023

Veronica B. Edgar, Ph.D., Mentor

**Afsoon Gazor**

B.S., 2016, The University of Texas at Arlington

M.Ed., 2018, Vanderbilt University

Ph.D. Dissertation: *“Pilot Treatment Development: Improving Adolescent Suicide Risk with a Standardized, Brief, Group Sleep Intervention”*

Degree Awarded: August 4, 2023

Sunita M. Stewart, Ph.D., ABPP and William D. Brown, Ph.D., Mentors

**William Foster Goette**

B.A., 2014, The University of Texas at Tyler

M.S., 2016, The University of Texas at Tyler

Ph.D. Dissertation: *“Explaining Racial and Ethnic Alzheimer's Disease Disparities with Joint Estimation of Life Course Social Inequities and Measurement Bias in Verbal Memory Assessment”*

Degree Awarded: December 15, 2023

Laura J. Lacritz, Ph.D., Mentor

**Allison P. Gregg**

B.A., 2018, William Marsh Rice University

Ph.D. Dissertation: *“Establishing Neurocognitive Profiles of Major Depressive Disorder Subtypes”*

Degree Awarded: August 4, 2023

Shawn M. McClintock., Ph.D., M.S.C.S., Mentor

**Jessica Orobio**

B.S., 2014, Texas A&M University

Ph.D. Dissertation: *“The Development and Validation of a Spanish Verbal Memory Test for Children (SVMT-C): A Pilot Study”*

Degree Awarded: August 4, 2023

Joy Neumann, Psy.D., and Lana L. Harder, Ph.D., ABPP, Mentors

**Jessica Marie Woodford**

B.A., 2011, The Ohio State University

M.A., 2014, Pepperdine University

Ph.D. Dissertation: *“Development of the Multicultural Curriculum Appraisal (MCCA): A Process to Promote Multicultural Infusion into APA Accredited Doctoral Program Curriculum”*

Degree Awarded: August 4, 2023

Sunita M. Stewart, Ph.D., ABPP and Kipp R. Pietrantonio, Ph.D., Mentors

**GENETICS, DEVELOPMENT, AND DISEASE**

Program Director: Ondine B. Cleaver, Ph.D.

**DOCTOR OF PHILOSOPHY**

**Daniel Alejandro Armendariz**

B.S., 2016, The University of Texas at El Paso

Ph.D. Dissertation: *“CHD-Associated Enhancers Shape Human Cardiomyocyte Lineage Commitment”*

Degree Awarded: August 4, 2023

Gary C. Hon, Ph.D., Mentor

**Phoebe Catherine Carter**

B.S., 2017, The University of Texas at Dallas

Ph.D. Dissertation: *“Investigating the Role of Hippo/Warts Signaling in Sarcomatoid Renal Cell Carcinoma”*

Degree Awarded: December 15, 2023

Thomas J. Carroll, Ph.D., Mentor

**Andreas Chenzhang Chai**

B.S., 2016, Johns Hopkins University

Ph.D. Dissertation: *“Precision Gene Editing for Muscle Diseases”*

Degree Awarded: August 4, 2023

Eric N. Olson, Ph.D., Mentor

**Tyron Chang**

B.S., 2015, California State University, Chico

Ph.D. Dissertation: *“New Roles for Mitochondria in Shaping Antiviral and Stress Responses”*

Degree Awarded: May 3, 2024

Dustin C. Hancks, Ph.D., Mentor

**Yujing Cheng**

B.S., 2017, Tsinghua University

Ph.D. Dissertation: *“A Non-Canonical Role for a Small Nucleolar RNA in Ribosome Biogenesis and Cellular Senescence”*

Degree Awarded: May 3, 2024

Joshua T. Mendell, M.D., Ph.D., Mentor

**Lauretta El Hayek**

B.S., 2015, Lebanese American University

M.S., 2018, Lebanese American University

Ph.D. Dissertation: *“From Genetics to Neurodevelopment: Identifying the Role of the Chromatin Remodeler KDM5A in Autism Spectrum Disorder”*

Degree Awarded: December 15, 2023

Maria H. Chahrour, Ph.D., Mentor

**Tuozhi Huang**

B.S., 2016, Tsinghua University

Ph.D. Dissertation: *“Mechanism and Functions of STING-induced Noncanonical Autophagy”*

