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2023 • Issue

ROCHESTER

MAYO CLINIC ALUMNI ASSOCIATION 73RD BIENNIAL MEETING

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▲ Biennial meeting recap • 04 New president Theresa Emory, M.D. • 52 Distinguished Alumni Awards • 56

Letter from the president

It is with humility and eagerness that I begin my term as president of the Mayo Clinic Alumni Association. More than 32 years ago, **Roger Emory Jr., M.D.** (S '94), and I arrived at Mayo Clinic in Rochester as young physicians and parents. Training with a diverse group of fellows from all over the world and learning from and being encouraged by brilliant yet humble and selfless world experts has influenced my career and life in general.

Over my term, I hope to increase engagement in the Alumni Association, specifically with international alumni and younger alumni. I understand how challenging it is to balance career and family, but I have found great rejuvenation when reconnecting with fellow alumni. The recent Biennial Meeting in Rochester offered another such experience. It was a reminder that we are connected by a core set of values to serve our patients, our colleagues and those who follow in our footsteps.

I encourage you to read this issue of the alumni magazine in which the contributions of fellow alumni and their exemplification of Mayo Clinic values is truly inspiring. I was particularly touched by the profiles of the recipients of the Humanitarian Award (page 36), including their work in extremely underserved locations with selfless dedication to care for patients, even in life-threatening circumstances.

I am excited to share the implementation of the Early and Mid-Career Alumni Awards (page 67). These awards aim to recognize alumni throughout their professional lives and recognize Mayo Clinic values while advancing medical practice, research and education. Please consider nominating alumni for these new awards.

I hope you will join us in Trondheim, Norway, June 27–29, at the Alumni Association International Meeting (back cover). Our family visited Norway last year and found it to be beautiful, clean, safe and inviting. The hotel for the meeting is stunning, and there will be ample opportunity to explore the culture, cuisine and natural beauty.

I'm proud to serve you in leadership of the Alumni Association, and I encourage you to reach out to me if you have ideas for the Alumni Association or are interested in getting involved. mayoalumni@mayo.edu



SENIN

Theresa Emory, M.D. (PATH '94) President, Mayo Clinic Alumni Association Anatomic and clinical pathologist Peninsula Pathology Associates Newport News, Virginia

About the cover: A minimalist interpretation of the Rochester skyline to commemorate the Alumni Association's 73rd Biennial Meeting.

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James Munis, M.D., Ph.D., Humanitarian Award

- A fire in the belly Cumara O'Carroll, M.D., Humanitarian Award
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Ronald Petersen, M.D., Ph.D.

- 64 Mayo Clinic Update News & obituaries
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Alumni reunite in Rochester

ayo Clinic Alumni Association President **Carl Backer, M.D.** (MED '80), welcomed alumni from 20 states and three countries to the 73rd Biennial Meeting of the Mayo Clinic Alumni Association in Rochester, Minnesota. The welcome included a message from Mayo Clinic President and CEO **Gianrico Farrugia, M.D.** (I '91, GI '94).













Alumni from far and near gathered in Rochester to learn, celebrate, reminisce and reconnect.





n a first for an Alumni Association Biennial Meeting, participants were treated to the bounty of the six Distinguished Alumni Award recipients' careers, experience and wisdom. Each of the Distinguished Alumni Award recipients (page 56), who received their awards days prior, presented a lecture in their area of expertise:

 Stephen Burkhart, M.D. (OR '81),
 "Innovation: The Triumph of Improbability"

- Mary Burritt, Ph.D. (PATH '78), "Lessons Learned in the Lab"
- Gerald Gleich, M.D. (IMM '77), "The Hunt for the Red Leukocyte (eosinophil)"
- Morey Haymond, M.D. (PD '78), "Glucagon: New Look Old Drug"
- Celestia Higano, M.D. (I '82), "The Conundrum of Prostate Cancer"
- Ronald Petersen, M.D., Ph.D. (MED '80, N '84) "Current State of Alzheimer's Disease: Diagnosis and Treatment"

These lectures, representing hundreds of years of collective experience, were recorded and are available at alumniassociation.mayo. edu/mayo-clinic-alumni-association-73rd-biennial-speakers along with those described below.

