Commencement Program

Mayo Clinic Alix School of Medicine
Mayo Clinic Graduate School of Biomedical Sciences

May 18, 2019
Mayo Civic Center Presentation Hall
Rochester, Minnesota
Mayo Clinic
College of Medicine and Science

The Mayo Clinic College of Medicine and Science is comprised of five schools.

• Mayo Clinic Alix School of Medicine
• Mayo Clinic Graduate School of Biomedical Sciences
• Mayo Clinic School of Continuous Professional Development
• Mayo Clinic School of Graduate Medical Education
• Mayo Clinic School of Health Sciences

Academic degrees are granted by the Mayo Clinic Board of Trustees on recommendation of the deans and the faculty of Mayo Clinic College of Medicine and Science.

The faculty is drawn from the clinical and scientific staff of Mayo Clinic and is augmented by area physicians. Faculty members participating in this graduation ceremony represent a total faculty of approximately 3,700.
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<td>Conferring of Honorary Degree</td>
<td>Gianrico Farrugia, M.D.</td>
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<td>L. James Maher III, Ph.D.</td>
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<td>Fredric B. Meyer, M.D.</td>
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<td>Honorary Degree Recipient</td>
<td>Richard Axel, M.D.</td>
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<td>Commencement Address</td>
<td>Richard Axel, M.D.</td>
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<td>Comments by the Dean</td>
<td>L. James Maher III, Ph.D.</td>
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<td>Mayo Clinic Graduate School of Biomedical Sciences</td>
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<tr>
<td>Student Address</td>
<td>Sabhya Rana</td>
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<tr>
<td>Mayo Clinic Graduate School of Biomedical Sciences</td>
<td>Class of 2019</td>
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<tr>
<td>Conferring of Degrees</td>
<td>Bruce F. Horazdovsky, Ph.D.</td>
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<tr>
<td>Mayo Clinic Graduate School of Biomedical Sciences</td>
<td>Kendall H. Lee, M.D., Ph.D.</td>
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<td>L. James Maher III, Ph.D.</td>
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<td>Virginia M. Shapiro, Ph.D.</td>
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<td>Student Advisors</td>
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<td>Comments by the Dean</td>
<td>Fredric B. Meyer, M.D.</td>
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<td>Mayo Clinic Alix School of Medicine</td>
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<tr>
<td>Student Address</td>
<td>John Moubarek</td>
</tr>
<tr>
<td>Mayo Clinic Alix School of Medicine</td>
<td>Class of 2019</td>
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<tr>
<td>Conferring of Degrees</td>
<td>J. Michael Bostwick, Mw.D.</td>
</tr>
<tr>
<td>Mayo Clinic School of Medicine</td>
<td>Fredric B. Meyer, M.D.</td>
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<td>Darcy A. Reed, M.D., M.P.H.</td>
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<td>Alexandra P. Wolanskyj-Spinner, M.D.</td>
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<td>Fredric B. Meyer, M.D.</td>
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<td>Timothy P. Peters</td>
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<td>Johnson L. Thistle, M.D.</td>
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</tbody>
</table>

Reception immediately following ceremony
Mayo Civic Center Grand Lobby
and Suites 102 – 105
PLATFORM PARTICIPANTS

Richard Axel, M.D.
Honorary Degree Recipient
Nobel Laureate
University Professor, Columbia University; Investigator, Howard Hughes Medical Institute

Gianrico Farrugia, M.D.
President & CEO, Mayo Clinic
Professor of Medicine and Physiology
Mayo Clinic College of Medicine and Science

Fredric Meyer, M.D.
Juanita Kious Waugh Executive Dean for Education, Mayo Clinic College of Medicine and Science
Dean, Mayo Clinic Alix School of Medicine
Alfred Uihlein Family Professor of Neurologic Surgery

L. James Maher III, Ph.D.
Dean, Mayo Clinic Graduate School of Biomedical Sciences
Professor of Biochemistry and Molecular Biology, Mayo Clinic College of Medicine and Science

Gerardo Colon-Otero, M.D.
Vice Dean, Mayo Clinic Alix School of Medicine; Dean, Mayo Clinic School of Medicine – Florida Campus
Professor of Medicine, Mayo Clinic College of Medicine and Science

Michele Halyard, M.D.
Suzanne Hanson Poole Vice Dean, Mayo Clinic Alix School of Medicine
Dean, Mayo Clinic Alix School of Medicine – Arizona Campus
Professor Radiation Oncology, Mayo Clinic College of Medicine and Science

J. Michael Bostwick, M.D.
Senior Associate Dean for Admissions, Mayo Clinic Alix School of Medicine
Professor of Psychiatry, Mayo Clinic College of Medicine and Science

Bruce Horazdovsky, Ph.D.
Associate Dean, Mayo Clinic Graduate School of Biomedical Sciences
Associate Professor of Biochemistry and Molecular Biology, Mayo Clinic College of Medicine and Science

Kendall Lee, M.D., Ph.D.
Director, Medical Scientist Training Program
Professor of Neurosurgery and Physiology, Mayo Clinic College of Medicine and Science

Darcy Reed, M.D., M.P.H.
Senior Associate Dean for Academic Affairs, Mayo Clinic Alix School of Medicine
Professor of Medicine, Mayo Clinic College of Medicine and Science
Associate Professor of Medical Education and Medicine, Mayo Clinic College of Medicine and Science

Virginia Shapiro, Ph.D.
Vice Chair, Department of Immunology, Mayo Clinic
Professor of Immunology, Mayo Clinic College of Medicine and Science

Alexandra Wolanskyj-Spinner, M.D.
Senior Associate Dean for Student Affairs, Mayo Clinic Alix School of Medicine
Professor of Medicine, Mayo Clinic College of Medicine and Science
Mayo Clinic
Graduate School of Biomedical Sciences

Since 1917 Mayo Clinic has been preparing candidates for M.S. and Ph.D. degrees in biomedical sciences. For 30 years, Mayo Clinic Graduate School of Biomedical Sciences has been training students in scholarship and scientific discovery as an independent degree-granting school. Currently, more than 100 students are working toward the M.S. degree, and more than 200 are working toward the Ph.D. degree. Seven students are admitted each year into the combined M.D.-Ph.D. degree program.

Embedded within a premier medical center, Mayo Clinic Graduate School of Biomedical Sciences provides students with access to elite faculty and a world-class education. Most of our graduates continue on to advanced research training and careers in biomedical research. Some students pursue primary teaching careers or a variety of other endeavors that use their research training.

The biographical information that follows each graduate's picture and name lists prior education and research advisor, and may include a thesis title and next career step.
Margaret Akinhanmi
B.S., Biological Science, University of Georgia, Athens, Georgia
Ph.D., Clinical and Translational Science
Advisor: Mark A. Frye, M.D.
Position: Health Policy Leadership Fellowship Program, Satcher Health Leadership Institute, The Division of Health Policy, Morehouse School of Medicine, Atlanta, Georgia

Jennifer Arroyo
B.S., Biochemistry/Cell Biology, Bucknell University, Lewisburg, Pennsylvania
Ph.D., Clinical and Translational Science
Advisor: Peter Harris, Ph.D.
Thesis: A Role for Canonical Wnt Signaling in Renal Development, Maintenance, and Autosomal Dominant Polycystic Kidney Disease
Position: Postdoctoral Fellow, Mayo Clinic, Nephrology, Rochester, Minnesota

Alexandra Blee
B.S., Biochemistry and Biology, University of California, Davis, Davis, California
Ph.D., Biochemistry and Molecular Biology
Advisor: Haojie Huang, Ph.D.
Thesis: Roles of TMPRSS2-ERG Gene Fusions During Prostate Adenocarcinoma Initiation and Progression
Position: Postdoctoral Scholar, Vanderbilt University, Department of Biochemistry, Nashville, Tennessee

Emma Brandt
B.S., Biomedical Sciences, University of Wisconsin-River Falls, Wisconsin
Ph.D., Molecular Pharmacology and Experimental Therapeutics
Advisor: Timothy Nelson, M.D., Ph.D.
Thesis: Dysregulation of p53 During Cardiac Differentiation of Human Induced Pluripotent Stem Cells
Position: Research Associate, University of Wisconsin-Madison, Cell and Regenerative Biology Department, Madison, Wisconsin

Anwar A. Chahal
B.Sc. (Hons), Genetics, University of Leeds, Leeds, England
M.B., Ch.B., University of Leeds, England
Ph.D., Clinical and Translational Science
Advisor: Virend Somers, M.D., Ph.D.
Thesis: Neural Circulatory Control, Genetic Pathogenic Variants and the Risk of Sudden Unexpected Death in Epilepsy (SUDEP)
Position: Clinical Fellowship in Cardiac Electrophysiology, University of Pennsylvania, Philadelphia, Pennsylvania

* denotes M.D.-Ph.D. dual degree program
DOCTOR OF PHILOSOPHY

Xiaoyue Chen
B.S., Biological Science, Tsinghua University, Beijing, Beijing, China
Ph.D., Biochemistry and Molecular Biology
Advisor: Jann Sarkaria, M.D.
Thesis: Epigenetic Abnormalities in Brain Tumors
Position: Postdoctoral Researcher, Amgen Inc., Oncology Research, Thousand Oaks, California

Yang Chen
B.S., Biological Sciences, Huaxhong University of Science and Technology, Wuhan, China
Ph.D., Biochemistry and Molecular Biology
Advisor: John Burnett, Jr., M.D.
Thesis: A Designer Natriuretic Peptide CRRL269 as a Novel Therapeutic Drug For Cardiac And Renal Disease
Position: Research Fellow, Department of Cardiovascular Medicine, Mayo Clinic, Rochester, Minnesota

Liang Cheng
B.S., Biotechnology, Shan Dong University, Jinan, China
Ph.D., Biochemistry and Molecular Biology
Advisor: Tamas Ordog, M.D.
Thesis: Role of DNA Replication-coupled Nucleosome Assembly in Cell Fate Determination During Development
Position: Postdoctoral Researcher, Columbia University, New York, New York