Degree Awarded: May 3, 2024

Zhijian “James” Chen, Ph.D., Mentor

**Usman Hyder**

B.S., 2018, The University of Texas at Dallas

Ph.D. Dissertation: “*Delineating Mechanisms of Signal-Induced RNA Polymerase II Transcription*”

Degree Awarded: December 15, 2023

Ivan D’Orso, Ph.D., Mentor

**Benjamin Thomas Jones**

B.S., 2016, Texas A&M University

Ph.D. Dissertation: “*The Role of Target-Directed microRNA Degradation in Mammalian Development*”

Degree Awarded: December 15, 2023

Joshua T. Mendell, M.D., Ph.D., Mentor

**Chunyang Ni**

B.S., 2017, Sun Yat Sen University

Ph.D. Dissertation: “*Dynamic Regulation of Ribosome Biogenesis and its Role in Early Brain Development*”

Degree Awarded: December 15, 2023

Michael Buszczak, Ph.D., Mentor

**Nicole Marie Novaresi**

B.A., 2015, De Pauw University

Ph.D. Dissertation: “*Therapeutic Targeting of Protocadherin 7 in Lung Adenocarcinoma*”

Degree Awarded: December 15, 2023

Kathryn A. O’Donnell, Ph.D., Mentor

**Carlos Andres Pinzon Arteaga**

D.V.M., 2015, National University of Colombia

M.S., 2017, Texas A&M University

Ph.D. Dissertation: “*From Stem Cells to Blastoids: Unraveling Early Development and Gene Silencing Mechanisms*”

Degree Awarded: December 15, 2023

Jun Wu, Ph.D., Mentor

**Daniel Andrew Schmitz**

B.S., 2017, California State University, Long Beach

Ph.D. Dissertation: *“From Enhancers to Mitochondria: Modified Stem Cells to Study Development and Pluripotency”*

Degree Awarded: May 3, 2024

Jun Wu, Ph.D., Mentor

**Choushi Wang**

B.S., 2018, Wuhan University

Ph.D. Dissertation: *“How Prostate Cancer Cells Modify Lineage and Microenvironment to Escape Targeted Therapy”*

Degree Awarded: May 3, 2024

Ping Mu, Ph.D., Mentor

**Jingcheng Wang**

B.S., 2017, Wuhan University

Ph.D. Dissertation: *“Topological Regulation of TM4SF20”*

Degree Awarded: August 4, 2023

Jin Ye, Ph.D., Mentor

**Yichi Zhang**

B.S. 2014, Queens University

M.S., 2016, Carleton University

Ph.D. Dissertation: *“Mechanistic Basis of Skeletal Muscle Wasting Diseases”*

Degree Awarded: December 15, 2023

Eric N. Olson, Ph.D. and Rhonda S. Bassel-Duby, Ph.D., Mentors

**IMMUNOLOGY**

Program Director: Anne B. Satterthwaite, Ph.D.

**DOCTOR OF PHILOSOPHY**

**Sushobhna Batra**

B.S., 2016, State University of New York, Buffalo

Ph.D. Dissertation: *“VCP Co-factors Dictate the Fate of Tau Seeds”*

Degree Awarded: August 4, 2023

Marc I. Diamond, M.D., Mentor

**Ryan Shie Huang**

B.S., 2016, The University of Texas at Austin

Ph.D. Dissertation: "*LILRB3 Supports Immunosuppressive Activity of Myeloid Cells and Tumor Development*"

Degree Awarded: May 3, 2024

Chengcheng "Alec" Zhang, Ph.D., Mentor

**Kennady Noelle Knox**

B.S., 2017, Texas Tech University

Ph.D. Dissertation: "*STING Signaling in Adaptive Immunity and Respiratory Pathophysiology*"

Degree Awarded: May 3, 2024

Nan Yan, Ph.D., Mentor

**MOLECULAR BIOPHYSICS**

Program Director: Luke M. Rice, Ph.D.