Yolonda Colson, M.D., Ph.D. (MED '89) (page 26) provided the Judd– Plummer Lecture, "The Alchemy of Dreamers & Pragmatists." Dr. Colson described William Worrall Mayo, M.D., as a pragmatist and alchemist, who







Darryl Chutka, M.D. (MED '78, I '82) (above), Mayo Clinic Emeriti Staff, was program chair of the 2023 Alumni Association Biennial Meeting. The 2025 meeting will be in Jacksonville, Florida.

"My life and career as a surgeon started here and gave me the keys to the rest of my career."

– Yolonda Colson, M.D., Ph.D.

took something ordinary and turned it into something extraordinary. "The Mayos chose to lead when they saw opportunity," she said. Dr. Colson described **Henry Plummer, M.D.** (I '01), as a dreamer who demonstrated leadership during times of change. "Complexity in medicine and surgery requires systems, teams and pit crews," said Dr. Colson. "We can't do it individually. We need discipline, collaboration and teamwork. Dr. Plummer gave us the tools to manage complexity."

Dr. Colson, who is chief of the Division of Thoracic Surgery at Massachusetts General Hospital in Boston, set the tone for the day when she said it took her breath away to be back at Mayo Clinic. "My life and career as a surgeon started here and gave me the keys to the rest of my career."

Michele Halyard, M.D. (RADO '89) (page 22), Mayo Clinic Emeriti Staff and the recently retired Suzanne Hanson Poole Dean of Mayo Clinic Alix School of Medicine - Arizona Campus and vice dean of Mayo Clinic Alix School of Medicine, was the Raymond Pruitt Lecturer. Her lecture, "Medical School Education — Where We've Been and Where We're Going," described challenges in medical education as information overload, a constantly changing healthcare landscape, integration of technology into healthcare delivery and medical education, a need for interprofessional collaboration, assessment and feedback tailored to learners, faculty development and support, a need for emphasis on mental health and well-being, accreditation and regulatory requirements, and diversity and cultural competence leading to inclusion.

"I had a stethoscope and textbooks," said Dr. Halyard. "Today's students have laptops, iPads, phones and stethoscopes. Medical educators have evolved from being the sage on the

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SPEAKERS, AWARDS & RECOGNITIONS • 73rd Biennial Meeting



"Medical educators have evolved from being the sage on the stage to the guide on the side."

- Michele Halyard, M.D.

Awards and recognitions provided to incoming and outgoing presidents of the Alumni Association.

stage to the guide on the side. Students want interactive learning that's problem-based and team-based in a flipped classroom. They want earlier clinical interaction, career exploration opportunities, learning with resources outside of the medical school, and a hybrid approach in learning."

She noted that the more than 62,000 applicants to medical schools across the country will depend on medical education to evolve to meet their needs.

Other Mayo Clinic lecturers included:

- Stephen Merry, M.D. (FM '05), Department of Family Medicine, "Goals for Going Global: Principles of Health Development in the Majority World"
- Colin West, M.D., Ph.D. (I '03, CMR '04), Division of General Internal Medicine, "Healthcare Professional Burnout"
- Daniel Hurley, M.D. (I '83, ENDO '86), Division of

Endocrinology, Diabetes, Metabolism, and Nutrition, "Improving Provider-Patient Communications"

The meeting also included:

- Mayo Clinic Surgical Society in Honor of James T. Priestley program (page 10)
- Mayo Clinic Women Physicians and Scientists Affinity Group program (page 12)
- Young Investigators Research Symposium (page 14)
- President's Dinner with presentation of Professional Achievement and Humanitarian awards (pages 30–49)
- Presentation of Doctors Mayo Society Lifetime Achievement Award to Aminah Jatoi, M.D. (ONCL '98) (page 50)
- Passing of the president's gavel from Carl Backer, M.D., to Theresa Emory, M.D. (PATH '94) ●



Priestley Society Past President Eric Dozois, M.D., presented about the origin and history of the group.

