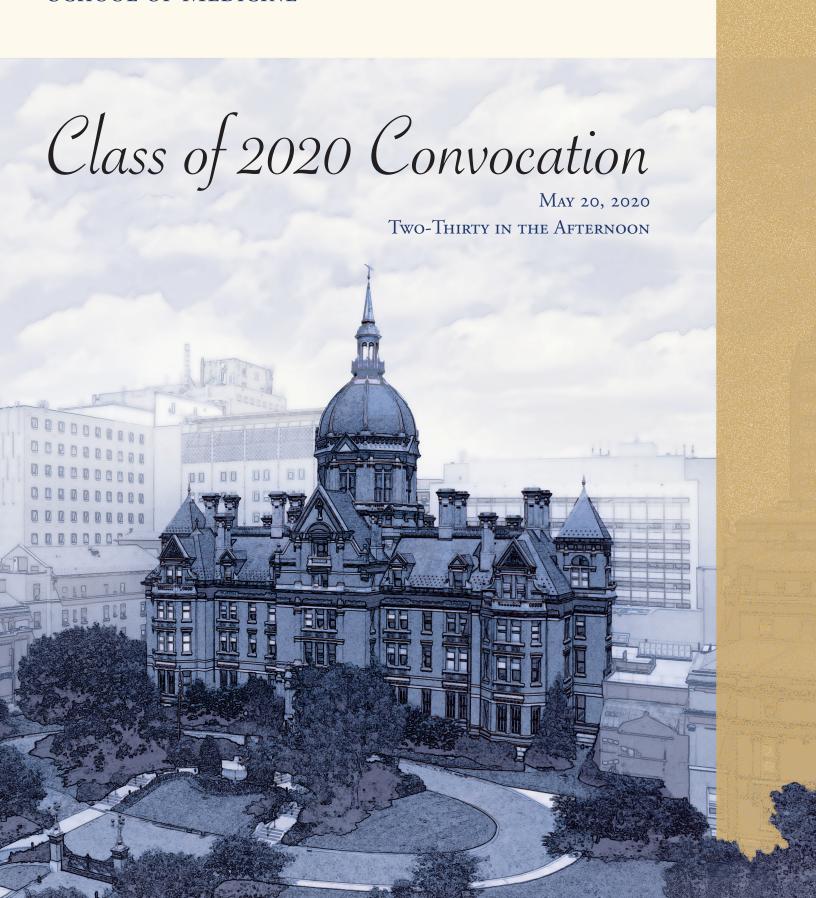
THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE



The Johns Hopkins University School of Medicine

# Class of 2020 Convocation

May 20, 2020

Two-Thirty in the Afternoon



### ORDER OF EVENTS

#### **WELCOME**

**Paul B. Rothman**, The Frances Watt Baker, M.D. and Lenox D. Baker, Jr., M.D. Dean of the Medical Faculty and Chief Executive Officer, Johns Hopkins Medicine

#### **GREETINGS**

**Leslie Ann Rivera-Rosado**, Ph.D. and 2009 Johns Hopkins University School of Medicine Alumna

#### **COMMENTS**

Thomas W. Koenig, Associate Dean for Medical Student Affairs
Rakesh Ram Goli, Medical Student
Peter J. Espenshade, Associate Dean for Graduate Biomedical Education
David Joshua Ottenheimer, Graduate Student

#### **ADDRESS**

**Bonnie Bassler**, Ph.D., Howard Hughes Medical Institute Investigator, Squibb Professor in Molecular Biology, Professor and Chair of Molecular Biology Princeton University

#### ANNOUNCEMENT OF AWARDS

Thomas W. Koenig, Associate Dean for Medical Student Affairs

**Paul B. Rothman**, The Frances Watt Baker, M.D. and Lenox D. Baker, Jr., M.D. Dean of the Medical Faculty and Chief Executive Officer, Johns Hopkins Medicine

**Kevin W. Sowers**, President, Johns Hopkins Health System and Executive Vice President, Johns Hopkins Medicine

#### ANNOUNCEMENT OF TEACHING AWARDS

**Paul B. Rothman**, The Frances Watt Baker, M.D. and Lenox D. Baker, Jr., M.D. Dean of the Medical Faculty and Chief Executive Officer, Johns Hopkins Medicine

#### THE GRADUATE STUDENT OATH

Administered by **Erika L. Matunis**, Professor of Cell Biology

#### THE OATH OF HIPPOCRATES

Administered by

Robert B. Shochet, Associate Professor of Medicine

#### **CLOSING**

**Roy. C. Ziegelstein**, Sarah Miller Coulson and Frank L. Coulson, Jr. Professor of Medicine and the Mary Wallace Stanton Professor of Education

#### THE DAVID TUCKCHOW YUE AWARD

David Tuckchow Yue, a Johns Hopkins M.D., Ph.D. graduate was an inspirational mentor to over 70 students, fellows and members of his Calcium Signals Lab, co-directed the Biomedical Engineering Ph.D. Program, and played an important role in the M.D.-Ph.D. program. In his memory, his wife, Nancy, and sons, Michael, Daniel, and Jonathan, along with his Calcium Signals Lab members, have sponsored the David Tuckchow Yue Award to honor innovative research by outstanding graduate students at the Johns Hopkins School of Medicine.

Awarded to
Priyanka Kothari 2018-2019

#### THE PAUL TALALAY RESEARCH AWARD

The Paul Talalay Research Award was established in 2017 to honor Dr. Paul Talalay, who was a Professor of Pharmacology and Molecular Sciences and started the Young Investigators' Day Program in 1978.

Awarded to

Michael Rowland Blatchely 2018-2019 Karole Nicole D'Orazio 2019-2020

#### THE MICHAEL A. SHANOFF RESEARCH AWARD

The award is made annually to a student for significant research contribution in the medical sciences. The award is made possible by a bequest from the family and friends of the late Dr. Michael A. Shanoff, who earned his undergraduate degree and M.D. and Ph.D. degrees from the Johns Hopkins University.

Awarded to

David Joshua Ottenheimer 2019-2020 Selamawit Abi Woldemeskel 2018-2019

# THE DAVID ISRAEL MACHT RESEARCH AWARD

The David Israel Macht Research Award was established in 1983 by the family of Dr. Macht to commemorate the centenary of his birth. Dr. Macht was a member of the faculty of the Departments of Pharmacology and Medicine in the early part of this century and was a pioneer investigator in the field of opiate alkaloids. The Award is intended to recognize excellence in investigation by a student in the School of Medicine.

Awarded to
Dustin Lee Gable 2019-2020

# THE MARTIN AND CAROL MACHT RESEARCH AWARD

The Martin and Carol Macht Research Award is awarded to a doctoral candidate whose research evidences elegance in science, originality in thought and creativity in approach. The Award was made possible by a donation from the Macht family of Cincinnati, Ohio.

Awarded to
Leire Abalde-Atristain 2018-2019

#### THE METTE STRAND RESEARCH AWARD

The Mette Strand Research Award was established in 1998 as an enduring legacy to graduate education and to honor the contributions to science and education made by Dr. Strand as a Professor of Pharmacology and Molecular Sciences from 1977 until her untimely death in 1997. The award is made possible by the generous contributions of her colleagues and friends as a tribute to her contribution to humanity in the quest for a vaccine against schistosomiasis, her unyielding devotion to science and her role in the training of a generation of graduate students of this institution.

Awarded to
Scott Tyler Albert 2019-2020

#### THE HANS JOAQUIM PROCHASKA RESEARCH AWARD

The Hans Joaquim Prochaska Research Award was established in 1998 to honor outstanding discovery by a student in the School of Medicine.

Awarded to
Daniel Ardeljan 2019-2020

#### THE NUPUR DINESH THEKDI RESEARCH AWARD

This award was established in 2002 to honor the memory of Nupur Dinesh Thekdi, an M.D.-Ph.D. student in the School of Medicine from 1996 until his untimely death in 2001. The award was made possible by the generous contributions of his family and friends and is given to honor outstanding research contributions made by a student in the School of Medicine.

Awarded to Sneha Berry 2019-2020

#### THE BAE GYO JUNG AWARD

The Bae Gyo Jung Research Award was established in 2006 by friends and family in memory of Bae Gyo Jung, who was a predoctoral student in the department of Biological Chemistry.

Awarded to Xuyu Qian 2016-2017

# THE W. BARRY WOOD STUDENT RESEARCH AWARD

The W. Barry Wood Student Research Award recognizes present commitment and future promise in research.

Awarded to
Jeremy Craig Applebaum 2017-2018

# THE HAROLD LAMPORT BIOMEDICAL RESEARCH PRIZE

The memory of Dr. Harold Lamport, a distinguished investigator, is honored by this prize established by the Lamport Foundation. The prize recognizes research contributions.

Awarded to
Seamus Brendan Walters Hughes 2017-2018

# THE HARRY C. SALTZSTEIN PRIZE FOR MEDICAL WRITING

This prize was established in 1990 by the family of Dr. Saltzstein, a 1914 graduate of the Johns Hopkins University School of Medicine, to recognize his life long interest in medical writing. The award is given to that student who has exhibited excellence in medical writing as judged by a faculty committee.