**DOCTOR OF PHILOSOPHY**

**Michael Antonio Cotten**

B.S., 2014, Baylor University

M.S., 2016, Baylor University

Ph.D. Dissertation: "*Modulating Protein-Protein Interactions to Understand Biomolecular Condensate Partitioning*"

Degree Awarded: May 3, 2024

Michael K. Rosen, Ph.D., Mentor

**Umang Goswami**

B.Tech., 2013, Kurukshetra University

M.S., 2018, Texas A&M University

Ph.D. Dissertation: "*Structural Interplay of Anesthetics and Paralytics on Muscle Nicotine Receptors*"

Degree Awarded: August 4, 2023

Ryan E. Hibbs, Ph.D., Mentor

**Casey Elizabeth Hudman-Wing**

B.S., 2016, The University of Texas at Dallas

Ph.D. Dissertation: *“Identifying Novel Interaction Partners for Importin-8 and CRM1/XPO1”*

Degree Awarded: May 3, 2024

Yuh Min Chook, Ph.D., Mentor

**Dagimhiwat Hailu Legesse**

B.S., 2014, San Francisco State University

Ph.D. Dissertation: *“Understanding the Structure and Function of GABA<sub>A</sub> Receptors Using Cryo-Electron Microscopy”*

Degree Awarded: August 4, 2023

Ryan E. Hibbs, Ph.D., Mentor

**Philip Frederick Paul Schmiede**

B.A., 2014, Boston University

Ph.D. Dissertation: *“Structures and Mechanisms of Lysosomal Transporters”*

Degree Awarded: December 15, 2023

Xiaochun Li, Ph.D., Mentor

**Jesus A. Vega Lugo**

B.S., 2018, University Sagrado Corazon

Ph.D. Dissertation: *“Quantitative Analysis of Spatial and Temporal Organization of Cell Surface Receptors”*

Degree Awarded: May 3, 2024

Khuloud Jaqaman, Ph.D., Mentor

**Liwei Wang**

B.S., 2019, Wuhan University

Ph.D. Dissertation: *“Structural Investigation of the Alkaline pH-Dependent Activation of Insulin Receptor-Related Receptor”*

Degree Awarded: December 15, 2023

Xiaochen Bai, Ph.D., Mentor

# MOLECULAR MICROBIOLOGY

Program Director: John W. Schoggins, Ph.D.

## DOCTOR OF PHILOSOPHY

### **Melissa Renee Budicini**

B.S., 2018, University of Notre Dame

Ph.D. Dissertation: “*Factors that Influence Murine Norovirus Stability and Tropism*”

Degree Awarded: May 3, 2024

Julie K. Pfeiffer, Ph.D., Mentor

### **Wesley Berry Buford**

B.S., 2008, San Francisco State University

M.S., 2012, San Diego State University

Ph.D. Dissertation: “*Design, Development, and Interrogation of Salmonella Typhimurium Minimal Effector Networks During Infection*”

Degree Awarded: December 15, 2023

Neal M. Alto, Ph.D., Mentor

### **Matthew Bret McDougal**

B.S., 2018, Louisiana Tech University

Ph.D. Dissertation: “*Investigating Interferon-Inducible Antiviral Effectors through a Virological and Evolutionary Lens*”

Degree Awarded: May 3, 2024

John W. Schoggins, Ph.D., Mentor

### **Moiz Munir**

B.S., 2017, University of Missouri

Ph.D. Dissertation: “*Genome-wide CRISPR Activation Screen Identifies JADE3 as an Antiviral Activator of NF- $\kappa$ B Dependent IFITM3 Expression*”

Degree Awarded: May 3, 2024

Robert C. Orchard, II, Ph.D., Mentor

### **Keyera Larlan Randolph**

B.S., 2017, Saint Mary's University

Ph.D. Dissertation: “*Functional Analysis of KAP1 Requirements for HIV-1 Transcription and Latency Reactivation*”

Degree Awarded: May 3, 2024

Ivan D'Orso, Ph.D., Mentor

**Vivian Kimberly Rojas**

B.S., 2017, The University of Texas at Arlington

Ph.D. Dissertation: “*Gene Regulation of Tartrate Metabolism in Salmonella Typhimurium*”

Degree Awarded: May 3, 2024

Sebastian E. Winter, Ph.D., Mentor

**Da Hee Seo**

B.S., 2017, Brown University

Ph.D. Dissertation: “*Poxvirus A51R Proteins Directly Bind to Microtubules to Antagonize Microtubule Dynamics, Intracellular Transport, and a Cell-Intrinsic Antiviral Response*”

Degree Awarded: May 3, 2024

Don B. Gammon, Ph.D., Mentor

**MASTER OF SCIENCE**

**Nguyen Hoang Khanh Vo**

B.S., 2020, California State University, Sacramento

Master’s Degree Awarded by Examination

Degree Awarded: August 4, 2023

Yuki Obata, Ph.D., Mentor

**NEUROSCIENCE**

Program Director: Maria H. Chahrour, Ph.D.