Fast-cut of **Priestley Society meeting**

he 58th annual meeting of the Mayo Clinic Surgical Society in Honor of James T. Priestley was held in conjunction with the Mayo Clinic Alumni Association Biennial Meeting. It attracted members from all three Mayo Clinic campuses and five other states.

The group honored:

- Legacy Professor: Michael Farnell, M.D. (S '80), Mayo Clinic Emeriti Staff
- ReMine Lecturer: David W.
 Larson, M.D. (S '02, CRS '03), Division of Colon and Rectal Surgery, Mayo Clinic in Rochester
- Presidential Address: Stephanie Heller, M.D. (CCMS '02, S '04), chair, Division of Trauma, Critical

Care and General Surgery, Mayo Clinic in Rochester

The Legends Chief Conference was presided over by former General Surgery program directors Dr. Heller and **David Farley, M.D.** (S '94), Mayo Clinic Emeriti Staff.

Barbara Inlow-Childress was in attendance. She is the daughter of **Robert Inlow, M.D.** (S '63), who died in 2021 and for whom the Inlow Award is endowed and awarded annually for top surgical research by a resident in the surgical training program. Inlow Awardees who presented research include:

 Omair Shariq, M.B.B.S. (S '24), Mayo Clinic in Rochester; 2022 awardee; "Epigenetic Targeting of Bromodomain and Extra-Terminal Domain Proteins as a Novel Therapy for Pancreatic Neuroendocrine Tumors"

- Jennifer Tomlinson, M.D. (S '24, CI '26), Mayo Clinic in Rochester; 2023 awardee; "Discovery of Novel LCK Interactions in Cholangiocarcinoma Using Proximity-Dependent Biotinylation"
- Sacha Broccard, M.D. (S '23), colorectal fellow at Keck Medicine of USC; 2023 awardee; "Room for Improvement: Extended Venous Thromboprophylaxis After Abdominal and Pelvic Surgery for Colorectal and Anal Cancer; The Impact of Guideline-Recommended Thromboprophylaxis in Patients Undergoing Abdominal Surgery

for Colorectal and Anal Cancer at a Tertiary Referral Center"

Other speakers included:

- Eric Dozois, M.D. (S '00, CRS '01), chair, Division of Colon and Rectal Surgery, Mayo Clinic in Rochester and Priestley Society immediate past-president, discussed the origin and evolution of the group and insights into Dr. Priestley.
- Dr. Farley updated on activities of and opportunities to become involved in the American Board of Surgery.
- Charles Rosen, M.D. (MED '84, S '89, TRNS '91), Division of Transplantation Surgery at Mayo Clinic in Rochester, discussed the Mayo experience with use of liver transplantation for treatment of hilar cholangiocarcinoma.

- Mark Truty, M.D. (S '04, CI '06, S '09), chair, Division of Hepatobiliary and Pancreas Surgery at Mayo Clinic in Rochester, detailed the advances Mayo Clinic has made in pancreatic surgery.
- Angela Hanna, M.D. (S '08), Division of Pediatric Surgery, University of Nebraska Medical Center, shared her experiences training and educating pediatric surgeons to provide patient care in a war-torn underserved country.
- Todd Rasmussen, M.D. (MED '93, S '96, VASS '01, VASA '21), Division of Vascular and Endovascular Surgery, Mayo Clinic in Rochester, spoke about a century of surgical collaboration between the U.S. military medical corps and Mayo Clinic.

- Jess Thompson III, M.D. (STS '03, CI '05, CLRSH '06, TS '10, STS '10), Dignity Health, Yavapai Regional Medical Center, Prescott, Arizona, spoke about the need for surgical advocacy in an increasingly complex healthcare system.
- Mariela Rivera, M.D. (CCMS '11), Division of Trauma, Critical Care and General Surgery, Mayo Clinic in Rochester, discussed how to better assess technical and nontechnical skills in trainees as virtual interview platforms become more prevalent.

THE PRIESTLEY SOCIETY WILL HOST ITS 2024 ANNUAL MEETING OCT. 24–26 IN NAPA VALLEY, CALIFORNIA.