Awarded to
James Paul Senter 2015-2016

# THE EXCELLENCE IN MEDICAL STUDENT RESEARCH AWARD

This award is given annually to students whose efforts in basic biomedical, clinical, or public health research is noteworthy and found deserving of special recognition.

Awarded to
Rohan Bajaj 2017-2018
Tiffany Kay Brocke 2017-2018
Ali Ghasemzadeh 2015-2016
Matthew Ryan Hoyer 2017-2018
Borna Kassiri 2017-2018
Michelle Alexandra Recto 2017-2018
Abigail Yimeng Wang 2017-2018

# SYLVAN SHANE PRIZE IN ANESTHESIOLOGY AND CRITICAL CARE MEDICINE

This prize, established by Dr. Sylvan Shane, a former member of the faculty in Anesthesiology and Critical Care Medicine, recognizes an outstanding medical student making a career choice in Anesthesiology.

Awarded to
Tymoteusz Jan Kajstura

# THE HASKINS K. KASHIMA, M.D. PRIZE IN OTOLARYNGOLOGY-HEAD AND NECK SURGERY

This prize, which honors Dr. Haskins K. Kashima, a former Professor in the Department of Otolaryngology-Head and Neck Surgery, recognizes an outstanding medical student who has chosen a career in Otolaryngology-Head and Neck Surgery.

Awarded to Rui Han Liu

#### THE SUDLER ARTS PRIZE

The Sudler Arts Prize is awarded to that graduating senior from the Zanvyl Krieger School of Arts and Sciences, the G.W.C. Whiting School of Engineering, the School of Nursing, the Peabody Institute, or that fourth-year student in the School of Medicine who, in the opinion of those faculties, has demonstrated excellence and the highest standards of proficiency in performance, execution, or composition in music, theater, dance, fiction, poetry, painting, drawing, sculpture, photography, film, or videotape.

Awarded to
James Paul Senter

# THE W. BRUCE FYE PRIZE IN THE HISTORY OF MEDICINE

The prize is made possible by the generosity of W. Bruce Fye (Johns Hopkins BA '68, MD '72, MA in History of Medicine, '78), a prominent cardiologist and historian of medicine who is the past president of both the American College of Cardiology, the American Osler Society, and the American Association for the History of Medicine, and who served as Professor of Medicine and History of Medicine at the Mayo Clinic. In a long and wide-ranging career as a clinician-historian, Fye's books and articles have consistently demonstrated the relevance of historical thinking to medical research, training, practice, and policy. He established this prize in 2018 to encourage Johns Hopkins medical students to gain experience in historical research and writing and to appreciate how the history of medicine provides valuable perspective on current and future challenges and opportunities in medical practice, education, and research.

Awarded to
Christine Elizabeth Gummerson

# THE FRANK H. NETTER, M.D. MEMORIAL SCHOLARSHIP IN MEDICAL ART

The medical illustrator, Frank H. Netter M.D., is known world-wide for his ability to distill complex medical subject matter into clear, effective teaching images. Dr. Netter was not only a skilled draftsman, but knowledgeable in anatomy, physiology, and pathology through his medical training. Family and friends established this scholarship to recognize a student in Art as Applied to Medicine who displays a similar balance of medical and scientific knowledge with the artistic skills that he exhibited throughout his career. Winners of this award have excelled in their academic courses; displayed exceptional art expression; and most importantly utilized both resources to create well-designed and effective didactic illustrations.

Awarded to
Jenny R. Wang 2018-2019

#### ALPHA OMEGA ALPHA Honor Medical Society

The Alpha Chapter of Maryland was established at the Johns Hopkins University School of Medicine in 1906. Medical students with outstanding records are elected to membership in their senior year. The following members of the graduating class have been elected to membership in Alpha Omega Alpha:

Jeremy Craig Applebaum Rohan Bajaj Eve Bishop Tiffany Kay Brocke Mirian Tien Hui Fox Gloria Hayoung Hong Seamus Brendan Walters Hughes Michelle Juarez Aravind Krishnan Maria S. Kryatova Christa Lynn LiBrizzi Jane Jiang Long Patrick Michael Meyers Teresa Maria Oszkinis Michelle Alexandra Recto James Paul Senter Aishwarya Shukla Lauren Elizabeth Sutherland Eric Xiaoguang Wei

#### PHI BETA KAPPA Honor Society

In recognition of excellent academic performance during their studies in the School of Medicine the following students have been elected to Phi Beta Kappa:

Rohan Bajaj Carley Jeanne Sue Heck Rui Han Liu Heidi Anna Morefield Jing Hui Adeline Yong

# WARFIELD T. LONGCOPE PRIZE IN CLINICAL MEDICINE

The award established in honor of Dr. Longcope, Director of the Department of Medicine from 1922 to 1946, recognizes that graduating student entering the field of medicine whose performance in clinical medicine exemplifies in outstanding fashion the academic excellence and the human qualities that mark the true physician.

Awarded to Rupali Sood

#### HELEN AND HAROLD HARRISON AWARD

The Harrison Award recognizes the remarkable achievements of Doctors Helen and Harold Harrison. The award was established by Dr. Harrison's house officers and colleagues during his many years as Chief of Pediatrics at the Baltimore City Hospitals. This award recognizes outstanding proficiency in pediatrics.

Awarded to
Miriam Tien Hui Fox

#### WILLIAM STEWART HALSTED AWARD IN SURGERY

This award, established in honor of Dr. Halsted, the first professor and director of the Department of Surgery, recognizes that graduating student entering the field of surgery whose proficiency in the discipline is deemed outstanding by the faculty of the Sections of Surgical Sciences.

Awarded to
Luckmini Nuvanthi Liyanage

#### **EMILY SIMMS HALLER PRIZE**

The Emily Simms Haller Prize in Obstetrics was established in 1993 to honor outstanding medical students for their work in obstetrics. Dr. Haller used the Hopkins Hospital Clinics and Labor and Delivery Suite as a site for regular medical student education. Dr. Haller is beloved by decades of students for her teaching and is recognized for her clinical excellence. She is a wife and mother of Hopkins' physicians. The prize was created by colleagues, friends, and family.

Awarded to

Mary Elizabeth Peeler

# SOCIETY FOR ACADEMIC EMERGENCY MEDICINE AWARD

This award recognizes a senior medical student who has demonstrated excellence in the specialty of emergency medicine.

Awarded to Jose Reyes

# AMERICAN ACADEMY OF NEUROLOGY PRIZE FOR EXCELLENCE IN NEUROLOGY

This prize is awarded by the American Academy of Neurology annually to a graduating medical student who exemplifies outstanding scientific achievement and clinical acumen in Neurology or Neuroscience and outstanding personal qualities of integrity, compassion, and leadership.

Awarded to
Christine Elizabeth Gummerson

# THE NOVEY PRIZE IN PSYCHOLOGICAL MEDICINE

This prize recognizes that graduating student with an outstanding academic record in Psychiatry who has written the best paper on the connection between medical illnesses and mental life.

Awarded to
Jeremy Craig Applebaum

# THE STEPHEN J. RYAN, M.D. PRIZE IN OPHTHALMOLOGY

Stephen J. Ryan, a graduate of the Johns Hopkins University School of Medicine, Class of 1965, established this prize in honor of his dedication to medical excellence and his affiliation with the Johns Hopkins School of Medicine and the Wilmer Eye Institute. This prize is awarded to a graduating Johns Hopkins medical student with an outstanding academic record who is entering the field of Ophthalmology.

Awarded to
Moon Jeong Lee

#### **DAVID E. ROGERS AWARD**

This award was established by the Johns Hopkins Health System, in honor of David E. Rogers, Dean of the School of Medicine from 1968-1971. The award is presented annually to two students who have exemplified the highest standards of professionalism, medical ethics, and community leadership.

Awarded to Kevin Monk Jose Reyes

### TEACHING AWARDS

#### GEORGE J. STUART AWARD

The Stuart Award was established in 1969 following the bequest of a grateful patient, George J. Stuart of Washington, D.C. Dr. Stuart stipulated that the income from his bequest be presented to an outstanding clinical teacher in the School of Medicine. The selection is made by the senior students.

Awarded to

Khalil Georges Ghanem

Department of Medicine

#### W. BARRY WOOD, JR. AWARD

The W. Barry Wood, Jr. Award for Excellence in Teaching is awarded annually to the teachers voted by the students in the preclinical years to have been most inspirational and/or effective.

Awarded to

Allan Charles Gelber

Department of Medicine

#### **HOUSE STAFF AWARD**

The House Staff Teaching Award, established by the Johns Hopkins Medical Student Senate, is awarded annually for excellence in clinical teaching by a member of the house staff. Its purpose is to recognize an individual's contributions, but also to emphasize the importance that the students attach to the concept of house officers as teachers.

Awarded to

Hiten Dilip Patel

Department of Urology

#### GRADUATE STUDENT TEACHING AWARD

The Graduate Student Teaching Award, established in 1986 by the Graduate Student Association, recognizes excellence in teaching and mentoring at the graduate level in the biomedical sciences.