Dah-Eun Chloe Chung
B.A., Biochemistry, Washington University in St. Louis, St. Louis, Missouri
Ph.D., Neuroscience
Advisor: Leonard Petrucelli, Ph.D.
Thesis: Investigating Seeding and Aggregation of Microtubule-Associated Protein Tau
Position: Postdoctoral Fellow, Baylor College of Medicine, Houston, Texas

Brittney Anne Dinkel
B.S., Nebraska Wesleyan University, Lincoln, Nebraska
Ph.D., Immunology
Advisor: Karen Hedin, Ph.D.
Thesis: The Role of TCR-Mediated TCR-CXR4 Complex Formation in Cytokine Production by T Cells
Position: Visiting Assistant Professor of Biology, Buena Vista University, Storm Lake, Iowa
Yuan Gao
B.S., University of Science and Technology of China, Hefei, China
Ph.D., Biochemistry and Molecular Biology
Advisor: Zhenkun Lou Ph.D.
Thesis: Mechanisms Regulating Epigenetic Information Passage and Development-Associated Chromatin Remodeling
Position: Postdoctoral Fellow, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York

Yujin E. Kim
D.V.M., Konkuk University, Seoul, South Korea
Ph.D., Molecular Pharmacology and Experimental Therapeutics
Advisor: Leonard Petrucelli, Ph.D.
Thesis: Transcriptional Inhibition of (GGGGCC) Hexanucleotide Repeat Expansion in c9orf72 FTD/ALS

Swati Kumar
M.B.B.S., M.D., Pediatrics, Institute Of Medical Sciences, India
Ph.D., Virology and Gene Therapy
Advisor: David Dingli, M.D., Ph.D.
Thesis: Sensing of HIV-1 by the Innate Immune System

Brian Lu
B.A., Biochemistry, Vassar College, Poughkeepsie, New York
Ph.D., Virology and Gene Therapy
Advisor: Yasuhiro Ikeda, D.V.M., Ph.D.
Thesis: Use of Glucokinase Gene Delivery to Enhance Beta-Cell Proliferation and Function
Position: Postdoctoral Fellow at University of Alabama at Birmingham, Department of Endocrinology, Metabolism, and Diabetes, Birmingham, Alabama

Reynold C. Ly
B.S., Biochemistry, Jacksonville University, Jacksonville, Florida
Ph.D., Molecular Pharmacology and Experimental Therapeutics
Advisor: Liewei Wang, M.D., Ph.D.
Thesis: Metformin Pharmacogenomics: Functional Genomics of CDC25B and TPD54 Regulation of Metformin Anticancer Response in Breast Cancer
Position: Clinical Pharmacology Postdoctoral Fellow, Indiana University School of Medicine, Division of Clinical Pharmacology, Indianapolis, Indiana

* denotes M.D.-Ph.D. dual degree program
DOCTOR OF PHILOSOPHY

Xiao Ma
B.S., Biology, Wuhan University, Wuhan, China
Ph.D., Clinical and Translational Science
Advisor: Xiaolei Xu, Ph.D.
Thesis: Explore Cardiomyopathy Genetics via Adult Zebrafish Model
Position: Research Fellow, Mayo Clinic, Department of Cardiovascular Diseases, Rochester, Minnesota

Courtney S. Malo
B.S., University of South Carolina, Columbia, South Carolina
Ph.D., Immunology
Advisor: Aaron J. Johnson, M.D.
Thesis: The Impact of Cell-Specific Deletion of MHC I in Generating CD8 T Cell Responses in the Central Nervous System
Position: Postdoctoral IRTA, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, Maryland

Tewodros “Teddy” Mamo*
B.A.Sc., Nanotechnology Engineering, University of Waterloo, Waterloo, Canada
Ph.D., Molecular Pharmacology and Experimental Therapeutics
Advisor: Michael Yaszemski, M.D., Ph.D.
Thesis: Sensitizing Osteosarcoma to Radiation Therapy
Residency: Pediatrics, University of Texas-Southwestern Medical School, Dallas, Texas

Lorena Marcano Bonilla
B.S., Cellular and Molecular Biology, University of Puerto Rico, Rio Piedras Campus
Ph.D., Clinical and Translational Science
Advisor: Lewis Roberts, M.B., Ch.B., Ph.D.
Thesis: Aspirin, other NSAIDs, Statins & Metformin Reduce the Risk of Biliary Tract Cancers: A Population-Based Cohort Study
Position: Fourth-Year Medical Student, University of Puerto Rico School of Medicine, San Juan, Puerto Rico

Dalia Mikhail
B.A., Biology, Saint Mary’s University, Winona, Minnesota
Ph.D., Clinical and Translational Science
Advisor: Michael Jensen, M.D.
Thesis: Improving Comprehensive Lifestyle Interventions for the Medical Management of Obesity
Position: Fellowship in Genetic Epidemiology, Mayo Clinic, Rochester, Minnesota
Essa Mohamed
B.A., Biology, Sociology and Anthropology, St. Olaf College, Northfield, Minnesota
Ph.D., Clinical and Translational Science
Advisor: Lewis Roberts, M.B., Ch. B., Ph.D.
Thesis: Disparities in Liver Disease among African Immigrants in Minnesota
Position: Fellowship, Mayo Clinic, Department of Cardiovascular Diseases, Rochester, Minnesota

Joseph D. Mozingo
B.S., Biomedical Engineering at University of Rochester, Rochester, New York
Ph.D., Biomedical Engineering and Physiology
Advisor: Kristin Zhao, Ph.D.
Thesis: Imaging-Based Quantification of Shoulder Motion and Mechanical Impingement in Individuals With Spinal Cord Injury Who Use a Manual Wheelchair
Position: Postdoctoral Research Associate, University of Utah, Department of Orthopedics, Salt Lake City, Utah

Rory Olson
B.A., Biology and Chemistry, Concordia College, Moorhead, Minnesota
Ph.D., Biochemistry and Molecular Biology
Advisor: Peter Harris, Ph.D.
Thesis: Biochemical and Transcriptomic Analysis of Autosomal Recessive- and Autosomal Dominant- Polycystic Kidney Disease Reveals Clues to Pathomechanism of Renal Cystogenesis
Position: Postdoctoral Fellow, Mayo Clinic, Nephrology, Rochester, Minnesota

Christopher Alan Parks
B.S., Cellular/Molecular Biology and Music Performance, University of Wisconsin, La Crosse, Wisconsin
Ph.D., Immunology
Advisor: Larry Pease, Ph.D.
Thesis: Breaking Tolerance with Engineered Class I Antigen Presenting Molecules
Position: Postdoctoral Research Scientist, Columbia University, Columbia Center for Translational Immunology, New York, New York

Kimberly Perez
B.S., Biochemistry and Mathematics-Buena Vista University, Storm Lake, Iowa
Ph.D., Immunology
Advisor: Robin Patel, M.D.
Thesis: Staphylococcus Epidermidis Interactions with the Human Host that Permit Evasion of Immune Killing
Position: Postdoctoral Fellow, Stanford University School of Medicine, Department of Microbiology and Immunology, Stanford, California

* denotes M.D.-Ph.D. dual degree program
Rachael Philips
B.S., Physiological Science, University of California, Los Angeles, Los Angeles, California
Ph.D., Immunology
Advisor: Virginia Shapiro, Ph.D.
Thesis: Transcriptional Regulation of T Cell Development by HDAC3
Position: Postdoctoral Fellow, NIH, NIAMS - Molecular Immunology and Inflammation Branch, Bethesda, Maryland

Li Qiang
B.S., Biotechnology, Northwestern A&F University, Yangling, Shaanxi, China
M.S., Biological Science, University of Minnesota-Twin Cities, Minneapolis, Minnesota
Ph.D., Biochemistry and Molecular Biology
Advisor: Mark McNiven, Ph.D.
Thesis: Regulation of Metalloprotease Action During Cancer Cell Metastasis
Position: Postdoctoral Researcher, Mayo Clinic, Gastroenterology Department, Rochester, Minnesota

Sabhya Rana
B.S., Biological Sciences, University of California, Irvine, Irvine, California
Ph.D., Molecular Pharmacology and Experimental Therapeutics
Advisor: Carlos Mantilla, M.D., Ph.D.
Thesis: Neuroplasticity of Respiratory Motor Control Following Spinal Cord Injury
Position: Postdoctoral Research Fellow, Department of Physiology and Biomedical Engineering, Mayo Clinic, Rochester, Minnesota

Stephanie L. Safgren
B.S., Chemistry, South Dakota School of Mines and Technology, Rapid City, South Dakota
M.S., Chemistry South Dakota School of Mines and Technology, Rapid City, South Dakota
Ph.D., Molecular Pharmacology and Experimental Therapeutics
Advisor: Martin Fernandez-Zapico, M.D.
Thesis: GLI1 Gene Expression Regulation in Cancer
Position: Research Fellow, Oncology, Mayo Clinic, Rochester, Minnesota

Kevin Guanwen Shim*
B.S., B.H.S., Molecular and Cellular Biology, Physiology, University of Arizona, Tucson, Arizona
Ph.D., Immunology
Advisor: Richard Vile, M.D., Ph.D.
Thesis: Combination Vesicular Stomatitis Virus Immunotherapy to Improve Treatment Outcomes in a Mouse Model of Metastatic Melanoma
Residency: Internal Medicine, Barnes-Jewish Hospital, St. Louis, Missouri
DOCTOR OF PHILOSOPHY

Joyce Thompson
M.S., Lifesciences, University of Mumbai, Mumbai, India
Ph.D., Molecular Pharmacology and Experimental Therapeutics
Advisor: Keith Robertson, Ph.D.
Thesis: Preventive Role of Curcuma Longa and Terminali Arjuna Against Mutagenesis Caused by Acrylamide and Boric Acid
Position: Postdoctoral Fellow, National Institute of Health, NICHD, Bethesda, Maryland