• Visit alumniassociation.mayo.edu/societies/ priestley-society for new and outgoing officers and future presidents and named lecturers.





Left: Priestley Society 2023 leaders Dawn Jaroszewski, M.D. (S '03), Division of Thoracic Surgery, Mayo Clinic in Arizona; Secretary-Treasurer and Program Chair Sami Khan, M.D. (PLS '04), Division of Plastic and Reconstructive Surgery, Stony Brook Medicine, Stony Brook, New York; and John Stulak, M.D. (S '06, TS '10), Department of Cardiovascular Surgery, Mayo Clinic in Rochester. Right: Priestley Society President Stephanie Heller, M.D.

Women Physicians and Scientists Affinity Group officers Melanie Brown, M.D., S. Ann Colbourne, M.D., Olayemi "Yemi" Sokumbi, M.D., and Jessica Silva-Fisher, Ph.D., with 2023 Program Chair Ana Norell, M.D. (center).

Women Physicians and Scientists Affinity Group **advances empowerment**

Mayo Clinic Women Physicians and Scientists Affinity Group officers

CHAIR

S. Ann Colbourne, M.D. (I '93, ADGM '94), Department of Medicine, University of Alberta, Canada

VICE CHAIR

Melanie Brown, M.D. (MED '98), Department of Pediatrics, The Johns Hopkins School of Medicine, Baltimore, Maryland

SECRETARY

Jessica Silva-Fisher, Ph.D. (BMB '11), Department of Medicine, Washington University School of Medicine, St. Louis, Missouri

EXECUTIVE SPONSOR

Olayemi "Yemi" Sokumbi, M.D. (MED '09, 11 '10, DERM '13), Department of Dermatology, Mayo Clinic in Florida

he Mayo Clinic Women Physicians and Scientists Affinity Group had programming at the Mayo Clinic Alumni Association Biennial Meeting, with panelists and speakers on the national landscape for reproductive rights, medical education and patient care after the Dobbs decision; diverse perspectives and journeys of physicians and scientists; overcoming obstacles and finding mentorship along the professional pathway; and finding work-life harmony. The program included opportunities for small group discussion and networking.

WOMEN PHYSICIANS AND SCIENTISTS AFFINITY GROUP • 73rd Biennial Meeting

The group was formed in 2019 to promote empowerment of Mayo Clinic alumni women physicians and scientists through education, dialogue, and connection to advance women's perspectives and voices worldwide.

Ana Norell, M.D. (FM '19), a family medicine physician with Allina Health in Hastings, Minnesota, served as program chair.

Pearls from the meeting include the following:

- Seize opportunities If you're given the chance to be on a spaceship, get on that spaceship.
- When opportunities arise, ask if they will get you where you want to go or if you are doing it to make someone else happy. Say yes to opportunities that align with your passion and vision.
- The enemy of good is perfect.
- Be adaptable and open at all times so you can pivot; but know your limits and what's not right for you. Know yourself.
- Be able to grow and adapt to what comes next. The most critical skill we can have is a growth mindset.

Speakers and panelists included:

- Anjali Bhagra, M.D. (I1 '05, I '08), medical director, Mayo Clinic Office of Equity, Inclusion and Diversity
- Claudia Chou, M.D. (I '15, N '18, MD '20), Division of Community Internal Medicine, Geriatrics, and Palliative Medicine, Mayo Clinic in Rochester
- LaTonya Hickson, M.D. (NEPH '08, CTSA '21), chair, Division of Nephrology and Hypertension, Mayo Clinic in Florida
- J. Luis Lujan, Ph.D. (NS '12), associate dean of Student Affairs, Mayo Clinic Graduate School of Biomedical Sciences
- Regan Theiler, M.D., Ph.D. (OBG '17), chair, Division



Left: Anjali Bhagra, M.D.