Awarded to

Ashwini Sagar Davison

Department of Medicine and Division of Health Sciences Informatics

# THE JOHNS HOPKINS UNIVERSITY ALUMNI ASSOCIATION EXCELLENCE IN TEACHING AWARD

This award, established in 1992 by the Johns Hopkins University Alumni Association, recognizes the critical importance of teaching at Johns Hopkins.

Awarded to

Rachel Marie E. Salas

Department of Neurology

#### PROFESSORS' AWARD FOR EXCELLENCE IN TEACHING

The Professors' Award for Excellence in Teaching was established in 1981 by the Advisory Board of the Medical Faculty and is intended to honor each year members of the faculty whose teaching is judged to have had a profound effect on students in the School of Medicine.

Awarded to

Stephen Martin Sozio

Department of Medicine for teaching in the biomedical sciences

Janet Denise Record

Department of Medicine for teaching in the clinical sciences

Belinda Yim Chen

Department of Medicine for teaching by a part time faculty member

### TEACHING AWARDS

#### MARTIN D. ABELOFF AWARD FOR LIFETIME ACHIEVEMENT IN MEDICAL AND BIOMEDICAL EDUCATION

The Martin D. Abeloff Award for Lifetime Achievement in Medical and Biomedical Education, the highest of the Institute for Excellence in Education's honors, is named for Dr. Martin D. Abeloff, whose long and illustrious career at Johns Hopkins left an indelible mark. Dr. Abeloff was at Hopkins beginning in 1966, and served as Director of the Sidney Kimmel Comprehensive Cancer Center from 1992 until his passing in 2007. He was a visionary leader, a superb physician and a world class scholar, in addition to being a much respected colleague and mentor. His educational leadership on the Committee on Educational Values and Rewards led to the formation of the IEE.

Awarded to
Lee Randol Barker
Department of Medicine

# THE LISA J. HEISER AWARD FOR JUNIOR FACULTY CONTRIBUTION IN EDUCATION

The Lisa J. Heiser Award for Junior Faculty
Contribution in Education is named in honor of Lisa J.
Heiser, M.A., Assistant Dean for Faculty Development
and Equity, Johns Hopkins Medicine, 2006-2011. Lisa
was the embodiment of what makes Johns Hopkins
Medicine special; smart and multitalented, combining
fierce tenacity and commitment with tremendous
personal warmth, friendliness and collegiality.
The Heiser award is given to a junior faculty member,
in her/his career 5 years or less on faculty, who has
made an outstanding contribution in medical/
biomedical education, and shows great promise for
future meaningful contributions to medical and
biomedical education.

Awarded to

Jed Thomas Wolpaw

Department of Anesthesiology and

Critical Care Medicine

#### **IEE TEACHING AWARDS**

The Teaching Awards are intended to recognize outstanding achievement in teaching. Three awards are given: one for those on faculty less than 10 years, one for those on faculty 10 or more years, and one specifically for part-time faculty.

Awarded to

Gigi Y. Liu

Department of Medicine on faculty less than 10 years

Erica N. Johnson
Department of Medicine
on faculty 10 or more years

Monica Clare Mix
Department of Medicine
on faculty part-time

#### IEE LEADERSHIP AND MENTORING AWARD

The Leadership and Mentoring Award is intended to recognize outstanding achievement in mentoring. The recipient is selected based on the training experiences and success of the nominee's mentees. Mentoring is defined as the process of guiding, supporting, and promoting the training and career development of others. Mentors may contribute in many areas, including, but not limited to intellectual growth and development, career development, professional guidance and advocacy.

Awarded to
Nisha Chandra-Strobos
Department of Medicine

## TEACHING AWARDS

#### IEE EDUCATIONAL SCHOLARSHIP AWARD

The Educational Scholarship Award is designed for the faculty member who has a body of educational scholarship work. We define scholarship broadly and include not only publications, but also workshops, other dissemination and contributions to other institutions.

Awarded to
Sanjay Virendra Desai
Department of Medicine

#### IEE EDUCATIONAL INNOVATION AWARD

The Educational Innovation Award recognizes an individual or, in rare cases, a two-person team, for having developed a resource that directly improves medical or biomedical education. This award is meant to encourage faculty members to creatively apply their talents to improve the academic needs of learners on a national scale.

Awarded to

**Joyce Nolan Harrison**Department of Psychiatry and Behavioral Sciences

Mary L. O'Connor Leppert
Department of Pediatrics

#### IEE EDUCATIONAL PROGRAM AWARD

The Educational Program Award is intended to recognize a noteworthy medical or biomedical team responsible for a teaching program which has been implemented for five years or less. Programs are judged on their impact on learners, including learner satisfaction, educational outcomes attained, and scholarship and recognition.

Awarded to
GIMboree at Johns Hopkins Bayview Medical Center

### Post-Baccalaureate Certificates

with title of capstone

Abdulrahman Mohammed Alsheikh; B.Med., Al Imam Mohammad Ibn Saud Islamic University College of Medicine, 2016; M.B.B.S., 2016; M.P.H., Johns Hopkins Bloomberg School of Public Health, 2019; Certificate in Clinical Informatics. *Identifying Areas for Improvement in a Community Health Worker History-Taking Platform.*\*

**Jakub Maria Kwiecinski**; M.S., Jagiellonian University Medical College (Krakow), 2008; Ph.D., University of Gothenburg, 2013; History of Medicine.

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### Masters of Arts

with title of essay

**Noelle Elizabeth Burgess**; B.A., James Madison University, 2011; B.F.A., Virginia Commonwealth University, 2018; Medical and Biological Illustration. *Creating a Game-Based Learning Tool for Optimizing Intra-Hospital Disaster Response.* 

William Guzman, Jr.; B.A., University of Maryland (Baltimore County), 2017; Medical and Biological Illustration. Prostate Carcinogenesis: Depicting a Proposed Pathway for Prostate Cancer Precursor Lesion Development Using 3D Animation.

**Po-Huei Hsieh;** B.A., National Taiwan Normal University, 2004; History of Medicine. *Paratextual Advantages of Versified Pulse Texts: The Theory and Practice of* Wang Shuhe's Rhymed Verses of Pulse-Diagnostics in Chinese Medical History, 11-17th Centuries.\*\*

Jamie Lynn Peterson; A.A.S., Palomar College, 2011; B.F.A., California State University, 2015; Medical and Biological Illustration. *Visualizing Cochlear Specializations that Enhance Protection of Hearing Function in Bats.* 

**Kellyn Sanders**; B.F.A., Grand Valley State University (Allendale), 2017; Medical and Biological Illustration. 3D Reconstruction of Fossilized Skull of South American Miocene Monkey Homunculus patagonicus: An Augmented Reality for Field Application.

Morgan Nicole Summerlin; B.S., Clemson University, 2018; Medical and Biological Illustration. *Visualizing HOPE: Encouraging HIV-Positive Organ Transplantation Using Novel Modular Animations.* 

Helen Huan Tang; B.A., Brown University, 2016; Medical and Biological Illustration. *Personalizing* Hospital-Based Stroke Education: Designing a Novel Recovery App to Prepare Stroke Patients for the Transition Home.

Jenny R. Wang; A.B., Washington University in St. Louis, 2015; Medical and Biological Illustration.

Optimizing e-Learning in Genetics: Creating and
Comparing Three Categories of Multimedia.

**Charles Patton Wilkinson**; M.D., Johns Hopkins University School of Medicine, 1966; History of Medicine. *A History of Diabetic Retinopathy: An Obscure* Entity Becomes an International Public Health Dilemma.

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<sup>\* =</sup> Degree Conferred 8/23/2019 \*\* = Degree Conferred 12/30/2019

# MASTERS OF SCIENCE

with title of essay/capstone

**Anabel A. Anandhapriya**; B.S., University of Madras, 2001; Applied Health Sciences Informatics. *mCARE-II Database Consolidation*.\*\*

Michael Anthony Batista; B.S., Massachusetts Institute of Technology, 2012; Biomedical Engineering. Carotid Body Denervation Via High-Intensity Focused Ultrasound for Treatment of Resistant Hypertension.\*

**Michael Anthony Bohman**; B.S., Weber State University, 2006; D.M.D., Tufts University, 2010; Applied Health Sciences Informatics. *E is for EHR: Evolving Toward an Educational Health Record.*\*\*

**Lusha Cao**; B.S., Sichuan University, 2008; Sc.D., Tsinghua University, 2014; Applied Health Sciences Informatics. *Onboarding End-Users of the Precision Medicine Analytics Platform.*\*\*

**Angela Chen**; B.S., Rutgers University, 2014; Applied Health Sciences Informatics. *Inpatient Medication Utilization*.\*\*

Nicole Eileen Chernavsky; B.S., University of California (Berkeley), 2017; Biomedical Engineering. Technical Assessment of a Mobile Intraoperative CT Scanner: Imaging Performance and Dose with Application to Image-Guided Gynecological Brachytherapy.\*