Sneha Vivekanandhan
B.S., Biotechnology, North Dakota State University, Fargo, North Dakota
M.S., Biotechnology, Johns Hopkins University, Baltimore, Maryland
Ph.D., Biochemistry and Molecular Biology
Advisor: Debabrata Mukhopadhyay, Ph.D.
Thesis: Genetic Status of KRAS Influences Transforming Growth Factor Beta (TGF-B) Signaling in Tumorigenesis
Position: Postdoctoral Fellow, Department of Immunology, Mayo Clinic, Jacksonville, Florida

Christina Von Roemeling
B.S., BioBehavioral Health, The Pennsylvania State University, University Park, Pennsylvania
Ph.D., Biochemistry and Molecular Biology
Advisor: Betty Kim, M.D., Ph.D.
Thesis: Therapeutic Modulation of the Phagocytosis Axis as a Novel Glioblastoma Immunotherapy
Position: Postdoctoral Research Fellow, University of Florida Brain Tumor Immunotherapy Program, Department of Neurosurgery, Gainesville, Florida

Monique Williams
B.A., Biology, Oakwood University, Huntsville, Alabama
Ph.D., Biochemistry and Molecular Biology
Advisor: Eric Klee, Ph.D.
Thesis: Regulation of HP1 Alpha by Phosphorylation During Mitosis is Critical for the Maintenance of Genomic Integrity
Position: Postdoctoral Associate, Duke University, Department of Surgery, Durham, North Carolina

Hyejin Yoon
B.S., Genetic Engineering, Kyunghee University, South Korea
M.S., Life Science, Gwangju Institute of Science and Technology, South Korea
Ph.D., Neuroscience
Advisor: Jungsu Kim, Ph.D.
Thesis: The Function of Microrna-7a in the Brain Regulating Energy Homeostasis
Position: Postdoctoral Fellow, Massachusetts General Hospital and Harvard Medical School Neurology Department, Alzheimer’s Disease Research Unit, Boston, Massachusetts

* denotes M.D.-Ph.D. dual degree program
Erin Fender  
B.S. General Science, University of Oregon, Eugene, Oregon  
M.D., University of Miami Miller School of Medicine, Miami, Florida  
M.S., Clinical and Translational Science  
Advisor: Sorin Pislaru, M.D., Ph.D.  
Thesis: Functional Tricuspid Regurgitation, Surgery, and Survival  
Residency: Cardiology/Interventional, Mayo Clinic, Rochester, Minnesota

Dae Wook Hwang  
M.D., College of Medicine, Seoul National University, Seoul, Republic of Korea  
M.S., in Medicine, College of Medicine, Seoul National University, Seoul, Republic of Korea  
Ph.D. in Medical Science, College of Medicine, Seoul National University, Seoul, Republic of Korea  
M.S., Clinical and Translational Science  
Advisor: Michael Kendrick, M.D.  
Thesis: The Resolution of Pre-existing, Long-standing Type 2 Diabetes after Pancreatoduodenectomy  
Position: Assistant Professor, Division of Hepatobiliary and Pancreatic Surgery, Asan Medical Center, College of Medicine, University of Ulsan, Seoul, Republic of Korea

Calvin Jerde  
B.S., Cellular and Molecular Biology, Winona State University, Winona, Minnesota  
M.S., Biochemistry and Molecular Biology  
Advisor: Thomas Ordog, M.D.  
Scholarly Review: Circadian Regulation of Gastrointestinal Function: Tune or Consequences  
Position: Development Technologist II, Mayo Clinic, Rochester, Minnesota

Dominder Kaur  
M.B.B.S., Maharashtra University of Health Sciences, Maharashtra, India  
M.S., Clinical and Translational Science  
Advisor: Aneel Ashrani, M.D., M.Sc.  
Thesis: Hemorrhagic and Thrombotic Complications in Recipients of Hematopoietic Stem Cell Transplant  
Position: Assistant Professor, Pediatric Hematology, Oncology and BMT, Columbia University, New York, New York
Panagiotis Kerezoudis
M.D., National and Kapodistrian University of Athens, Athens, Greece
M.S., Clinical and Translational Science
Advisor: Elizabeth Habermann, Ph.D.
Thesis: Surgical Readmissions and Reoperations: Implications for Quality Improvement and Health Care Policies
Residency: Neurologic Surgery, Mayo Clinic, Rochester, Minnesota

Kathleen Kollitz Jegapragasan
B.S., Symbolic Systems, Stanford University, Charlottesville, Virginia
M.D., Duke University School of Medicine, Durham, North Carolina
M.S., Orthopedics
Advisor: Alexander Shin, M.D.
Thesis: A Rabbit Model of Brachial Plexus Injury and Recovery
Residency: Orthopedic Surgery, Mayo Clinic, Rochester, Minnesota

Clara Nicolas Martinez
M.D., Universidad Complutense de Madrid, Madrid, Spain
M.S., Clinical and Translational Science
Advisor: David Farley, M.D.
Thesis: In Utero Gene Therapy to Correct the Metabolic Deficiency in Mouse and Pig Models of Hereditary Tysosinemia Type 1
Residency: Surgery, University of Alabama at Birmingham, Birmingham, Alabama

Aaron Odegard
B.S., Biology, Stetson University, Deland, Florida
M.S., Molecular Pharmacology and Experimental Therapeutics
Advisor: Evette Radisky, Ph.D.
Scholarly Review: Antibiotic Resistance: Colistin’s New Role in Emerging Resistance
Position: Medical Technologist, Infectious Diagnostics Laboratory, Baptist Health System, Jackson, Mississippi

Ibronke Oduyebo
B.S., Chemistry, University of Maryland, College Park, Maryland
M.D., Vanderbilt Medical School, Nashville, Tennessee
M.S., Clinical and Translational Science
Advisor: Michael Camilleri, M.D.
Thesis: A Phase 1B, Double-Blind, Placebo-Controlled, Parallel-Group, Multi-Dose Study of the Pharmacodynamics of NGM282 on Colonic Transit, Bile Acid Homestasis and Fecal Fat in Subjects with Functional Constipation
Position: Assistant Professor of Medicine, University of Michigan, Department of Internal Medicine, Division of Gastroenterology and Hepatology, Ann Arbor, Michigan
Pavan Parikh
B.Sc., Biomedical Science, University of Guelph, Ontario, Canada
M.D., St. George’s University, Grenada, West Indies
M.S., Maternal Fetal Medicine
Advisor: Y.S. Prakash, M.D., Ph.D.
Thesis: Hyperoxia-Induced Fetal Airway Smooth Muscle Cells
Position: Resident, Maternal Fetal Medicine, Mayo Clinic, Rochester, Minnesota

Megha Prasad
B.A., Biology, University of Southern California, Los Angeles, California
M.D., Keck School of Medicine of USC, Los Angeles, California
M.S., Clinical and Translational Science
Advisor: Amir Lerman, M.D.
Thesis: Uric Acid and Inflammation and its Association with Major Adverse Cardiovascular Outcomes across the Continuum of Cardiovascular Disease
Position: Research Collaborator, Cardiology Research, Mayo Clinic, Rochester, Minnesota

Mackenzie Purdy
M.D., University of Missouri, Columbia
M.S., Maternal Fetal Medicine
Advisor: Elizabeth Stewart, M.D.
Thesis: Increased Baseline YAP/TAZ Nuclear Localization and Responsiveness to Mechanical and Hormonal Changes Give Insight to Fibroid Pathophysiology
Residency: Reproductive Endocrinology, Mayo Clinic, Rochester, Minnesota

Yogesh Reddy
M.B.B.S., Medicine, Madras Medical School, Chennai, India
M.S., Clinical and Translational Science
Advisor: Barry A Borlaug, M.D.
Thesis: The β-Adrenergic Agonist Albuterol Improves Pulmonary Vascular Reserve in Heart Failure with Preserved Ejection Fraction: A Randomized Controlled Trial
Position: Fellowship, Advanced Heart Failure and Transplantation, Mayo Clinic, Rochester, Minnesota

Keely Redhage
B.S., Microbiology, Oklahoma State University, Stillwater, Oklahoma
M.S., Molecular Pharmacology and Experimental Therapeutics
Advisor: Marina Ramirez Alvarado, Ph.D.
Thesis: Mechanisms of Protein Toxicity in Cardiac AL Amyloidosis
Jessica Schmidt  
B.S., Physiology, B.S. Molecular and Cellular Biology, University of Arizona, Tucson, Arizona  
M.S., Molecular Pharmacology and Experimental Therapeutics  
Advisor: Aleksandar Sekulic, M.D., Ph.D.  
Scholarly Review: Modeling Lineage-specific Tumor Drivers in Melanoma Using Tumor-derived Induced Pluripotent Stem Cells  
Position: Senior Research Technologist, Mayo Clinic, Scottsdale, Arizona

Sierra Slade  
B.S., Neuroscience, Trinity College, Hartford, Connecticut  
M.S., Neuroscience  
Advisor: Isobel Scarisbrick, Ph.D.