**DOCTOR OF PHILOSOPHY**

**Newaz Ibrahim Ahmed**

B.S., 2015, The University of Texas at Austin

Ph.D. Dissertation: “*Compensation Between FOXP Transcription Factors Maintains Proper Striatal Function*”

Degree Awarded: August 4, 2023

Genevieve Konopka, Ph.D., Mentor

**Danyal Hassan Alam**

B.A., 2015, Hunter College, City University of New York

Ph.D. Dissertation: *“From Song to Sleep: A Multi-Project Investigation into the Courtship Song of Zebra Finch, Memory Consolidation, and Transgene Expression”*

Degree Awarded: August 4, 2023

Todd F. Roberts, Ph.D., Mentor

**Emre Caglayan**

B.S., 2016, Bilkent University

M.S. 2018, Heidelberg University

Ph.D. Dissertation: *“Molecular Underpinnings of Human Brain Evolution and Cognition at Cellular Resolution”*

Degree Awarded: December 15, 2023

Genevieve Konopka, Ph.D., Mentor

**Ambar Cajigas Hernandez**

B.S., 2016, University of Puerto Rico, Rio Piedras

Ph.D. Dissertation: *“The Role of Stac3 in Synapse Elimination and Maturation”*

Degree Awarded: May 3, 2024

Weichun Lin, Ph.D., Mentor

**Katherine Poinatte**

B.A., 2014, Kenyon College

Ph.D. Dissertation: *“Remodeling of the Axonal and Synaptic Projectome in the Whole Brain and Cervical Spinal Cord Following Motor Cortex Stroke”*

Degree awarded: May 3, 2024

Mark P. Goldberg, M.D., Denise M. Ramirez, Ph.D., and Helen C. Lai, Ph.D.,  
Mentors

**Jennifer Nicole Putman**

B.S., 2015, The University of Texas at Dallas

M.S., 2016, The University of Texas at Dallas

Ph.D. Dissertation: *“Pre-and Postsynaptic MEF2C Promote Experience-Dependent, Input-Specific Development of Local Cortical Excitatory Synapses”*

Degree Awarded: December 15, 2023

Kimberly M. Huber, Ph.D., Mentor

**Natalia Rodriguez-Sosa**

B.S., 2017, University of Puerto Rico, Rio Piedras

Ph.D. Dissertation: “GABA Co-Release from Excitatory Pallidal Projections to the Lateral Habenula Controls Depression-Related Behaviors”

Degree Awarded: May 3, 2024

Steven J. Shabel, Ph.D., Mentor

**Gordon Chandler Werthmann**

B.S., 2017, Brown University

Ph.D. Dissertation: “The Role of Progranulin in Frontotemporal Dementia”

Degree Awarded: August 4, 2023

Joachim Herz, M.D., Mentor

**ORGANIC CHEMISTRY**

Program Director: Uttam K. Tambar, Ph.D.

**DOCTOR OF PHILOSOPHY**

**Jake M. Aquilina**

B.S., 2019, City University of New York, John Jay College of Criminal Justice

Ph.D. Dissertation: “Chemical Investigations in Complex Alkaloid Synthesis”

Degree Awarded: December 15, 2023

Myles W. Smith, Ph.D., Mentor

**James Edward McGettigan, Jr.**

B.S., 2018, Juniata College

Ph.D. Dissertation: “Development of New Stereoselective Reactions Using Alkenyl Boronate Complexes”

Degree Awarded: May 3, 2024

Joseph M. Ready, Ph.D., Mentor

**Cooper Atkins Vincent**

B.S., 2017, Gonzaga University

M.S., 2019, Western Washington University

Ph.D. Dissertation: “Synthesis of Sulfonyl Fluorides and the Total Synthesis of the Rhodocorane Natural Products”

Degree Awarded: December 15, 2023

Uttam K. Tambar, Ph.D., Mentor

**HONORS AND AWARDS FOR EXCELLENCE IN RESEARCH  
AND SERVICE RECEIVED BY 2023-2024 GRADUATES  
SOUTHWESTERN GRADUATE SCHOOL**

**American Heart Association Predoctoral Fellowship**

Andreas Chenzhang Chai (2022)

Umang Goswami (2021)

**Leita Marsh Altrusa Award**

Mehmet Oguz Gok (2024)

**Dean's Discretionary Award (Nominata Finalist)**

Yichi Zhang (2024)