Ritu Ajay Doijad; B.Eng., Visveswaraiah Technological University, 2018; Applied Health Sciences Informatics. Mapping of Quantitative Data in Cardiac Imaging to the Electronic Medical Record and Precision Medicine Databases.\*\*

**Rachel Ann Frigot**; B.A., University of Cambridge, 2009; Functional Anatomy and Evolution.\*

Vinaya Mohan George; B.S., University of Kerala, 2005; M.B.A., Mahatma Gandhi University, 2008; Applied Health Sciences Informatics. *Characterizing and Validating the National Council on Prescription Drug Programs (NCPDP) Real-Time Prescription Benefit (RTPB) Transaction.* 

**Ting He**; B.S., Dalian University of Technology, 2017; Health Sciences Informatics. *Comorbidity Clusters in Clinical Conditions: An Analysis of Electronic Health Record Data.*\*\*

Sarah Hussain; M.B.B.S., Fatima Jinnah Medical University (Lahore), 2011; Health Sciences Informatics. A Multi-Modal Quality-Improvement Study of Strategies for Enhancing Adoption of Naloxone-Prescribing Clinical Decision Support.\*\*

**Dustin K. Jones**; B.S., Virginia Commonwealth University, 2012; Cellular and Molecular Physiology.\*\*

**Dwi Margawati**; B.S., Gadjah Mada University, 2015; Health Sciences Informatics. *Understanding the Variability in Value Sets: The Role of Steward.*\*\*

**Jeffrey Wayne Pompe**; B.S., University of Illinois (Urbana-Champaign), 2008; Biomedical Engineering. *Haptic Deep Learning.*\*

**Ian Michael Reucroft**; B.S., Rutgers University, 2016; Biomedical Engineering.\*

**Kristina M. Russell**; B.S., University of Pittsburgh, 2005; Certificate, Johns Hopkins University School of Medicine, 2012; Applied Health Sciences Informatics.

**Gan Shi**; B.S., University of Washington, 2018; Applied Health Sciences Informatics. Association of Pre-Noon Hospital Discharge with All-Cause, Unplanned Hospital Readmission and In-Hospital Length-Of-Stay.\*\*

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# MASTERS OF SCIENCE

with title of essay/capstone

Marlen Soledad Tagle Rodriguez; B.S., University of California (Irvine), 2017; Biomedical Engineering.\*

**Miguel Angel Tellez**; B.S., California State University (Fullerton), 2017; Biochemistry, Cellular and Molecular Biology Training Program–Physiology.

**Sarah Jean Vanderplas**; B.S., George Mason University, 2018; Applied Health Sciences Informatics. Examination of Emergency Department Use Among the R-Health Direct Primary Care Population.\*\* Kinjel M. Vyas; B.S., Towson University, 2016; Applied Health Sciences Informatics. *The Premise and Challenges of Including Social and Behavioral Determinants of Health in Health Payment Models.* 

Gongliang Zhang; B.Med., Anhui University, 1998; M.S., 2004; Ph.D., Florida Atlantic University, 2010; Applied Health Sciences Informatics. *Quantitative Analysis of Data Entry Conflicts in Clinical Trials*.

**Xiaohan Zhang**; B.Med., Sichuan University, 2017; Health Sciences Informatics. *Clinical Content Coverage Evaluation on ICD-11: The Third in a Series.*\*\*

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<sup>\* =</sup> Degree Conferred 8/23/2019 \*\* = Degree Conferred 12/30/2019

with title of dissertation

**Leire Abalde-Atristain**; B.Sc., Universitat Autonoma de Barcelona, 2011; Cellular and Molecular Medicine. *Molecular Mechanisms Underlying the Neuroprotective Effects of AAA ATPase Thorase.*\*

**Scott Tyler Albert**; B.S., Lafayette College, 2013; Biomedical Engineering. *The Role of Error-Based Learning in Movement and Stillness*.

**Melis Atalar Aksit**; B.S., Bilkent University, 2015; Human Genetics. *Evaluation of the Genetic Architecture of Cystic Fibrosis*.

**Daniel Ardeljan**; B.S., Duke University, 2011; Human Genetics. *LINE-1 Retrotransposons:* A Source of Replication Stress in Cancer.

**Olubusayo Ayobami Awe**; B.S., Morehouse College, 2013; Cellular and Molecular Physiology. *Insights into the Role of Kisspeptin and Sex Steroid Hormones in the Control of Reproduction and Metabolism.* 

**Timothy David Babatz**; B.S., Wheaton College, 2007; Human Genetics. *Defining Substrate Requirements for Cleavage of Prelamin A by the Zinc Metalloprotease ZMPSTE24*.\*

**Emilyn Constance Banfield**; B.S., Clemson University, 2012; Human Genetics. *The Role of* In Utero *Endotoxin Exposure in the Postnatal Immune Response in Mice*.

**James Daniel Beckett**; B.A., Kenyon College, 2011; Human Genetics. *Novel Mechanisms and Therapies for Fibrosis*.

**Benjamin Joseph Bell**; B.S., Northeastern University, 2012; Human Genetics. *Characterization of mWake:* Circadian Regulator of Arousal in Mammals that Defines a Novel Fundamental Arousal Circuit.\*

Alexandra Murray Bender; B.A., Johns Hopkins University, 2013; M.S., 2013; Cellular and Molecular Medicine. Accurately Measuring the True Size of the Latent Reservoir and Characterizing the Proviral Landscape in Nonhuman Primate Models.

**Sneha Berry**; B.Tech., Padmashree Dr. D.Y. Patil Medical College (New Bombay), 2013; Cellular and Molecular Medicine. *Multispectral Immunofluorescence for Immuno-Oncology Biomarker Discovery: Mapping Co-Expression and Intensity on Whole-Slides Using the 'Astropath' Platform.* 

**Ian Anthony Bettencourt**; B.A., Colby College, 2012; Molecular Biology and Genetics-Program in Immunology. *The Role of Amino Acid Metabolism in the Regulation of T Cell Fate.* 

Kelsey Elaine Bettridge; B.A., Lawrence University, 2011; Program in Molecular Biophysics. *Probing the Dynamics of RNA Polymerase and HU in live* E. coli *Cells.*\*

Michael Rowland Blatchley; B.S., Purdue University, 2013; Biomedical Engineering. Reconstructing the Vascular Regenerative Niche with Oxygen-Controllable Hydrogels.\*\*

Christopher Herrick Bohrer; B.S., Kent State University, 2013; Program in Molecular Biophysics. Part I: Super-Resolution Microscopy Method Development; Part II: Investigations of Transcription Regulation by Chromosomal Organization in Bacteria.

Christopher Michael Booth; B.S., Wake Forest University, 2011; Biochemistry, Cellular and Molecular Biology Training Program-Pharmacology and Molecular Sciences. Development of a New Set of Genetically Encodable Tools to Manipulate and Measure the Spatiotemporal Dynamics of Cell Signalling.\*

with title of dissertation

**Kyla Anne Britson**; B.S., University of Minnesota (Twin Cities), 2013; Cellular and Molecular Medicine. *There and Back Again: Developing a Xenograft Model of Sporadic Inclusion Body Myositis for Translational Research.* 

**Giovanni Carosso**; B.S., University of California (Santa Barbara), 2010; Human Genetics. *New Insights into the Basis of Neurogenesis Defects in Kabuki Syndrome*.

Justina Caushi; B.S., Fairfield University, 2013; Cellular and Molecular Medicine. Neoantigen Specific Tissue Resident Memory T Cells Facilitate Pathological Response in Resectable NSCLC Treated with Neoadjuvant Anti-PD-1.

**Hee Sun Choi**; B.S., Yonsei University, 2009; M.S., 2011; Pathobiology. *The Role of Innate Lymphoid Cells in the Heart and Cardiac Inflammation.*\*

**Liam Chung**; B.S., University of California (Irvine), 2015; Biomedical Engineering. *Interleukin 17 and Senescence Regulate the Foreign Body Response.* 

Kathleen Mary Cunningham; A.B., Dartmouth College, 2013; Cellular and Molecular Medicine. Nucleocytoplasmic Transport Disruption Leads to Autophagy and Lysosome Defects in a Drosophila Model of C9ORF72 Hexanucleotide Repeat Expansion Mediated ALS and FTD.\*

Emmanuel Datan; B.A., Queens College (New York), 2011; Pharmacology and Molecular Sciences. *Mechanistic Studies of the Transcription Inhibitor Triptolide and Its Selective Targeting to Cancer Cells under Hypoxia.* 

**Kevin Andrew Day**; B.S., University of Pittsburgh, 2014; Biomedical Engineering. *Getting the Most Out Of A Training Session: A Motor Learning Approach to Gait Rehabilitation in Stroke.*\*\*

Alicia Ann DeColli; B.S., Stonehill College, 2013; Pharmacology and Molecular Sciences. *Investigating the Mechanism of C2Alpha-Lactylthiamim Diphosphate Formation, Stabilization, and Decarboxylation on 1-Deoxy-D-Xylulose 5-Phosphate Synthase, An Attractive Antibacterial Target.*\*\*

Karole Nicole D'Orazio; B.S., State University of New York (Stony Brook), 2012; Biochemistry, Cellular and Molecular Biology Training Program-Molecular Biology and Genetics. *Characterizing Molecular Pathways that Rescue Stalled Ribosomes and Decay Problematic Messenger RNAs*.