Nathan Smischney  
M.D., University of Minnesota Medical School, Minneapolis, Minnesota  
M.S., Clinical and Translational Science  
Advisor: Brian Pickering, M.B., B.Ch.  
Thesis: T Ketamine/Propofol Admixture “Ketofol” at Induction in the Critically Ill Against Etomidate: Keep Pace Trial  
Position: Assistant Professor of Anesthesiology, Mayo Clinic, Rochester, Minnesota

Tatsuya Suwabe  
M.D., Nagoya City University, School of Medicine, Nagoya, Japan  
Ph.D., Medical Sciences, Kyorin University, Graduate School of Medicine, Tokyo, Japan  
M.S., Clinical and Translational Science  
Advisor: Vicente Torres, M.D., Ph.D.  
Thesis: Epidemiology of Autosomal Dominant Polycystic Kidney Disease in Olmsted County Project  
Position: Head Physician of Nephrology and Rheumatology, Toranomon Hospital, Tokyo, Japan

Nathan Werneburg  
B.S., Biotechnology, University of Northern Iowa, Cedar Falls, Iowa  
M.S., Molecular Pharmacology and Experimental Therapeutics  
Advisor: Gregory Gores, M.D.  
Scholarly Review: Regulation of the Transcriptional Co-Activator YES-Associated Protein (YAP)  
Position: Senior Lab Technician II, GI Basic Research, Mayo Clinic, Rochester, Minnesota
Chad Zack
B.S., Philosophy, Biology University of Scranton, Scranton, Pennsylvania
M.D., Temple University School of Medicine, Philadelphia, Pennsylvania
M.S., Clinical and Translational Science
Advisor: Amir Lerman, M.D.
Thesis: Leveraging Machine Learning Techniques to Forecast Patient Prognosis After Percutaneous Coronary Intervention
Position: Assistant Professor of Medicine, Penn State Milton S. Hershey Medical Center, Hershey, Pennsylvania

Peini Zhu
B.S. Biology, University of Pittsburgh, Pittsburgh, Pennsylvania.
M.S., Orthodontics
Advisor: Chad Rasmussen, D.D.S.
Thesis: Relationship Between FA to WALA Distance and ABO Buccolingual Inclination
Position: Orthodontist, Rosemount, Minnesota
A Farewell Thanks

As we transition beyond graduate school, we pause to thank those who have supported us along this journey. We salute our families, who have provided a lifetime of love and support during our growth as scientists. We are forever indebted to our mentors, who are champions of education, beacons of optimism in the face of disappointment and brilliant examples of what we hope to become. We appreciate our lab mates, classmates, and friends who rode the roller coaster with us, and the administrators who helped us to stay on track. We also thank our gracious benefactors for their continued financial support for our truly unique educational opportunity.

Our genuine and deep gratitude is extended to all who have helped us through the remarkable Mayo Clinic Graduate School of Biomedical Sciences experience. Please join us in celebration of this important time of transition.

— Mayo Clinic Graduate School of Biomedical Sciences
   Class of 2019
Graduating Class of 2019

Mayo Clinic Alix School of Medicine
Mayo Clinic Alix School of Medicine

Mayo Clinic Alix School of Medicine matriculated its first class in 1972. For more than 45 years, world-class faculty has educated aspiring physicians in Mayo Clinic’s unsurpassed model of team-based, patient-centered care. Our faculty work with students to develop the skills to be highly successful care providers as well as the compassionate hearts and inquisitive minds to change lives and innovate health care for generations to come.

Mayo Clinic Alix School of Medicine holds the distinction of being one national medical school with three unique campuses – the original campus in Rochester, Minnesota; a four-year campus at Mayo Clinic in Scottsdale, Arizona; and a third- and fourth-year program on Mayo Clinic’s Jacksonville, Florida, campus. Our novel school configuration provides our students with a depth and breadth of learning experiences unlike any other school.

We are proud that Mayo Clinic Alix School of Medicine is a top-ranked medical school with a stellar national and international reputation. Our integrated approach to clinical and research training means our students are instilled with an unrelenting quest to find and apply medical answers where none have been found before. We are constantly innovating curriculum so our students will be well-prepared to handle the challenges of the nation’s evolving health care environment.

The Class of 2019 will be part of the prestigious alumni of Mayo Clinic. Selected from 4,692 applicants, Mayo Clinic Alix School of Medicine Class of 2019 consists of 24 women and 20 men.
Jay Alix

Jay Alix is a noted philanthropist and founder of the turnaround consulting firm AlixPartners, the global advisory firm and industry standard for providing comprehensive solutions for companies facing complex operating, financial, legal and restructuring challenges. Sought out by corporate and government leaders alike, he has led and advised on some of the largest and most complex restructurings and turnarounds of the past four decades, including leading the creation, design and development of the highly successful restructuring and turnaround plan to bring General Motors in and out of bankruptcy in just 40 days. Having sold control of the firm in 2006, today Alix serves as one of 15 Board members and a mentor to AlixPartners’ leaders.

In addition to his past consulting work and private equity investment experience, Alix has lectured widely, written many articles on turnaround management, co-authored two books on the financial issues facing companies in reorganization, and given many speeches on corporate transitions, turnarounds and the corporate revitalization process.

Former U.S. President Clinton appointed Alix to the National Bankruptcy Review Commission in December 1994, the only businessperson and non-lawyer to serve on the nine-member commission. He served as a strategic advisor to Dennis Archer during his first term as mayor of Detroit in 1994. The Turnaround Management Association presented Alix with the 2002 Chairman’s Award in recognition of his “pioneering leadership role” in helping to create and build the turnaround industry. The Japanese Association for Turnaround Professionals honored him as its Inaugural Foreign Member in April 2003. He received the Harvey R. Miller Outstanding Achievement Award for Service to the Restructuring Industry in November 2004. Alix was awarded Wayne State University’s 2005 Michigan Executive of the Year award.

Since 2006, Alix has focused on pro bono advisory and creative activities including producing award-winning documentary films, six-time Tony-winning Broadway musicals and plays, and Grammy-nominated music. He has actively helped restructure the Detroit Public School System and assisted the Norman Rockwell Museum advance its mission nationally and internationally.

Alix completed the YPO/Advanced Management Program at the Harvard Business School. He holds an MBA in accounting from Rutgers University and a bachelor’s degree in finance from the Wharton School at the University of Pennsylvania. He began his career as a CPA with PricewaterhouseCoopers in New York.
Claire Olivia Brutocao  
B.S., Science-Business, The University of Notre Dame, Notre Dame, Indiana
Residency: Psychiatry, Butler Hospital-Brown University, Providence, Rhode Island

Richmond Malabanan Castillo  
B.S., Cellular and Molecular Biology, Johns Hopkins University, Baltimore, Maryland
M.S., Biology, Johns Hopkins University, Baltimore, Maryland
M.A., Teaching, Johns Hopkins School of Education, Baltimore, Maryland

Christopher Anh-Thao Dinh  
B.S., Molecular Biology & Biochemistry, Finance, Rutgers University, New Brunswick, New Jersey
Residency: Internal Medicine, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Merit Philip George  
B.A., Biology and Psychology, Virginia Commonwealth University, Richmond, Virginia
Residency: Internal Medicine, Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania

Shemonti Rabeya Hasan  
B.S., Molecular and Cellular Biology, B.S.H.S, Physiology, University of Arizona, Tucson, Arizona
M.S., Clinical and Translational Sciences, Mayo Clinic Graduate School of Medicine, Rochester, Minnesota
Residency: Neurology, Mayo Clinic School of Graduate Medical Education, Scottsdale, Arizona
Amal Y. Hassan  
B.A., Anthropology and Community Health, Brown University, Providence, Rhode Island  
Residency: Family Medicine, Stanford University, San Jose, California

Deeyar Adel Itayem  
B.S., Biology of Global Health, Georgetown University, Washington, D.C.  
Residency: Otolaryngology, University of Tennessee College of Medicine, Memphis, Tennessee

Courtney Lyn James  
B.S., Biology, University of Massachusetts, Lowell, Massachusetts  
Residency: Emergency Medicine, Orlando Health, Orlando, Florida

Casey R. Johnson  
B.A., Zoology, North Dakota State University, Fargo, North Dakota  
M.S., Cereal Science, North Dakota State University, Fargo, North Dakota  
Residency: Pediatrics, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Mark Walter Kaczor  
B.A., Molecular Biophysics and Biochemistry, Yale University, New Haven, Connecticut  
Residency: Pediatrics, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

* denotes M.D.-Ph.D. dual degree program
Grace Y. Kim
B.A., Neuroscience, University of Southern California, Los Angeles, California
Residency: Medicine-Preliminary, University of California-San Francisco, Fresno, California; Dermatology, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Daniel S. Kirk
B.S., Biological Sciences, University of Connecticut, Storrs, Connecticut
D.M.D., University of Connecticut School of Dental Medicine, Farmington, Connecticut
Residency: Oral and Maxillofacial Surgery, Mayo Clinic, Rochester, Minnesota

Mykhaylo “Misha” Krushelnytsky
B.S., Biochemistry, University of Washington, Seattle, Washington

Kaitlin Nicole Leopold
B.S.E., Biomedical Engineering, University of Iowa, Iowa City, Iowa
Residency: Pediatrics, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Tewodros “Teddy” Mamo*
B.A.Sc., Nanotechnology Engineering, University of Waterloo, Waterloo, Canada
Ph.D., Molecular Pharmacology and Experimental Therapeutics, Mayo Clinic Graduate School of Biomedical Sciences, Rochester, Minnesota
Residency: Pediatrics, University of Texas-Southwestern Medical School, Dallas, Texas
DOCTOR OF MEDICINE

Gohar Shahwar Manzar
B.S., Biology, University of Texas at Arlington, Arlington, Texas
Ph.D., Biomedical Engineering, University of Iowa, Iowa City, Iowa
Residency: Transitional, Memorial Sloan-Kettering, New York, New York;
Radiation Oncology, University of Texas MD Anderson Cancer Center, Houston, Texas

John P. Marinelli
B.S., Physics, United States Military Academy, West Point, New York
Residency: Otolaryngology, San Antonio Military Medical Center,
San Antonio, Texas

Lisa M. Marinelli
B.S., Life Sciences, United States Military Academy, West Point, New York
Residency: Pathology, San Antonio Military Medical Center, San Antonio, Texas

Carmen Marcelle Montagnon
B.A., Chemistry, Hamilton College, Clinton, New York
Residency: Dermatology, Mayo Clinic School of Graduate Medical Education,
Rochester, Minnesota