Below: Olayemi "Yemi" Sokumbi, M.D., Anne Schletty and Heidi Nelson, M.D.



of Obstetrics, Mayo Clinic in Rochester

- Heidi Nelson, M.D. (CRS '88, S '89), Mayo Clinic Emeriti Staff
- Robin Patel, M.D. (I '92, INFD '95, CM '96), Department of Laboratory Medicine and Pathology, Mayo Clinic in Rochester, the Elizabeth P. and Robert E. Allen Professor of Individualized Medicine
- Anne Schletty, principal business analyst, Department of Internal Medicine, Mayo Clinic in Rochester
- Erin Tietz, legal administrator, Mayo Clinic Health System
- Elizabeth Valencia, M.D. (RD '16), Department of Radiology, Mayo Clinic in Rochester •

WANT TO GET INVOLVED WITH THE GROUP?

- Visit alumniassociation.mayo.edu/societies/ women-physicians-and-scientists
- (log in to your alumni profile first)Email mayoalumni@mayo.edu (indicate
- Women's Affinity Group in subject line)

Spotlight shines on young investigators

he Young Investigators Research Symposium at the Alumni Association Biennial Meeting was a resounding success. Researchers represented all Mayo Clinic locations and Mayo Clinic Health System with young investigators at all levels undergraduate through early career scientists and physicians.

The 2023 co-chairs were **Elaine Griffeth, M.D.** (S '26, TS '28), and **Yun Liang, M.D.** (S '22, CI '24) — both surgical residents at Mayo Clinic in Rochester.

The event included breakout sessions on grant applications, clinical trials, and commercialization and innovation; and judged oral and poster presentations.

Speakers were:

Celestia Higano, M.D. (I '82), Madrona Oncology, Seattle, Washington, 2023 Mayo Clinic Distinguished Alumni Award recipient (page 62) "Trials, Tribulations, and Joy of Medical Research"

Myung Park, M.D. (CTSA '16), Division of Trauma, Critical Care and General Surgery, Mayo Clinic in Rochester "Early Career Funding: Exploring Options and Maximizing Success"

Yun Liang, M.D., and Elaine Griffeth, M.D., chaired the 2023 Young Investigators Research Symposium. **Clark Otley, M.D.** (DSRG '96), chief medical officer, Mayo Clinic Platform; Brenna Loufek, software as a medical device regulatory manager, Mayo Clinic Center for Digital Health AI in Healthcare & Biomedical Sciences panel

ORAL PRESENTATION AWARDS

Top Abstract Award for Clinical Research Mina Al Saeedi, M.B, Ch.B., M.D. (NEPH '22), research fellow, Division of Nephrology and Hypertension, Mayo Clinic in Rochester "Renal Microvascular Inflammation in Human Obesity Detected by Urinary Extracellular Vesicles"

Top Abstract Award for

Translational Research Markcus Lee II, research technologist, Mayo Clinic in Rochester "Comparative Assay of Barcoded Transposon Vector Systems In Vivo Reveals Advantages of PiggyBac"

Top Abstract Award for Basic Science Research

Niyati Borkar, Ph.D. (ANES '23), research fellow, Anesthesiology Research, Mayo Clinic in Rochester "Nicotine Affects Mitochondrial Dynamics in Human Airway Smooth Muscle Cells"

Top Abstract Award for Education Research

George Cholack, M.D. (I '23), resident, Department of Internal Medicine, Mayo Clinic in Rochester "Teaching Basic Sciences with Causal Mechanisms: A Randomized Controlled Study"

190+





in-person poster presentations

60+ virtual poster presentations

Best Quick Shot Oral Presentation Award

Anthony Kashou, M.D. (I '21, CV '25), fellow, Department of Cardiovascular Medicine, Mayo Clinic in Rochester "EDUCATE: An International, Randomized Controlled Trial for Teaching Electrocardiography"

Honorable Mention Quick Shot Oral Presentations Fadi Adel, M.D. (I '21, CTSA '23, CV '25), fellow, Department of Cardiovascular Medicine, Mayo Clinic in Rochester "The Glucose-Lowering and Cardiorenal Effects of CRRL094, a Novel Bispecific Peptide, Versus Exogenous Insulin in