Hannah Elizabeth Edelman; B.A., Swarthmore College, 2012; Human Genetics. *Discovering Mechanisms That Regulate Beta-Cell Neogenesis and Proliferation*.

**Eric Finkel**; B.S., McGill University, 2011; Neuroscience. *Tactile Processing Depends on Motor Intentions.*\*

Catherine Guerra Fischer; B.S., Pennsylvania State University, 2014; Pathobiology. Characterizing Driver Gene Heterogeneity and Clonal Origin of Intraductal Papillary Mucinous Neoplams of the Pancreas.\*

**Joseph William Fischer**; B.S., University of Wisconsin (Madison), 2012; Human Genetics. *Highly-Structured 3'Untranslated Regions Mediate RNA Decay.*\*\*

James Flowers; M.A., University of Technology (Sydney), 2010; History of Medicine. Koreans Building a New World: Eastern Medicine Renaissance in the Context of Japanese Rule, 1910-1945.\*\*

**Dustin Lee Gable**; B.S., The Ohio State University, 2011; Human Genetics. *Mechanisms of Telomerase RNA Insufficiency in Disease.* 

<sup>\* =</sup> Degree Conferred 8/23/2019 \*\* = Degree Conferred 12/30/2019

with title of dissertation

**Darik Wendell Gamble**; B.A.S., University of Waterloo, 2008; Biomedical Engineering. *Physiological Characterization of Parabelt Auditory Cortex in the Awake, Behaving Marmoset Monkey.* 

**Minling Gao**; B.S., Nanyang Technological University, 2014; Pathobiology. *EGFR Activates a TAZ-Driven Oncogenic Program in Glioblastoma*.

Nathalie Gerassimov; B.A., Smith College, 2010; Biochemistry, Cellular and Molecular Biology Training Program-Molecular Biology and Genetics. *The Role of Dynamin in Cell-Cell Fusion.*\*

**Ali Ghasemzadeh**; B.S., Marquette University, 2012; Molecular Biology and Genetics-Program in Immunology. *The Role of Histone Acetylation in the Control of Immune Checkpoint Expression in CD8+ T Cells.* 

Jordana Gilbert-Honick; B.S., Rutgers University, 2013; Biomedical Engineering. Engineering Skeletal Muscle for Histological and Functional Regeneration Following Volumetric Muscle Loss.

**Douglas Lowell GoodSmith**; B.A., Johns Hopkins University, 2010; Neuroscience. *Firing Correlates and Mnemonic Functions of Dentate Gyrus Granule Cells and Mossy Cells.*\*\*

**Dorothy Leigh Hallberg**; B.A., Bucknell University, 2013; Human Genetics. *Applying Next-Generation Cancer Genome Sequencing Approaches to Ovarian Cancer*.

Anthony Maxwell Harper; B.S., University of California (Santa Cruz), 2007; M.S., San Diego State University, 2012; Functional Anatomy and Evolution. Craniodental Adaptation and Homoplasy in Early Mammals.\*\*

Carley Jeanne Sue Heck; B.S., Shippensburg University of Pennsylvania, 2014; Pharmacology and Molecular Sciences. Cytochrome P450 Metabolism Involvement in the Development of Hepatotoxicity with First-Generation Non-Nucleoside Reverse Transcriptase Inhibitors.\*

Jacob Sijie Heng; B.S., University of Glasgow, 2010; M.B.B.S., 2012; Neuroscience. *Uncovering Novel Insights into Retinal Diseases Using Single-Cell Transcriptional Profiling.*\*

**Thuy Mong Hoang**; B.S., University of Texas (Austin), 2006; Pharmacology and Molecular Sciences. *Cervicovaginal Mucus Barrier Function: Implications in HIV Infection and Vaginal Drug Delivery.*\*

**Patrick Sean Hogan**; B.Eng., University of Minnesota (St. Paul), 2013; Biomedical Engineering. *Subjective Representations of Effort Value in Humans.* 

**Nicholas James Huang**; B.S., University of Rochester, 2011; Biomedical Engineering. *Auditory Salience in Natural Scenes*.\*\*

**Robert Michael Hughes**; B.S., University of Maryland (College Park), 2010; Cellular and Molecular Medicine. *Asporin Restricts Mesenchymal Stromal Cell Differentiation and Drives Metastatic Progression*.

**Mohameed Islam**; B.S., Cornell University, 2014; Biochemistry, Cellular and Molecular Biology Training Program-Cell Biology. *Immunomodulators of Tissue Regeneration and Morphogenesis*.

**Dengrong Jiang**; B.Eng., Tsinghua University, 2013; Biomedical Engineering. *Magnetic Resonance Imaging of Cerebral Venous Oxygenation*.

Jessica Ann Joseph; A.B., Washington University in St. Louis, 2015; Cellular and Molecular Medicine. Connexin 43 Hemichannels Modulate Spatial and Temporal Disease Spread in Amyotrophic Lateral Sclerosis.

<sup>\* =</sup> Degree Conferred 8/23/2019 \*\* = Degree Conferred 12/30/2019

with title of dissertation

**Tymoteusz Jan Kajstura**; B.A., Oberlin College, 2007; Neuroscience. *The Effects of Traumatic Brain Injury on Neocortical Serotonin Axon Innervation.* 

**Allen Kyung Kim**; B.S., Cornell University, 2010; M.Eng., 2011; Biomedical Engineering. *Rational Design of Protein Kinase A Phosphorylation Switches.*\*\*

**Leslie Ann Kirby**; B.S., California State University (Fullerton), 2011; Cellular and Molecular Medicine. Oligodendrocyte Precursor Cells Are Co-Opted by the Immune System to Cross-Present Antigen and Mediate Cytotoxicity.\*

**Audrey Knight**; B.S., Illinois College, 2014; Pathobiology. *Sustained Microglial Immune Responses in an SIV/Macaque Model of HIV CNS Disease.* 

**Geran Michael Kostecki**; B.S., Washington University in St. Louis, 2010; Biomedical Engineering. Applications of Optogenetic Tandem-Cell Units for In Vitro Study of Cardiac Electrophysiology.\*

**Priyanka Kothari**; B.A., University of Pennsylvania, 2014; M.S., 2014; Biochemistry, Cellular and Molecular Biology Training Program-Cell Biology. *Deciphering the Biochemical Interactions of the Mechanoresponsive Contractility Controller.* 

Heather Lynn Kristjanson; B.S., University of Toronto, 2012; Functional Anatomy and Evolution. Tupaiid Masticatory Anatomy and the Application of Extant Analogs to Reconstructing Plesiadapiform Jaw Adductors.\*

Anh-Thu Ngoc Lam; B.A., University of Vermont, 2012; B.S., 2012; Human Genetics. *Molecular Characterization of* SLC26A9 *and Evaluation of its Potential Role as a Modifier of Cystic* Fibrosis.\*\*

**Patrick James Lariviere**; A.B., Bowdoin College, 2013; Biochemistry, Cellular and Molecular Biology Training Program-Biological Chemistry. *Linking the* 

Bacterial Cytoskeleton to Cell Wall Synthesis Activation: Discovery of the [FtsZ-FzlA]-FtsWI Signaling Pathway.\*

Alessandro Igor Cavalcanti Leal; M.D., Universidade de Brasilia, 2004; Cellular and Molecular Medicine.

Circulating Tumor DNA in the Cancer Care

Continuum. \*\*

Andriana Lebid; B.S., Yale University, 2015; Molecular Biology and Genetics-Program in Immunology. Activin A Promotes Treg Induction in Cancer Through the Activin Receptor 1C.