John Labeeb Moubarek
B.S., Biological Sciences, University of California Irvine, Irvine, California
Residency: Emergency Medicine, Riverside Community Hospital, Riverside, California

* denotes M.D.-Ph.D. dual degree program
Benjamin Francis Mundell  
B.S., Engineering Mechanics, United States Air Force Academy, Colorado Springs, Colorado  
Ph.D., Policy Analysis, Frederick S. Pardee RAND Graduate School, Santa Monica, California  
Residency: General Surgery, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Chris Martin Olson Jr.  
B.S., Biology, University of North Carolina, Charlotte, North Carolina  
Ph.D., Biomedical Sciences, University of Massachusetts, Amherst, Massachusetts  
Residency: Emergency Medicine, Indiana University School of Medicine, Indianapolis, Indiana

Tanmayi S. Pai  
B.A., English, Biology, Emory University, Atlanta, Georgia  
Residency: Internal Medicine, Mayo Clinic School of Graduate Medical Education, Jacksonville, Florida

Ashley Rose Paquin  
B.A., Biology, Carleton College, Northfield, Minnesota  
Residency: Internal Medicine, Oregon Health and Science University, Portland, Oregon

Haley Ruth Patterson  
B.S., Biology/Medical Sciences, Western Illinois University, Macomb, Illinois  
Residency: Emergency Medicine, University of Wisconsin Hospitals and Clinics, Madison, Wisconsin
DOCTOR OF MEDICINE

Pierce Andrew Peters
B.A., Chemistry, Macalester College, St. Paul, Minnesota
Residency: Neurological Surgery, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Amanda L. Porter
B.S., Biochemistry & Molecular Biology, Hope College, Holland, Michigan
Residency: Neurology, Mayo Clinic School of Graduate Medical Education, Jacksonville, Florida

Aradhana “Lipi” Sahoo
B.S., Speech-Language Pathology and Audiology, University of Texas at Dallas, Richardson, Texas
Residency: Internal Medicine, NYP Hospital-Columbia University Medical Center, New York, New York

Jennifer Helen Schildmeyer
B.A., Sociology/Anthropology, Psychology, Lewis & Clark College, Portland, Oregon
Residency: Family Medicine, Kootenai Health, Coeur d’Alene, Idaho

John Christian Swihart Schupbach
B.S., Mechanical Engineering, Washington University in St. Louis, St. Louis, Missouri
M.B.A., Harvard Business School, Boston, Massachusetts
Residency: Emergency Medicine, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

* denotes M.D.-Ph.D. dual degree program
Kristen Lelah Sessions
B.S., Chemistry and Economics, University of Miami, Miami, Florida
Residency: Pediatrics, Northwestern McGaw/Lurie Children’s Hospital, Chicago, Illinois

Saumya Mihir Shah
B.S., Ecology and Evolutionary Biology, University of California, Los Angeles, Los Angeles, California
Residency: Medicine-Preliminary, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota; Ophthalmology, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Kevin Guanwen Shim*
B.S., B.H.S., Molecular and Cellular Biology, Physiology, University of Arizona, Tucson, Arizona
Ph.D., Immunology, Mayo Clinic Graduate School of Biomedical Sciences, Rochester, Minnesota
Residency: Internal Medicine, Barnes-Jewish Hospital, St. Louis, Missouri

Lauren Elizabeth Smith
B.S., Nutritional Sciences, Cornell University, Ithaca, New York
M.P.H., University of California, Berkeley, Berkeley, California
Residency: Pediatrics, Cincinnati Children’s Hospital, Cincinnati, Ohio

Annabelle Kathleen Soares
B.S., Microbiology, Immunology, and Molecular Genetics, University of California, Los Angeles, Los Angeles, California
Residency: Pediatrics, Wright State University Boonshoft School of Medicine, Dayton, Ohio
Dylan Shea Soukup
B.S., Biology, Massachusetts Institute of Technology, Cambridge, Massachusetts
Residency: General Surgery, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Asha G. Stenquist
B.A., Economics, Geosciences, Wellesley College, Wellesley, Massachusetts
Residency: Obstetrics-Gynecology, Kaiser Permanente, Oakland, California

Kiri Elyse Sunde
B.A., Mathematics, B.S., Quantitative Biology, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina
M.S., Clinical and Translational Sciences, Mayo Clinic Graduate School of Biomedical Science, Rochester, Minnesota
Residency: Pediatrics, University of Wisconsin Hospital and Clinics, Madison, Wisconsin

Leonardo Adiputra Tjahjono
B.S., Chemistry with Concentration in Biochemistry, Wake Forest University, Winston-Salem, North Carolina
Residency: Medicine-Preliminary, Medical College of Wisconsin Affiliated Hospitals, Milwaukee, Wisconsin; Dermatology, Medical College of Wisconsin Affiliated Hospitals, Milwaukee, Wisconsin

Maria Emma Torres
B.S., Chemistry and Biology, University of Alabama in Huntsville, Huntsville, Alabama
Residency: Transitional, Redmond Regional Medical Center, Rome, Georgia; Anesthesiology, Emory University School of Medicine, Atlanta Georgia

* denotes M.D.-Ph.D. dual degree program
DOCTOR OF MEDICINE

Marvin Alvarez Vallejo
B.S., Biological Sciences, University of California, Irvine, California
D.M.D., Western University College of Dental Medicine, Pomona, California
Residency: Oral and Maxillofacial Surgery, Mayo Clinic, Rochester, Minnesota

Nathan James Vinzant
B.S., Medical Biology, University of South Dakota, Vermillion, South Dakota
Residency: Anesthesiology, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Simrit Kaur Warring
B.S., Exercise Biology, University of California, Davis, California
M.S., Global Medicine, Keck School of Medicine of USC, Los Angeles, California
Residency: Obstetrics-Gynecology, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

* denotes M.D.-Ph.D. dual degree program
A Farewell Thanks

The Mayo Clinic Alix School of Medicine Class of 2019 would like to express our most sincere gratitude to many individuals deserving of recognition and thanks.

First, to the patients of Mayo Clinic who have been gracious in allowing us to learn from them. With every patient, we learned to appreciate not only the symptom or the etiology of the disease but, most importantly, the story and essence of each unique individual.

Second, to the benefactors of the Mayo Clinic whose generosity has allowed us to receive an unparalleled education with the finest medical resources and opportunities to fill our learning with meaningful service.

Third, to the Mayo Clinic staff who have given so much time and attention to the behind-the-scenes details that ensure smooth learning, and especially to the faculty who have demonstrated the meaning of compassionate medical care. Together, we have learned what “the needs of the patient come first” truly means.

Next, to our fellow students who have accompanied us along the way with their support, understanding and laughter. To those who graduated before us, thank you for the perspective and meaningful guidance when planning for the future. And to those who graduate in the future, we are thankful for the opportunity to be your mentors.

Last but certainly not least, we are most thankful for our families and friends. Thank you for being so patient with us. Medical school has been a wild journey through our failures and successes. You all have made many sacrifices to be with us, to be available for us and to encourage us through it all. We could not have done this without you.

Through your support, patience and encouragement, today we graduate together. Today we become compassionate doctors because of you.

Thank you.

— Mayo Clinic Alix School of Medicine
Class of 2019
The Mayo Clinic School of Medicine
Physician’s Pledge

To patients, colleagues and society

In the tradition of Hippocrates and the physicians who have come before me, I make the following pledge:

The needs of my patients come first. I will be a partner to improve the quality of their life through good health. I will not discriminate, I will protect the vulnerable and above all, I will do no harm.

It is my duty to care for the individual and the community. I will work to prevent disease and assure access to care for all who are in need.

The practice of medicine is both art and science. The wisdom of my patients and colleagues will guide me in the art. I will improve medicine through science and by increasing my knowledge and skills throughout my career. I believe in the tradition that care is best delivered by health professionals working together in the best interest of the patient.

I will honor my teachers by freely sharing my knowledge and skill with patients, colleagues and successors.

My profession is an honored one and I will not violate the trust society has placed in me. I will provide care that is ethical, moral and just and expect the same from my colleagues. I will be humble.

In the presence of my teachers, my family, my class and my friends, I make these promises solemnly and freely.

Adapted from the Hippocratic Oath by the Mayo Clinic School of Medicine Class of 2004
Honored Guests and Award Recipients 2019
Richard Axel, M.D.

Richard Axel, M.D., is a molecular biologist; Nobel Laureate; university professor; professor of biochemistry and molecular biophysics, neuroscience and pathology; investigator at the Howard Hughes Medical Institute, and co-director of the Mortimer B. Zuckerman Mind Brain Behavior Institute at Columbia University in New York City.

In earlier studies with his colleagues geneticist Michael Wigler, Ph.D., and microbiologist Saul Silverstein, Ph.D., Dr. Axel developed gene transfer techniques that permit the introduction of virtually any gene into any mammalian cell. These studies not only afforded a novel approach to isolate genes but also permitted a detailed analysis of how they worked. This approach led to the isolation and functional analysis of the gene for the lymphocyte surface protein, CD4, the cellular receptor for the AIDS virus, HIV.

Dr. Axel then began to apply molecular biology to problems in neuroscience, with the expectation that genetics could interface with neuroscience to approach the tenuous relationship between genes, behavior and perception. His studies on the logic of the sense of smell revealed more than a thousand genes involved in the recognition of odors and provided insight into how genes shape our perception of the sensory environment. This research earned him the 2004 Nobel Prize in Physiology or Medicine.

Dr. Axel’s current work centers on how recognition of odors is translated into an internal representation of sensory quality in the brain and how this representation leads to meaningful thoughts and behavior.

Dr. Axel is a member of the U.S. National Academy of Science and the American Philosophical Society. He is a fellow in the American Academy of Arts and Sciences.