Peyton Classon, GI Research Unit, Mayo Clinic in Rochester "Mitochondrial Iron Overload Renders Cholangiocarcinoma Vulnerable to Ferroptosis"

Experimental Diabetes"

POSTER PRESENTATION AWARDS

Best Poster Presentation by an Undergraduate Student Parmita Das "Packed Red Blood Cell (PRBC) Transfusions in the Emergency Department: A Descriptive Analysis at a Non-Trauma Center"

Best Poster Presentation

by a Medical Student Jennifer Backus "Intermammary Pilonidal Sinus Disease in a 13-year-old Girl"

Best Poster Presentation by a Graduate Student

Carter Hoffman, visiting predoctoral student, Department of Physiology and Biomedical Engineering, Mayo Clinic in Rochester "Rapid and Parallelized Antimicrobial Susceptibility Testing using Dropbased Microfluidic Barcoding"



Best Poster Presentation by a Resident

Jordan Nunnelee, M.D. (I '25), Department of Internal Medicine, Mayo Clinic in Rochester "C3+ and C3- Warm Autoimmune Hemolytic Anemias: Comparison of Clinical Characteristics and Treatment Outcomes"

Best Poster Presentation by a Clinical Fellow Saiesh Voppuru, M.B.B.S. (TSG '23), Department of Surgery, Mayo Clinic

in Rochester "Innovation in Lung Cancer Surgery: Shape-Sensing Robotic-Assisted Bronchoscopy (SSRAB) & Thoracoscopic Anatomic Resection in a Single Anesthesia Setting"

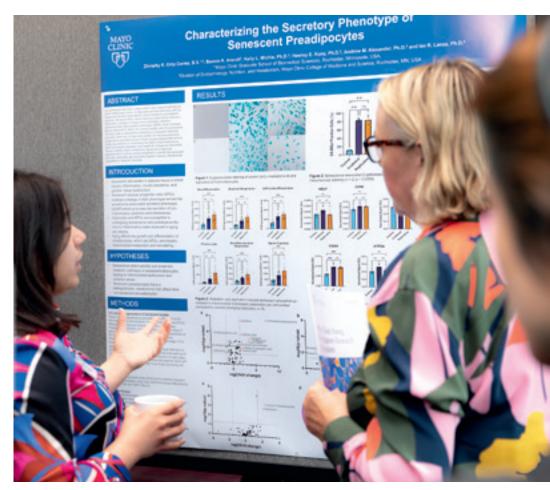
Best Poster Presentation by a Research Trainee

Diego Vinnicyus Santos Rodrigues, Surgery Research Office, Mayo Clinic in Rochester "Impact of Active Smoking in Perioperative Outcomes of Patient Undergoing FB-EVAR for Complex Aortic Aneurysms"

Best Poster Presentation by a Postdoctoral Research Fellow Indranath Mitra, Ph.D. (BME '21), Department of Physiology and Biomedical Engineering, Mayo Clinic in Rochester "Engineering Restorative Scaffolds for Hyperglycemia-Targeted Bone Healing in Diabetes Mellitus"

Best Poster Presentation by a Junior Faculty Member

Hyun Se "Daniel" Kim Lee, research technologist, GI Research Unit, Mayo Clinic in Rochester "Genetic Ablation of CD4 T Cells in Mice Attenuates Liver Injury, Inflammation, and Fibrosis in Metabolic Dysfunction Associated Steatohepatitis"



Zinnarky Ortiz Correa (CTSN '25), a predoctoral Ph.D. student, explains her research to event judge Christina Pabelick, M.D. (ANES '03), Department of Anesthesiology and Perioperative Medicine, Mayo Clinic in Rochester.