**Sung Hoon Lee**; B.S., Seoul National University, 2008; M.S., 2010; Biomedical Engineering. A Study of Signaling Networks Regulating Plasticity of Endothelial Cells in Angiogenesis.\*

Augusto Abel Lempel; B.S., Universidad de Buenos Aires, 2012; Neuroscience. *Higher-Order Motion Processing in the Ferret and Its Development.*\*

**Laura Nevin Lessen**; B.S., University of Maryland (Baltimore County), 2013; Program in Molecular Biophysics. *Investigation of Translation Elongation, Termination, and Recycling by Bulk Biochemical and Single Molecule Methods.*\*\*

Susan Elizabeth Liao; B.S., California Institute of Technology, 2013; Biochemistry, Cellular and Molecular Biology Training Program-Biological Chemistry. Regulation of Gene Expression by Drosophila Dead-Box RNA Helicase Belle.\*\*

**Chang-Ting Lin**; B.S., National Taiwan University, 2008; Biophysics and Biophysical Chemistry. *Probing Protein-Nucleic Acid Interactions with Optical Manipulation.*\*\*

**Hannah Currier Little**; B.S., University of California (Irvine), 2013; Biochemistry, Cellular and Molecular Biology Training Program-Physiology. *Discovery and Characterization of Skeletal Muscle-Derived Myokines.*\*

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with title of dissertation

**Ryan Joseph Longchamps**; B.S., University of Maryland (College Park), 2011; Human Genetics. *Exploring the Role of Mitochondrial DNA Quantity and Quality in Cardiovascular Disease.*\*\*

**Maxim Igorevich Manakov**; B.S., Moscow Institute of Physics and Technology, 2011; Neuroscience. *Action Sequencing by Rats.* 

Wendy Mao; B.S., University of Maryland (Baltimore County), 2014; Molecular Biology and Genetics-Program in Immunology. Strategies for Improving Antitumor Response in Prostate Cancer: BET Bromodomain Inhibition and A2A Adenosine Receptor Inhibition as Methods of Targeting Prostate Cancer.\*\*

**William Michael Matern**; B.S., University of New Hampshire, 2012; Biomedical Engineering. A Systems Biology Approach to Identify Adjunctive Drug Targets in Two Major Mycobacterial Pathogens.\*

Mariusz Matyszewski; B.S., University of Michigan, 2013; Program in Molecular Biophysics. *Understanding Signal Transduction Mechanisms of Inflammasomes.*\*\*

**Allison McCague**; B.S., University of Delaware, 2013; Human Genetics. *Cystic Fibrosis in the Era of Effective Treatment: Informing Targeted Therapy and Influencing Reproductive Decision Making.*\*

**Sarah Anne McClymont**; B.S., University of Guelph, 2012; Human Genetics. *Transcriptional Regulation and Disruption in Parkinson Disease*.

**Meredith Rose McGuire**; B.S., Saint Vincent College, 2013; Biochemistry, Cellular and Molecular Biology Training Program-Cell Biology. *PGRMC1 Functions to Stabilize Cytochromes P450.* \*\*

**Rebecca Nell Mitchell;** B.S., Pennsylvania State University, 2009; Human Genetics. *Evaluation of the Genetic Architecture of Sudden Cardiac Arrest.*\*\*

**Fuad Mohammad**; B.S., The Ohio State University, 2012; Biochemistry, Cellular and Molecular Biology Training Program-Molecular Biology and Genetics. *A Study of Bacterial Translation at Codon Resolution Using Ribosome Profiling*.

**Kevin Monk**; B.S., Brandeis University, 2013; Neuroscience. *The Production of Interval Timing Activity in the Primary Visual Cortex of Mice.* 

**Janelle Marie Montagne;** B.S., Lafayette College, 2009; Pathobiology. *Interrogating T Cell Reactivities Using Repertoire Sequencing*.

**Heidi Anna Morefield**; B.A., McGill University, 2008; M.Sc., University of Edinburgh, 2009; History of Medicine. *Developing to Scale: Appropriate Technology and the Making of Global Health.*\*

**Tyler Christopher Moyer**; B.S., Bucknell University, 2011; Biochemistry, Cellular and Molecular Biology Training Program-Molecular Biology and Genetics. *Building the Centriole: PLK4 Phosphorylates STIL to Direct Precentriole Assembly.*\*

**Mai Nakamura**; B.S., Duke University, 2012; Cellular and Molecular Medicine. *Investigating the* Role of a Novel GPI-Anchor Releasing Enzyme GDE2 in Alzheimer's Disease.\*\*

Ethan Lytle Nyberg; B.S., University of Virginia, 2004; Biomedical Engineering. Design, Manufacture, and Implementation of 3D-Printed Tissue Engineering Scaffolds Used with Stromal Vascular Cells for Craniofacial Bone Regeneration.\*

Christine Mangione O'Keefe; B.S., University of Maryland (College Park), 2013; Biomedical Engineering. A Microfluidic Digital Melt Platform for Sensitive Biomarker Analysis and Parallelized Profiling of Molecular Heterogeneity.

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with title of dissertation

**David Joshua Ottenheimer**; B.S., Yale University, 2014; Neuroscience. *Preference Encoding in Ventral Pallidum Mediates Reward-Seeking Behavior.* 

**Elizabeth Michelle Park**; B.S., University of Oklahoma (Norman), 2014; Biochemistry, Cellular and Molecular Biology Training Program-Molecular Biology and Genetics. *Understanding the Role of Splicing Factors in Centriole Duplication*.

Jacqueline Thien Kim Pham; B.S., Stanford University, 2008; Cellular and Molecular Medicine. *The Effect of the GGGGCC Repeat Expansion in* C9ORF72 *ALS Astrocytes*.

**Genay Opal Whitney Pilarowski**; B.A., Whitman College, 2013; Human Genetics. *Causes and Consequences of Disrupted Chromatin Opening: Kabuki Syndrome and Related Disorders.*\*\*

Mikhail Borisovich Proskurin; B.S., Moscow Institute of Physics and Technology, 2011; Neuroscience. Changes in Strategy Prevalence as an Organizing Principle of Anterior Cingulate Cortex Ensemble Dynamics.

**Alexandra Bolm Pucsek**; A.B., Harvard University, 2009; Molecular Biology and Genetics-Program in Immunology. *Galectin-3 and the Modulation of Antitumor Immunity.* 

**Xuyu Qian**; B.S., Worcester Polytechnic Institute (Worcester), 2013; Biomedical Engineering. *Modeling Human Brain Development and Diseases Using Human Induced-Pluripotent Stem Cell-Derived Organoids*.

**Lauren Que**; B.S., Mount Saint Mary's College, 2013; Program in Molecular Biophysics. *Characterizing the Cross-Regulatory Complex, OTUB1:E2.*\*

**Daniel Michael Ramos**; B.A., University of Pennsylvania, 2013; Neuroscience. *Investigation of SMN Expression in Development and Disease: Implications for SMA Pathogensis and Treatment.* 

**Sarah Marie Robbins**; B.A., University of Maryland (College Park), 2014; B.S., 2014; Human Genetics. Lessons From Rare Mendelian Disorders: Uncovering the Molecular Mechanisms of Skeletal and Reproductive Diseases.\*\*

**Gaddiel Rodriguez**; B.A., Hunter College, 2014; Program in Molecular Biophysics. *Function of the Intrinsically Disordered N-Terminal Domain of hUNG2 in DNA Repair.*\*

Yazmin Ines Rovira Gonzalez; B.S., Pennsylvania State University, 2012; Cellular and Molecular Medicine. Mss51 Deletion Enhances Muscle Metabolism and Glucose Homeostasis in Mice. \*\*

Samarjeet; B.Tech., Indian Institute of Technology (Kanpur), 2011; Biochemistry, Cellular and Molecular Biology Training Program-Biophysics and Biophysical Chemistry. Accelerated Computing for Molecular Dynamics Simulation.\*\*

**Phillip Raul Sanchez**; B.S., University of South Florida, 2014; Pharmacology and Molecular Sciences. *Macrocyclic Probes for Cell Adhesion and the Unfolded Protein Response.* 

**Samantha Lynn Semenkow**; B.S., Towson University, 2010; Pathobiology. *Targeting the Notch Pathway and the Role of the Tumor Microenvironment in Glioblastoma*.

Vanesa Laura Silvestri; B.A., Colby College, 2012; Biochemistry, Cellular and Molecular Biology Training Program-Cell Biology. *Cellular Dynamics of Tumor-*Vessel Interactions in Breast Cancer Metastasis.\*

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with title of dissertation

**Richard Sima**; A.B., Harvard University, 2012; Neuroscience. *The Cerebellar Vermis Robustly Modulates* Neural Activity in the Inferior Colliculus.\*

Nianbin Song; B.S., University of Texas (Austin), 2011; Molecular Biology and Genetics-Program in Immunology. *The Role of MHC Class II Chaperone HLA-DO in Shaping CD4 T Cell Repertoire and the Development and Longevity of CD4 Memory T Cells.*\*\*

**Ramanujan Srinath**; B.S., Manipal University, 2011; Neuroscience. *Solid Shape Processing in Area V4.*\*\*

**Sho Sugawara**; B.S., Soka University, 2014; Molecular Biology and Genetics-Program in Immunology. *Human Immunodeficiency Virus-1 Infection and Type 1 Interferon Responses.*\*\*

**Bo-Yi Sung**; M.D., National Defense Medical Center (Taipei), 2010; Pathobiology. *Human Memory CD8 T Cells Polyfunctionality is Epigenetically Controlled by PRMT1.\*\** 

**Han Tan**; B.Med., Peking University, 2012; Biological Chemistry. *Molecular Mechanisms Underlying AMPA Receptor Trafficking* In vitro *and* In vivo. \*\*

**Darya Task**; B.S., The Ohio State University, 2011; Neuroscience. *Neurogenetic Investigation of Olfactory Receptor Expression in* Drosophila melanogaster *and* Anopheles coluzzii *Insects.* \*\*

**Brian Joseph Tenner**; B.S., Southern Methodist University, 2012; Program in Molecular Biophysics. Development and Application of Genetically Encoded Biosensors for Studying Compartmentalized Signaling.\*\*

Andrew Edward Timmons; B.S., University of Maryland (College Park), 2013; Pharmacology and Molecular Sciences. *Heat Shock Blockade Disrupts Latency Reversing Activity of Several Compounds* In Vitro and Ex Vivo.\*

Meghan Ellen Travers; B.S., Cornell University, 2009; Cellular and Molecular Medicine.