Dr. Axel obtained a bachelor’s degree from Columbia College and a medical degree from Johns Hopkins University School of Medicine.
Mayo Clinic Graduate School of Biomedical Sciences Dean’s Recognition Award

Dean’s Recognition Award recipients are chosen by leadership of Mayo Clinic Graduate School of Biomedical Sciences and Mayo Clinic Alix School of Medicine. This year’s Dean’s Recognition Award recipients are Virginia Shapiro, Ph.D., John Stulak, M.D., respectively.

Virginia Shapiro, Ph.D.

Virginia Shapiro, Ph.D., was selected for the Mayo Clinic Graduate School of Biomedical Sciences Dean’s Recognition Award for years of service as a dedicated mentor to students, her role as principal investigator in stewarding the T32 institutional training grant in immunology, service as a member of the 2018 MGS Growth Task Force, and her role in MCGSBS admissions.

Dr. Shapiro is vice chair of the Department of Immunology at Mayo Clinic in Rochester, Minnesota, and a professor of immunology in the Mayo Clinic College of Medicine and Science. She is a member of the Mayo Clinic Personnel Committee and Research Review Group, and former member of the Mayo Clinic Research Core Subcommittee. Dr. Shapiro’s laboratory is interested in understanding hematopoiesis and lymphocyte development, maturation and activation.

Dr. Shapiro has been involved in mentoring and graduate education since 2000. She served in graduate admissions at the University of California, Berkeley; University of Pennsylvania; and Mayo Clinic. Since joining Mayo Clinic in 2008, she has taught first-year immunology for graduate students, Tutorial on Cell Signaling, Tutorial on B Cell Development, Genome Biology and Cancer Biology. She also developed a course for an Introduction to flow cytometry. Dr. Shapiro is principal investigator on the predoctoral training grant T32 renewal (years 21-25).

Dr. Shapiro received a Mayo Graduate School Teacher of the Year award in 2012. She serves on the Immunology Graduate Group Executive Committee and has served on 36 thesis committees and numerous oral qualifying committees. She has mentored 10 predoctoral students in her lab. Four of those she has mentored have received American Association of Immunologists Young Investigator Awards, and seven have been chosen for oral presentations or travel awards at annual AAI meetings. Dr. Shapiro also is active in the Summer Undergraduate Research Programs.

Dr. Shapiro has served in various positions in the American Association of Immunologists including chair of the Nominated Committee, founding member of the Career Advisory Board, chair of the Committee on the Status of Women and Abstract Programming Chair for Hematopoiesis. She is a member of the editorial board of Scientific Reports and former associate editor of the Journal of Immunology.

Dr. Shapiro completed a postdoctoral fellowship in immunology/cell signaling at the University of California in San Francisco. She received her Ph.D. in molecular and cell biology from the University of California, Berkeley, and an undergraduate degree in biochemistry from Harvard University in Cambridge, Massachusetts.
John Stulak, M.D.

John Stulak, M.D., was selected for the Mayo Clinic Alix School of Medicine Dean’s Recognition Award in recognition of his outstanding contributions and longstanding dedication to the school’s students. He inspires them with his creativity, energy and passion, and is a strong advocate for students considering careers in surgery. According to award nominators, Dr. Stulak epitomizes great mentoring. “He was the most influential person during my four years at Mayo and an absolute role model I hope to emulate during my career.” “Dr. Stulak exemplifies the culture that our medical school strives to foster and the type of physician/educator that we all should strive to become. I am certain the Mayo brothers would be proud to have someone like him representing their institution and educating the next generation of physicians.”

Dr. Stulak is a consultant in the Department of Cardiovascular Surgery at Mayo Clinic in Rochester, the department vice chair for education and medical director of an intensive care unit on the Rochester campus. He also is associate program director for the General Thoracic Surgery Fellowship and the General Surgery Residency, and surgery clerkship director for Mayo Clinic Alix School of Medicine. He joined the Mayo Clinic staff in 2011.

Dr. Stulak is a professor of surgery in the Mayo Clinic College of Medicine and Science. He is principal investigator of two ongoing clinical trials and co-investigator in several other trials including two NHLBI-funded clinical trials as part of the CTSNET Clinical Trials Network. His most significant areas of contributions to science are in surgical ablation of atrial arrhythmias and outcomes after implantation of left ventricular assist devices.

Dr. Stulak received a Teacher of the Year award in the Department of Surgery from the Mayo Fellows’ Association in 2013, Fellow Teacher of the Year award in the Division of Subspecialty General Surgery in 2010 and a Mayo Brothers Distinguished Fellowship Award from Mayo Clinic School of Graduate Medical Education in 2005. Other awards he has received include the McGoon Award for an outstanding young faculty member in cardiothoracic surgery in recognition of commitment to resident education and mentorship in 2017; and Jonathon van Heerden Award for Meticulous Patient Care in the Division of Subspecialty General Surgery in 2005.

Dr. Stulak completed a fellowship in cardiac transplantation and mechanical circulatory support from the University of Michigan in Ann Arbor and residencies in thoracic and cardiovascular surgery and general surgery at Mayo Clinic School of Graduate Medical Education in Rochester, Minnesota. He received his medical degree from Temple University School of Medicine in Philadelphia, Pennsylvania, and a bachelor’s degree from West Chester University in West Chester, Pennsylvania.
Diversity and Inclusion is a strategic priority at Mayo Clinic as we seek to produce the medical and biomedical workforces of the future. Mayo Clinic Alix School of Medicine is committed to creating an environment that embraces diversity and inclusion for our students and faculty. The recipient of the Dean’s Recognition Award for Diversity and Inclusion exemplifies exceptional service to the medical school for efforts related to diversity and inclusion. This year’s award recipient is Walter Franz III, M.D.

Walter Franz III, M.D.

Walter Franz III, M.D., was selected to receive the Mayo Clinic Alix School of Medicine Dean’s Recognition Award for Diversity and Inclusion in honor of his outstanding contributions to furthering the school’s vision for recruitment and retention of diverse students, and creating a learning environment that embraces diversity and inclusion. Dr. Franz has led activities and programs that use simulation to engage premedical students in clinical learning to encourage exploration of medicine and science. To accomplish this work, he has galvanized diverse teams of physicians, residents, scientists, research staff and allied health employees. He has leveraged diverse, underrepresented perspectives on these teams to meet the needs, interests and demographics for learners. Dr. Franz has kept diversity and excellence in programming at the forefront in hands-on simulation activities. As one of Dr. Franz’s colleagues said, “Dr. Franz embodies the attributes of a true champion for diversity.”

Dr. Franz joined the Mayo Clinic staff in 1982. He is a consultant in the Department of Family Medicine at Mayo Clinic in Rochester and an assistant professor of family medicine in the Mayo Clinic College of Medicine and Science. His medical practice and institutional responsibilities include an emphasis on acute care, care of the underserved, care of military veterans, and disaster and emergency management. His major educational and teaching interests focus on the simulation of global health issues, and mentoring of learners in providing care in austere, underserved environments, including the simulation of human rights issues.

Dr. Franz has participated in Mayo Clinic missions in New Orleans, Louisiana; Albania; Colombia; Haiti (Program of Underserved and Global Health); the Dominican Republic; Guatemala; and Nicaragua. He has received awards including the Mayo Medical School Teacher of the Year (1990), election to the Mayo Fellows’ Association Teachers Hall of Fame (1995), Alumni Distinguished Service Award from the University of Missouri-Columbia School of Medicine (1998), Minority Service Award from the Minnesota Medical Association (2001), Mayo Fellows’ Association Humanitarian Award (2008), Community Service Award from Zumbro Valley Medical Society and Minnesota Medical Association (2012).
Dr. Franz was commissioned in the U.S. Army Reserve in 1991 and retired with the rank of colonel after 23 years of service. During his military service, he served three tours in Iraq and a tour in Afghanistan, including command of a forward critical care and trauma team. His military awards include the Bronze Star Medal and the Combat Medic and Combat Action Badges.

Dr. Franz completed a fellowship and residency in family medicine at Mayo Clinic School of Graduate Medical Education. As a resident, he received a national Mead Johnson Award for residency performance. He received his medical degree with honors from the University of Missouri-Columbia School of Medicine in Columbia, Missouri; and a bachelor’s degree from William Jewell College in Kansas City, Missouri. He is a native of St. Louis, Missouri.
Mayo Clinic Alix School of Medicine Distinguished Service Award

Chosen by Mayo Clinic Alix School of Medicine leadership, the Distinguished Service Award recipient is a Mayo Clinic Alix School of Medicine educator or leader who has exemplified over the course of their career exceptional education and service to the medical school. This year the Distinguished Service Award recipient is Gina Vitali-Räsänen.

Gina Vitali-Räsänen

Gina Vitali-Räsänen was chosen for the Mayo Clinic Alix School of Medicine Distinguished Service Award in recognition of the critical role she plays in the recruitment of outstanding medical students, her service as adviser and confidant to program applicants, and her role as counselor to the admissions teams on all three Mayo Clinic campuses. Vitali-Räsänen also helps to ensure the quality of the medical school’s LCME-accreditation process.

Nominators for the award cited Vitali-Räsänen’s ability to advance the entire educational enterprise while dynamically and sensitively devoting herself to meeting the needs of team members and student applicants.

Vitali-Räsänen has been an admissions operations specialist in the Mayo Clinic Alix School of Medicine for four years and was instrumental in the successful expansion of admissions activities on the Arizona and Florida campuses of the medical school. Previously, she was an education administration coordinator for the medical school and Mayo Clinic School of Health Sciences. She joined Mayo Clinic in 2011.

Vitali-Räsänen has worked in higher education for 25 years. She has served as a coordinator and liaison for global medical humanitarian projects for 15 years — most recently for World Friends’ Neema Hospital project in Nairobi, Kenya. She received her bachelor’s degree from the University of St. Thomas in St. Paul, Minnesota, majoring in Spanish language and education.
Each year the graduate students select faculty members to receive Teacher of the Year Awards. The awards are given to faculty members who have made significant contributions to graduate student education. This year’s Mayo Clinic Graduate School of Biomedical Sciences Teacher of the Year Award recipients are Aleksey Matveyenko, Ph.D., and Gina Razidlo, Ph.D.