**Howard Hughes Medical Institute Gilliam Fellowship**

Ester Alvarez Benedicto (2021)

**Carmen Miller Michael Award for Scholarship and Service**

Ellen Marie Andrews (2023)

William Foster Goette (2023)

**National Science Foundation Graduate Research Fellowship**

Ester Alvarez Benedicto (2018)

Mauricio Antonio Marquez Palencia (2019)

Matthew Bret McDougal (2019)

Spencer Dewayne Shelton (2019)

**NIH Predoctoral to Postdoctoral Fellow Transition Award**

Usman Hyder (2021)

**NIH Ruth L. Kirschstein National Research Service Award**

Newaz Ibrahim Ahmed (2020)

Zachary Thomas Bennett (2021)

Andreas Chenzhang Chai (2022)

William Foster Goette (2023)

Krystal Courtney Johnson (2020)

Dagimhiwat Hailu Legesse (2020)

Carla Sofia Rodriguez Tirado (2022)

Philip Frederick Paul Schmiede (2022)

Daniel Andrew Schmitz (2022)

## **HONORS AND AWARDS (continued)**

### **Sandra L. Warshak Outstanding Dissertation Award**

Afsoon Gazor (2023)

### **Rush C. Williams Award for Scholarship and Service**

Karen Atelegna Dorsman (2022)

## **CANDIDATES FOR GRADUATE DEGREES MEDICAL SCIENTIST TRAINING PROGRAM**

The Medical Scientist Training Program is a program leading to both the M.D. and the Ph.D. degrees. The University is pleased to note this significant achievement.

### **August 4, 2023**

Andreas Chenzhang Chai (2025)

Michael Alexander Pontikos (2025)

Gordon Chandler Werthmann (2025)

### **December 15, 2023**

Bianca Catriona Field (2025)

Hande C. Piristine (2026)

### **May 3, 2024**

Kennady Noelle Knox (2027)

Moiz Munir (2026)

## ACADEMIC HERALDRY AND REGALIA

Although the people, the places and the styles have changed, you are about to participate in a reenactment of a ceremony, which has existed for nearly nine centuries: the recognition of academic achievement.

The tradition of recognizing academic accomplishment with ceremony, bright color and distinctive dress is an exercise that has existed through the ages. Although the commencement ceremony and academic costume of most colleges and universities in the United States are guided by a twentieth century standard, their roots are found in the development of the universities during the Middle Ages. The medieval universities of Western Europe, such as Paris, Bologna, Cambridge and Oxford, have provided us with an institutional format -- the university structure; a measure of progress -- degrees; and a ceremony of achievement -- commencement.

The academic hood is derived from the cloak, which in medieval times was worn over the gown. Attached to the cloak, at the back of the neck, was a cowl hood that hung down or could be pulled over the head for warmth. After time, this hood became a separate article, worn over the shoulders and hanging down the wearer's back. With the coming into fashion of caps and hats during the fifteenth century, the hoods soon became more ornamental than functional.

Whereas it is generally understood that in Europe gowns were necessary for warmth and hoods covered the academic clerics' tonsured heads, today the American tradition has evolved toward individual expression of the institution. Although the style of the hood is not unique to each institution, the combinations of colors and chevrons have been standardized in the United States for nearly 100 years. The satin colors of the hood lining represent the institution conferring the degree. The academic colors for all components of The University of Texas System are orange and white. The color of the academic hood's velvet trim is distinctive of the degree earned, as is the tassel on the cap. Historical associations of color continue to signify the various faculties and generally carry the traditions established by their early English counterparts. The green of medicinal herbs immediately identifies a medical degree. Philosophy is signified by dark blue, the traditional color of truth and wisdom. The wealth of information earned through research in science is represented by golden yellow. The arts, letters and humanity are represented by the purity of white.

*Cords worn with academic regalia:*

*Green and gold - Alpha Omega Alpha Honor Medical Society*

*Red, white, and blue - US Armed Forces, Active Duty and Veterans*

*Solid color - Medical School Academic College*

*Light blue stoles - Southwestern Academy of Teachers*

*Medals - The University of Texas Academy of Health Science Educators and*

*UT System Regents' Outstanding Teacher Award*

Degrees will be officially conferred to Candidates for Graduation identified in this Commencement Booklet who have met all requirements on the recommendation of the Faculty of the Graduate School for Biomedical Sciences and by virtue of the authority vested in the Faculty and Dean by the Regents of The University of Texas.