Difluoromethylornithine and 5-Azacytidine Promote

Tumor Associated Macrophages Toward M1 Polarization in an Ovarian Cancer Mouse Model.\*

Vimvara Vacharathit; B.S., Villanova University, 2013; Molecular Biology and Genetics-Program in Immunology. *Allele- and Cell-Type-Specific Effects of Human* IL10 *on Intestinal Health and Disease.* 

Caroline Alexandra Vissers; B.S., University of California (Davis), 2014; Biochemistry, Cellular and Molecular Biology Training Program-Neuroscience. *m6A mRNA Methylation in Development and Disease*.

**Chia-Hsuan Wang**; B.S., National Taiwan University, 2010; Neuroscience. *The Cognitive Map and Compartmentalized Space: Neural Representations of Surface Cue Boundaries.*\*

Jamie Ray Wangen; B.A., St. Olaf College, 2011; Biochemistry, Cellular and Molecular Biology Training Program-Molecular Biology and Genetics. *Investigation* of Translation Termination and Stop Codon Read through Using Ribosome Profiling.\*\*

**Robert Douglass Wardlow, II**; B.S., University of Maryland (Baltimore County), 2012; Cellular and Molecular Medicine. *Functional Characterization of Genetic Modifiers for Marfan Syndrome Provides Insight for Novel Therapeutic Strategies*.

**David Robert Wilson**; B.S., Syracuse University, 2014; Biomedical Engineering. *Polymeric Nanoparticle Engineering for Delivery of Nucleic Acids.* 

**Selamawit Abi Woldemeskel**; B.S., Saint Francis University, 2013; Biological Chemistry. *From a Transcriptional Regulator to Cell Division: Insights into the Mechanisms Regulating Bacterial Growth, Morphogenesis, Cell Cycle, and Stress Response.*\*

<sup>\* =</sup> Degree Conferred 8/23/2019 \*\* = Degree Conferred 12/30/2019

with title of dissertation

**Brian Michael Woolums**; B.S., University of Minnesota (Twin Cities), 2011; Pharmacology and Molecular Sciences. *Mechanisms of TRPV4-Mediated Axonal Degeneration*.\*

Michael Montgomery Wormald; B.S., University of Richmond, 2014; Pharmacology and Molecular Sciences. Discovery, Synthesis, and Characterization of Purine Based Isoform Selective Inhibitors of Inositol Hexakisphosphate Kinase 1.\*\*

**Zhuwei Xu**; B.S., Tsinghua University, 2012; Biochemistry, Cellular and Molecular Biology Training Program-Molecular Biology and Genetics. De novo *Genome Assembly and Analysis of Non-Allelic Recombination in Pathogenic Yeast* Candida glabrata.

Wan Rou Yang; B.S., University of Washington, 2007; B.S., 2007; Pathobiology. *Developing SQuIRE to Map the Landscape of Interspersed Repeat Expression*.

**Jing Hui Adeline Yong**; B.S., National University of Singapore, 2013; Cellular and Molecular Medicine. *AMPA Receptor Tyrosine Phosphorylation and Subunit Composition*.

**Tehrim Yoon**; B.S., Seoul National University, 2013; Neuroscience. *Control of Movement in Decision Making: Movement Vigor, Reaction, and Their Relationship with Subjective Value and Effort.*\*\*

**Wen-Kai You**; M.D., National Taiwan University, 2008; Neuroscience. *Selective Visuospatial Attention in Freely Moving Mice.*\*

**Huiwang Zhan**; B.S., Xiamen University, 2012; Biological Chemistry. *Migratory Transitions and Oncogenic Transformation in Epithelial Cells are Controlled by the Threshold of the Ras/PI3K/ERK Excitable Network.* 

**Yi Zhu**; B.S., Tsinghua University, 2009; Biological Chemistry. *Regulating O-GlcNAcylation on Specific Proteins Using RNA Aptamers.* \*\*

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<sup>\* =</sup> Degree Conferred 8/23/2019 \*\* = Degree Conferred 12/30/2019

### GRADUATE STUDENT OATH

As I embark on my career as a scientist, I willingly pledge that:

- I will practice and support a scientific process that is based on logic, intellectual rigor, personal integrity, and an uncompromising respect for truth;
- I will perform my professional activities and interactions with scientific integrity and respect for the field and my peers;
- I will acknowledge my role as an ambassador of science to the public, and strive to be honest, respectful, and unbiased with engaging the public;
- I will value my work and its contribution to the scientific community;
- I will never let the potential for personal recognition or advancement cause me to act in a way that violates the public trust in science or in me as a scientist;
- I will foster a community that is inclusive of all and recognize that diversity cultivates innovation, creativity, and progress;
- I will acknowledge and honor the contributions of scientists who have preceded me and become a worthy role model deserving of respect by those who follow me;
- And I will always be cognizant that my work is for the advancement of knowledge and the benefit of all humanity.

By pronouncing this Oath, I declare my commitment to these professional standards and goals.

## **Doctors of Medicine**

**Ali Karim Ahmed**; B.S., University of Notre Dame, 2014.

**Derick Owusu Ansah**; B.S., University of Maryland (College Park), 2016.

**Jeremy Craig Applebaum**; B.S., Carnegie Mellon University, 2016.

Daniel Ardeljan; B.S., Duke University, 2011.

**Jake Alexander Awtry**; B.A., Boston University, 2016; M.A., 2016.

Rohan Bajaj; B.S.C., McGill University, 2016.

James Daniel Beckett; B.A., Kenyon College, 2011.

**Alexandra Murray Bender**; B.A., Johns Hopkins University, 2013; M.S., 2013.

Eve Bishop; B.A., Cornell University, 2015.

**Luke William Bonham**; B.S., University of California (Berkeley), 2013.

**Tiffany Kay Brocke**; B.S., University of Michigan (Ann Arbor), 2015.

**Jonathan Kramer Callan**; B.S., Pennsylvania State University, 2015.

**Arun Chandra**; B.S., California Institute of Technology, 2016; B.S., 2016.

**Sonal Rajendra Chaudhari**; B.S., University of California (Los Angeles), 2016.

Aneesha Cheedalla; B.A., Rutgers University, 2016.

**John Hyunkuk Choi**; B.S., University of Southern California, 2012; M.Ed., University of California (Los Angeles), 2014.

Won Kyu Choi; B.S., Johns Hopkins University, 2015.

**Kathryn Evalyn Clark**; B.A., Johns Hopkins University, 2016.

**Halley Michelle Darrach**; B.S., California State University (Northridge), 2014.

**Fidel Ariel Desir Boyá**; A.B., Washington University in St. Louis, 2010; M.P.H., Johns Hopkins Bloomberg School of Public Health, 2014; Ph.D., 2018.

**Xiangyun John Duan**; B.S., University of Illinois (Urbana-Champaign), 2016.

**Hannah Elizabeth Edelman**; B.A., Swarthmore College, 2012.

**Francisco Augusto Eguia**; B.A., Rice University, 2015.

**Ahmed Eltahir**; B.S., Massachusetts Institute of Technology, 2016.

**Samuel John Erlinger**; B.A., Vanderbilt University, 2016.

Miriam Tien Hui Fox; B.S., Duke University, 2013; M.P.H., Johns Hopkins Bloomberg School of Public Health, 2019.

**Nicholas Kin-man Fung**; B.S., Case Western Reserve University, 2016.

**Dustin Lee Gable**; B.S., The Ohio State University, 2011.

Ali Ghasemzadeh; B.S., Marquette University, 2012.

## **Doctors of Medicine**

**Rakesh Ram Goli**; B.A., University of Pennsylvania, 2016.

**Michael James Grzelak**; B.S., Creighton University, 2015.

Chengcheng Gui; B.S.E., Princeton University, 2014.

**Christine Elizabeth Gummerson**; B.A., Harvard University, 2012.

**Wenji Guo**; B.S., University of Illinois (Chicago), 2013; Ph.D., University of Oxford, 2018.

**Pranjal Bodh Gupta**; B.E., Vanderbilt University, 2016.

**Matthew Joseph Hadad**; B.S., University of Notre Dame, 2016.

**Tai Kyung Sohn Hairston**; B.S., Johns Hopkins University, 2015.

Allison Haley; B.S., University of Connecticut, 2016.

**Michael Steven Harper**; B.Mus, Vanderbilt University, 2012; M.Mus, University of Michigan (Ann Arbor), 2014; M.Mus, 2014.

**Amir Saam Heravi**; B.S., California Institute of Technology, 2015.

**Gloria Hayoung Hong**; B.A., Columbia University in the City of New York, 2015.

Marina Horiates; B.A., Yale University, 2015.