Aleksey Matveyenko, Ph.D.

Aleksey Matveyenko, Ph.D., is a consultant in the Department of Physiology and Biomedical Engineering at Mayo Clinic in Rochester with a joint appointment in the Division of Endocrinology, Diabetes, Metabolism, and Nutrition. He also is an associate professor of physiology in the Mayo Clinic College of Medicine and Science.

Dr. Matveyenko’s career focuses on basic science and translational research into the pathophysiology of diabetes mellitus, with emphasis on understanding how pancreatic islets function in health and under conditions of metabolic stress.

Dr. Matveyenko completed his doctoral studies at the University of Southern California (USC), followed by a postdoctoral fellowship at the University of California, Los Angeles (UCLA). He then served on the UCLA faculty for six years after completing a postdoctoral fellowship. He transitioned to Mayo Clinic in 2014 to the newly formed Islet Regeneration Center, where he established an islet biology laboratory focused on identifying molecular and physiological mechanisms underlying loss of pancreatic beta cell mass and function in diabetes. More recently, the focus of his research has been on the role the circadian system as a novel regulator of beta cell function, survival and regeneration. Dr. Matveyenko has published extensively in the areas of circadian biology and physiology, molecular regulation of insulin secretion, and circadian control of beta cell function and turnover.

He is involved in leadership roles in the diabetes/metabolism community at and outside of Mayo Clinic; is a reviewer for multiple national and international research study sections focused on obesity, diabetes and endocrinology; serves on the editorial board of the premier review journal published by the American Physiological Society and several top journals in metabolism/physiology and diabetes fields; and is an active member of several professional societies.

Dr. Matveyenko completed a postdoctoral fellowship in metabolism and islet biology at UCLA. He received his Ph.D. from USC. He received a bachelor’s degree from Chapman University in Orange, California. His is a native of Moscow, Russia.
Gina Razidlo, Ph.D.

Gina Razidlo, Ph.D., is an associate consultant in the Division of Gastroenterology and Hepatology at Mayo Clinic in Rochester with a joint appointment in the Department of Biochemistry and Molecular Biology. She also is an assistant professor of biochemistry and molecular biology in the Mayo Clinic College of Medicine and Science.

Students who nominated Dr. Razidlo for the Teacher of the Year Award said: “Dr. Razidlo’s involvement outside the classroom was what struck us. She asks relevant questions in seminars and participates at graduate school weekends while being tremendously active in the lab. While working on establishing her own career, she contributes to our careers of many as mentor, committee member and person who is always available to bounce ideas off and talk to.”

The goal of Dr. Razidlo’s research is to determine the molecular mechanisms that regulate cell migration, invasion and metastasis with the intent of identifying novel therapeutic targets for cancer. Her background is in signal transduction and the regulation of cell survival, proliferation and invasion. Her focus is on diseases of the pancreas — specifically, inflammatory signaling, lipid storage and cytoskeletal dynamics in pancreatic cancer. Her research uses cell and molecular biological approaches to investigate the mechanisms of metastasis — specifically, signaling through small GTPases to regulate cytoskeletal dynamics leading to tumor cell invasion, and she has made significant contributions to understanding how tumors upregulate the invasive machinery to promote metastasis. She is investigating novel therapeutic approaches to block this process. She has received grants including a Mayo Clinic Center for Biomedical Discovery Pilot Award; Career Development Award from the Mayo Clinic SPORE in Pancreatic Cancer; Pilot Project Award from the Fraternal Order of Eagles Cancer Research Fund; and Mayo Clinic Center for Biomedical Discovery Pilot Award. She also is supported by an R01 from the National Cancer Institute.

Dr. Razidlo completed postdoctoral fellowships in cell biology in the Division of Gastroenterology and Hepatology at Mayo Clinic, and in biochemistry in the Department of Biochemistry and Molecular Biology at the University of Nebraska Medical Center in Omaha. She received her Ph.D. in pathology and microbiology from the University of Nebraska Medical Center’s Eppley Cancer Research Training Program. Dr. Razidlo received an undergraduate degree summa cum laude from Gustavus Adolphus College in St. Peter, Minnesota.
Each year graduating medical students select two faculty members to receive Teacher of the Year Awards. The awards are given in recognition of outstanding contributions to undergraduate medical education at Mayo Clinic. This year’s recipients are Joseph Grande, M.D., Ph.D., for basic science education, and James Gregoire, Ph.D., for clinical education.

Joseph Grande, M.D., Ph.D.
A practicing renal pathologist and researcher, Joseph Grande, M.D., Ph.D., is professor of laboratory medicine and pathology for Mayo Clinic College of Medicine and Science and holds appointments in the Division of Nephrology and Hypertension, Department of Internal Medicine, and Division of Experimental Surgery at Mayo Clinic in Rochester. He also is an adjunct professor in the School of Biological and Health Sciences Engineering at Arizona State University.

Dr. Grande, a Mayo Foundation Distinguished Educator, has been the director of the first-year course pathology and cell biology for Mayo Clinic Alix School of Medicine since 1991 and has participated in courses taught to undergraduate medical students, graduate students, residents and fellows. He served as associate dean for academic affairs for Mayo Clinic Alix School of Medicine from 2006 to 2013.

Mayo Clinic Alix School of Medicine students note Dr. Grande’s passion for teaching, ability to explain complex topics in an approachable way and advocacy on behalf of students. “My medical school experience would have not been the same without Dr. Grande. It is very infrequent to come across a professor who cares so deeply about our well-being as students and people.” “He cares for students with all of his myocardium. He is a treatment for intellectual malaise.”

Dr. Grande’s research focus is studying the basic mechanisms of renal fibrogenesis. He has had an established NIH-funded experimental renal research program at Mayo Clinic for 25 years. Dr. Grande has mentored more than 70 students, including medical students, visiting scholars, postdoctoral research fellows, Ph.D. candidates and high school students. He has participated in more than 50 grant review panels for the National Institutes of Health and serves as chair of an R13 review panel.

Dr. Grande has more than 260 publications related to basic/translational science and medical education. He has worked extensively with the National Board of Medical Examiners for more than 20 years, having served as chair of the Step 1 Committee and on the Composite Committee and Executive Board. In 2017, he received the Edithe J. Levit Distinguished Service Award from the National Board of Medical Examiners, and the Alpha Omega Alpha Robert J. Glaser Distinguished Teacher Award from the American Association of Medical Colleges.

Dr. Grande completed postdoctoral studies at the University of Michigan, Ann Arbor, after completing a residency in anatomic and clinical pathology at Mayo Clinic School of Graduate Medical Education. He was in the medical scientist training program and received a doctorate in pathology and medical degree from the University of Chicago, Illinois.
James Gregoire, M.D.

James Gregoire, M.D., was selected for the Mayo Clinic Alix School of Medicine Teacher of the Year Award – specifically, for best clinical professor – due to his commitment to and passion for medical student education. He is an assistant professor of medicine at Mayo Clinic College of Medicine and Science and a consultant in the Division of Nephrology and Hypertension in the Department of Medicine at Mayo Clinic in Rochester.

Students cited Dr. Gregoire’s ability to explain complex topics in an approachable, understandable way, and his care for and dedication to students, the curriculum and learning. “I did not fully understand what patient-centered care model is until Dr. Gregoire taught one of our blocks. However, he was more than just an educator, he is one of the greatest when it comes to patient advocacy; he is willing to go above and beyond to assist anyone who requires help — from patients to students.” “The handwritten and hand-graded tests say everything: You care so much about our learning, and we cannot thank you enough for the many thankless hours that go into us getting an awesome exposure to nephrology, especially how it all translated to within the clinical world of medicine.” “Dr. Gregoire is one of the most inspiring, influential teachers at Mayo Clinic. He is extremely kind and intelligent. He helps students believe in themselves, a skill that cannot be overstated, especially working with those early in medical training. I looked forward to every day on his Renal Ranger team. His humor, spark and humility are a rare combination. We cannot thank him enough for being the human being and teacher he is.”

Dr. Gregoire has led the renal block of the Mayo Clinic Alix School of Medicine since 2007 and the urinary tract block since 2014. He was selected Teacher of the Year for Basic Sciences in 2012, 2014 and 2017. He greatly appreciates the opportunity to work with medical students and looks forward to the wonderful things they will accomplish during their careers.

Through his experiences in life and his work in scouting and medicine, Dr. Gregoire has become a strong advocate for the prevention of physical abuse in youth, and treatment and support for those who have experienced abuse.

Dr. Gregoire completed residencies in nephrology and internal medicine at Mayo Clinic Graduate School of Medical Education. He received his medical degree from Mayo Medical School and bachelor’s degree from Gustavus Adolphus College in St. Peter, Minnesota. He was raised in Bemidji, Minnesota.
Mayo Clinic Alix School Of Medicine
Golden Stethoscope Awards

Mayo Clinic Alix School of Medicine third- and fourth-year students select up to four residents or fellow educators to receive the Golden Stethoscope Award. Recipients are chosen from all Mayo Clinic campuses. Students recognize these residents and fellows for their outstanding commitment to medical student education and for going above and beyond expectations during the students’ clinical experiences. This year’s Golden Stethoscope Award recipients are Joshua Ellis, M.D., Leah Heidenreich, M.D., Cree Kachelski, M.D., and Hailon Wong, M.D.

Joshua Ellis, M.D.

Joshua Ellis, M.D., completed a residency in the Department of Emergency Medicine at Mayo Clinic School of Graduate Medical Education and has accepted a medical education fellowship and emergency medicine staff physician position with the Harvard Medical Faculty Physician practice group at the Beth Israel Deaconess Medical Center in Boston, Massachusetts. In 2018 he received a Mayo International Health Program Scholarship from the Mayo Fellows’ Association. Dr. Ellis looks forward to continuing his career in medical education.

Students who nominated Dr. Ellis for the Golden Stethoscope Award said: “Dr. Ellis goes out of his way to help medical students feel comfortable and confident in the high-stress environment of the emergency room. He doesn’t just show up for work; he is proactive about making each shift a learning experience.” “Dr. Ellis is kind and enthusiastic. You can tell he really loves what he does and brings you along for the ride. He checks to make sure you’re enjoying your time and learning in a nonjudgmental, approachable manner. He is fantastic with students. His excitement for emergency medicine and involvement in medical student education is something I will strive for.”

Dr. Ellis received his medical degree from Howard University College of Medicine in Washington, D.C., and an undergraduate degree from the University of Houston, Texas, as a member of the Honors College. Dr. Ellis was raised in San Antonio, Texas, with four siblings. His father is African American, and his mother is Mexican American. He is proud to be an active member of the black, Hispanic and LGBT communities.
Leah Heidenreich, M.D.

Leah Heidenreich, M.D., is a resident in the Department of Pediatric and Adolescent Medicine at Mayo Clinic School of Graduate Medical Education. She is the class of 2021 representative on the Pediatrics Education Committee and was her medical school class of 2017 representative. Dr. Heidenreich looks forward to exploring pediatric fellowship options and to many more years of learning and teaching. She is certain she will make medical student education a cornerstone of her career.

Mayo Clinic Alix School of Medicine students who nominated Dr. Heidenreich for the Golden Stethoscope Award said: “She is brilliant, kind and exceptional in every sense of the word. She is one of the best teachers I have encountered in medical school, and she consistently goes the extra mile to offer support and mentorship. She is the type of doctor I hope to become and would want any of my loved ones to see.” “Dr. Heidenreich is an incredible teacher, friend, mentor and human being. She somehow finds the time to provide top-notch care to her patients while incorporating medical students into the day, finding ways to make them part of the team, finding pearls to teach and sending students home when that would better suit their education. She is amazing — no other words.” “Dr. Heidenreich took me under her wing and found clever ways to get me actively involved in patient care. She made me feel like an integral part of the team. I aspire to be the kind of team player that she is.”

Dr. Heidenreich completed a year of residency in the Department of Psychiatry and Psychology at Mayo Clinic before transitioning to pediatrics. She received her medical degree from Mayo Clinic School of Medicine and her undergraduate degree from the University of Illinois at Urbana-Champaign. She is from Illinois but has made Rochester, Minnesota, her home for the last six years. She met her husband, Mark Heidenreich, M.D., a fourth-year resident in the Department of Orthopedic Surgery, while both were in medical school at Mayo.
Cree Kachelski, M.D., is a third-year pediatric resident. Through residency she has cultivated interest in chemical dependency, child abuse medicine and emergency care of children. In June she will move to Kansas City, Missouri, to pursue a dual fellowship in pediatric emergency medicine and child abuse pediatrics at Children’s Mercy Kansas City. She also will obtain her master’s degree in medical education to enable her to continue working with and educating medical students and residents. Dr. Kachelski would like to become a residency program director.

Students who nominated Dr. Kachelski for the Golden Stethoscope Award said: “Dr. Kachelski is an excellent teacher who maintains an incredibly efficient, positive and fun working environment.” “She has great passion and knack for teaching. She has mastered teaching basic pediatric concepts in a simple way and teaches the importance of self-care and how to handle difficult and emotional situations in the children’s hospital. Dr. Kachelski is an inspiration and role model for many students and will continue to be a fantastic educator in her fellowship.”

Dr. Kachelski received her medical degree with honors from the University of Minnesota Medical School in Minneapolis, and an undergraduate degree from Saint Mary’s University in Winona, Minnesota, where she graduated magna cum laude. During medical school, she discovered her love for medical education and became involved in undergraduate mentoring, tutoring at the medical school, and teaching anatomy and basic doctoring. She has served as a mentor to medical students throughout medical school and residency. Dr. Kachelski will be married in June. She is a native of Elgin, Minnesota.
Hailon Wong, M.D.

Hailon Wong, M.D., is a third-year resident in the Department of Family Medicine at Mayo Clinic in Rochester. He plans to pursue a fellowship in global health at Florida State University in Fort Myers, where he will serve as junior faculty member. He hopes to also pursue a master’s degree in public health. He has completed global health trips to Nepal and several to Nicaragua.

Students who nominated Dr. Wong said, “His passion for teaching and dedication to patient care is apparent. His capacity to integrate timely evidence-based medicine into his everyday practice is impressive, but it’s the kind of attention he pays to the needs of patients and learners alike.” “Dr. Wong epitomizes the nurturing quality people seek in an educator and physician. He is filled with so much information that he’s like a family medicine reference book. He can give a lecture on hypertension on the spot and break down the information in a way that medical students and patients can easily understand.”

Dr. Wong received his medical degree and undergraduate degrees (with special distinction and summa cum laude) from the University of Oklahoma College of Medicine. He is a member of the Gold Humanism Honor Society and Phi Beta Kappa. He was born in Venezuela and grew up in Oklahoma.
Mayo Clinic Alix School of Medicine
Mayo Brothers Award

Given in memory of William and Charles Mayo’s service to the Army, this prestigious award is presented to a graduating medical school student who embodies the values of Mayo Clinic as well as the values of the United States Armed Forces medicine – academic performance, leadership, service, integrity, dutifulness and dedication to the patients. Recipients of this award have honorable military service and are chosen by Mayo Clinic Alix School of Medicine leadership. This year’s award recipients are Benjamin F. Mundell and Chris M. Olson Jr.

Benjamin Mundell

Benjamin Mundell graduates from Mayo Clinic Alix School of Medicine with a civilian match in general surgery. He is a former captain in the United States Air Force. He spent seven years on active duty and accumulated more than 160 hours of flying high-performance military jet trainer aircraft. He served as chief engineer for the Department of Defense’s only real-time global combat serve and rescue communication and coordination system, leading a team of engineers responsible for maintaining and improving that vital capability. Mundell received the Air Force Commendation Medal for that role.

Other awards and honors he has received include the William J. Schoen Scholarship Award from Mayo Clinic Alix School of Medicine; Project Air Force Dissertation Award, National Security Research Division Dissertation Award and RAND Impact Award from RAND Corporation.

During medical school Mundell conducted population-based research on the cost of care and health outcomes for individuals with transfemoral amputations. That research led to a series of publications including the first-ever estimate of the cost of falls for individuals with lower-limb amputations. This research was instrumental in the formation of a combined Center for Medicine and Medicaid, Veterans Affairs and Department of Defense database to track health care encounters, costs and utilization for individuals with lower-limb amputations.

He has conducted research in health economics and outcomes research in several surgical specialties resulting in five mostly first-authored peer-reviewed publications, with three forthcoming manuscripts, and four oral presentations including the American Orthotic & Prosthetic Association World Congress.

Mundell completed Science of Health Care Delivery certificate curriculum at Mayo Clinic School of Graduate Medical Education. He received a Ph.D. and master’s degree in policy analysis from Pardee RAND Graduate School in Santa Monica, California; and a bachelor’s degree from the United States Air Force Academy in Colorado Springs, Colorado, where he was a distinguished graduate (top 10 percent).

Mundell plans to pursue a career in academic general surgery, focused on improving surgical outcomes and decision-making.
Chris M. Olson Jr.

Chris M. Olson Jr. graduates from Mayo Clinic Alix School of Medicine with a civilian match in emergency medicine. Olson, a former lieutenant commander in the United States Navy Medical Service Corps, began his military career in 2009 as assistant chief of the Infectious Disease Laboratory at Walter Reed National Military Medical Center in Bethesda, Maryland. He subsequently served as senior scientist on the Joint Combat Casualty Research Team at NATO Role III Hospital in Kandahar, Afghanistan, under U.S. Central Command. During that time, he authored 27 studies, including a performance improvement study on wartime MEDEVAC operations published in the *Journal of Trauma and Acute Care Surgery*. Most recently, he was division officer of Naval Research Labs at the National Aeronautics and Space Administration, Stennis Space Center in Mississippi.

Olson received awards and military service decorations including Joint Service Commendation Medal, Navy and Marine Corps Achievement Medal, National Defense Service Medal, Global War on Terror Medal, Afghanistan Campaign Medal, Navy and Marine Corps Overseas Service Ribbon, NATO Medal and Expert Pistol Shot Medal.

Olson completed a predoctoral fellowship of the American Heart Association while completing a Ph.D. in biomedical sciences from the University of Massachusetts in Amherst. His Ph.D. resulted in 10 peer-reviewed publications including a co-first-authored article in *Proceedings of the National Academy of Sciences*. He has a bachelor’s degree from the University of North Carolina in Charlotte.

Olson is a partner and manages the web technology division of a creative technology company, Strut. Located in Rochester, Minnesota, Strut received the Small Business of the Year award in 2016 from the Rochester Area Chamber of Commerce.

Olson plans to integrate data science, advanced computer algorithms and artificial intelligence to optimize health care delivery for military and civilian patients in his emergency medicine practice.
Congratulations from the Mayo Clinic Alumni Association

The officers and Board of Directors of the Mayo Clinic Alumni Association welcome you as members. The Association’s mission is to nurture mutually beneficial relationships between Mayo Clinic and the remarkable individuals who participate in its education programs. It was formed by alumni who wished to maintain scientific and social contacts with the people and programs of Mayo Clinic. Since its incorporation in 1915, the Mayo Clinic Alumni Association has grown to include more than 24,000 members in medicine, academia and research throughout the United States and around the world. You now join the ranks of Mayo alumni and alumnae, and we are proud to count you among our respected colleagues. Welcome!

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- Promote and preserve excellence in the fields of medical practice, education and research
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- Perpetuate Mayo Clinic’s standard of excellence

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