**Matthew Ryan Hoyer**; B.S., University of Wisconsin (Madison), 2016.

**Amy Hungyun Huang**; B.A., Columbia University in the City of New York, 2015; M.P.H., Johns Hopkins Bloomberg School of Public Health, 2019.

**Robert Michael Hughes**; B.S., University of Maryland (College Park), 2010.

**Seamus Brendan Walters Hughes**; B.S., University of Massachusetts (Amherst), 2014.

**Alvaro Ibaseta Fidalgo**; M.Eng., University of Bristol, 2011; M.S., Stanford University, 2013.

**Bradley Miles Isaacs**; B.S., Johns Hopkins University, 2014.

**Sara Isabel Jones**; B.A., University of Pennsylvania, 2016.

Michelle Juarez; B.S., Lehigh University, 2016.

Tymoteusz Jan Kajstura; B.A., Oberlin College, 2007.

Borna Kassiri; B.S., Duke University, 2016.

**Noore-Sabah Khan**; B.A., University of Maryland (Baltimore County), 2015; B.A., 2015.

**Aravind Krishnan**; B.A., Johns Hopkins University, 2015.

Maria S. Kryatova; B.S., Tufts University, 2013.

Christina Dasl Kwon; B.A., Harvard University, 2016.

Moon Jeong Lee; B.S., Emory University, 2014.

David Liao; B.A., City University of New York, 2014.

**Ross Shane Liao**; B.S., Johns Hopkins University, 2015.

**Christa Lynn LiBrizzi**; B.S., North Carolina State University, 2013; B.S., Idaho State University, 2015.

**Stephanie Lin**; B.S., Massachusetts Institute of Technology, 2012; M.Phil., University of Oxford, 2014.

## **DOCTORS OF MEDICINE**

Rui Han Liu; B.S., McGill University, 2016.

**Luckmini Nuvanthi Liyanage**; B.A., University of Pennsylvania, 2014.

**Jane Jiang Long**; B.S., Yale University, 2013; M.F.A., Rhode Island School of Design, 2015.

Eva Luderowski; B.A., Carleton College, 2010.

Hasina S. Maredia; B.A., Brown University, 2014.

**Breanne Elizabeth McCarthy**; B.S., Arizona State University, 2016.

Michael Hale McColl; B.S., Emory University, 2016.

**Patrick Michael Meyers**; B.A., Vanderbilt University, 2016.

**Surekha Uma Mullangi**; B.A., Johns Hopkins University, 2015.

**Jason Andrew Murray**; B.S., Georgia Institute of Technology, 2011; B.S., 2011; Ph.D., University of Cambridge, 2018.

Ha Vi Nguyen; B.S., Arizona State University, 2016.

Maisa Nimer; B.S., Johns Hopkins University, 2016.

Oluseye Kolapo Oduyale; B.S., McMaster University, 2016

**Teresa Maria Oszkinis**; B.A., Harvard University, 2016.

**Nisha Parikh**; B.S., New York University, 2014; M.P.H., Johns Hopkins Bloomberg School of Public Health, 2019.

**Sagar Pankaj Patel**; B.A., University of Pennsylvania, 2016; B.S., 2016.

Mary Elizabeth Peeler; B.S., University of North Carolina (Chapel Hill), 2015; M.P.H., Harvard T.H. Chan School of Public Health, 2019.

**Kevin Gerard Pineault**; B.S., University of Maryland (College Park), 2016.

Tejus Pradeep; B.A., Rutgers University, 2016.

Jennifer Zhen Qin; B.A., University of Chicago, 2016.

**Shagnik Ray**; B.A., University of California (Berkeley), 2015.

**Michelle Alexandra Recto**; B.A., Washington University in St. Louis, 2016.

**Jose Reyes**; B.S., Texas State University (San Marcos), 2016.

Awa Sanneh; B.S., University of South Florida, 2014.

**James Paul Senter**; B.S., Duke University, 2014; M.P.H., Johns Hopkins Bloomberg School of Public Health, 2019.

**Lochan Manish Shah**; B.A., University of California (Berkeley), 2016.

Yi Shao; B.S., Johns Hopkins University, 2015.

Na Eun Shin; B.A., University of Chicago, 2015.

**Aishwarya Shukla**; B.A., University of California (Berkeley), 2014; M.P.H., Johns Hopkins Bloomberg School of Public Health, 2019.

Scott Ross Shuldiner; B.S., Tufts University, 2013.

Dan Isaac Soffer; B.S., University of Florida, 2014.

# **Doctors of Medicine**

**Rupali Sood**; B.S., University of California (Berkeley), 2014; M.P.H., Johns Hopkins Bloomberg School of Public Health, 2019.

Zhuo Tony Su; B.S., Yale University, 2011.

**Lauren Elizabeth Sutherland**; B.S., Elon College, 2015.

**Jason John Theis**; B.S., University of Maryland (College Park), 2015; M.P.H., Johns Hopkins Bloomberg School of Public Health, 2019.

**Sarah Elizabeth Thompson**; B.A., Hendrix College, 2012.

**James Shouqi Ting**; B.S., Yale University, 2015.

William Elijah Tobolowsky; B.S., University of California (Santa Barbara), 2016.

Chau Diep Quoc Vo; B.A., Williams College, 2014.

**Allison Noelle Wallingford**; B.A., Pomona College, 2014; M.S.E., Johns Hopkins University, 2019.

**Abigail Yimeng Wang**; B.S., University of Michigan (Ann Arbor), 2016.

**Kendrick Michael Wang**; B.S., Stanford University, 2014.

**Tony Ying-Wen Wang**; B.S., Washington University in St. Louis, 2015.

Zixiao Wang; B.A., Johns Hopkins University, 2014.

**Robert Douglass Wardlow, II**; B.S., University of Maryland (Baltimore County), 2012.

Rebecca Edith Watsky; B.A., Yale University, 2014.

**Eric Xiaoguang Wei**; B.A., Columbia University in the City of New York, 2016.

**Jenny Xin Wen**; B.A., Rice University, 2013; M.P.H., Johns Hopkins Bloomberg School of Public Health, 2019.

**Matthew Eldon Wood**; B.S., Brigham Young University, 2014.

Eric Glen Xie; B.S., Johns Hopkins University, 2014.

Kevin Z. Xin; B.S., Johns Hopkins University, 2015.

Eric Jia Yi Xu; B.A., University of Pennsylvania, 2015.

**Wan Rou Yang**; B.S., University of Washington, 2007; B.S., 2007.

**Alice Lily Zhou**; B.S., University of California (Los Angeles), 2016.

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## THE OATH OF HIPPOCRATES

I do solemnly swear...
by that which I hold most sacred...
That I will be fully committed to those I serve...

and just and loyal to the profession of medicine and its members...

That I will lead my life...

and practice my art...

in uprightness and honor...

That into whatsoever house I shall enter...

it shall be for the good of the sick...

to the utmost of my power...

holding myself aloof from wrong...

from corruption...

and from the tempting of others to vice...

That I will exercise my art...

solely for the care of my patients...

and will give no drug...

and perform no operation...

without justifiable purpose...

nor ever suggest it...

That whatsoever I shall see or hear...

of the lives of men and women...

which is not fitting to be spoken...

I will keep inviolably secret...

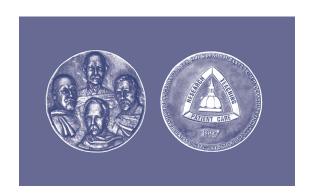
These things I do promise...

and in proportion as I am faithful to this my oath...

may happiness and good repute be ever mine...

the opposite if I shall be forsworn.

# MEDAL OF THE FRANCES WATT BAKER, M.D. AND LENOX D. BAKER, Jr., M.D. DEANSHIP



#### JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE

In 1997 Dr. Edward D. Miller commissioned sculptor Neil Estern to create a medal commemorating the endowment of the Baker deanship. The medal was struck in bronze. Design of its obverse is based on John Singer Sargent's group portrait of four major figures associated with the founding of the School of Medicine – William H. Welch, William Osler, Howard A. Kelly, and William S. Halsted. Silversmith Henry P. Hopkins, III designed and produced the chain of the medal which incorporates silver medallions inscribed with names of each individual who has served as Dean of the Medical Faculty. Included are blank medallions which will be inscribed with the name of each successive dean in years to come. The medal is worn by the dean on ceremonial occasions. When not in use, the medal is on display in the Office of the Dean.

William H. Welch 1893 - 1898

**William Osler** 1898 - 1899

William H. Howell

1899 - 1911 J. Whitridge Williams

1911 - 1923

**Lewis H. Weed** 1923 - 1929

**Alan M. Chesney** 1929 - 1953

**Philip Bard** 1953 - 1957

**Thomas B. Turner** 1957 - 1968

**David E. Rogers** 1968 -1971

**Russell H. Morgan** 1971 - 1975

**Richard S. Ross** 1975 - 1990

Michael E. Johns

1990 - 1996 **Edward D. Miller** 

**Interim Dean** 1996 - 1997

**Edward D. Miller** 1997 - 2012

Paul B. Rothman 2012 -