Best Virtual Poster Presentation Awards

Max Guarda, research trainee, Rheumatology Research Unit, Mayo Clinic in Rochester "Concordance of Relapse Symptoms with Initial Baseline Presentation Features Among Patients with Giant Cell Arteritis: An Analysis and Comparison of Three Patient Cohorts"

Andres Daryanani Acevedo, M.D., visiting research fellow, Echocardiology Research, Mayo Clinic in Rochester "Predictive Performance of Echocardiographic Variables on the Development of High-Grade Cytokine Release Syndrome After CD19 CAR T-Cell Therapy: A Retrospective Cohort Study" • Established in 2010, the Young Investigators Research Symposium is organized by the Mayo Fellows' Association, Mayo Research Fellows' Association, Mayo Clinic Alumni Association, Mayo Clinic College of Medicine and Science, and Mayo Clinic Office of Postdoctoral Affairs and Research Training. Graduate students, medical students, allied health students, undergraduates, residents, clinical fellows, postdoctoral research fellows and trainees, and junior faculty are invited to participate. The symposium is typically held every other year. Since 2021, the Alumni Association has included it as a component of its biennial meetings, which rotate among Mayo Clinic locations.

2023 • Issue 4



Good as gold

Medical school celebrates 50-year anniversary

Mayo Clinic Alix School of Medicine

- 478 current medical students
- 3% acceptance rate
- 30% of graduates are on Mayo Clinic staff
- One of the lowest faculty-to-student ratios in the U.S.

redric Meyer, M.D. (NS '88), the Juanita Kious Waugh Executive Dean of Education and the Alfred Uihlein Family Professor of Neurologic Surgery, welcomed more than 100 alumni of Mayo Clinic Alix School of Medicine, representing classes from 1976 to 2023, to the celebration of the school's 50 years of educating students, calling it a momentous occasion.

Eric Evenson, M.D. (MED '76), a member of the school's first class, made a celebratory toast to 50 years of medical education. Dr. Evenson noted that the first class of medical students didn't have medical students preceding them to



Above: Class of '76 members include Eric Evenson, M.D. (MED '76), Reading, Ohio; Mark Hauge, M.D. (MED '76, ONCL '87), Loretto, Minnesota; Mark Arnesen, M.D. (MED '76), Owatonna, Minnesota; James Davison, M.D. (MED '76, OPH '80), Marshalltown, Iowa; Robert Bruley, M.D. (MED '76), Minneapolis, Minnesota; and Kerry Olsen, M.D. (MED '76, ENT '81), Rochester, Minnesota.

Right: Medical school alumni, including the class of '80 (center), reminisce.

serve as role models and mentors and had to figure things out on their own. He recalled attending lectures in shorts, T-shirts and sandals. Ultimately, the students left medical school knowing that the primary focus must be on the patient and carried that with them throughout their careers.

Dr. Meyer reiterated that 50 years after Dr. Evenson and his peers walked through Mayo Clinic's doors, medical students continue to be inculcated in Mayo's primary value — the needs of the patient come first. "These students are provided with the best clinical and scientific education in the hope that they will advance healthcare around the world, using the Mayo Model of Care." •





Mayo Clinic Alumni Association Board members, including outgoing members: (row 1) David Skillrud, M.D.; Olayemi "Yemi" Sokumbi, M.D. (MED '09, I1'10, DERM '13); Judith D. Anderson, director, Alumni Center; Burkhard Wippermann, M.D. (BIOM '87), president elect; Carl Backer, M.D. (MED '80), immediate past president; Theresa Emory, M.D. (PATH '94), president; Melanie Brown, M.D., vice president; Dawn Davis, M.D. (PD '03, DERM '06), medical director, Alumni Center; Daniel Townsend, M.D. (MED '80); (row 2) Thomas J. Smith, M.D. (MED '83); Michael Rock, M.D. (OR '82); Robert Bratton, M.D.; Enrique Wolpert, M.D.; Eric Edell, M.D., past president; Daniel Chan, M.D. (MED '11, I'14, GI '17); Elizabeth Cozine, M.D. (MED '11, FM '14); Elaine Griffeth, M.D. (S '26, TS '28), president, Mayo Fellows' Association–Rochester; Elaine Yacyshyn, M.D. (I '96, RHEU '98, GERI '99); (row 3) Patricia Yugueros, M.D. (PLS '99, HAND '00, PRES '02); Erik St. Louis, M.D.; Gerardo Colon-Otero, M.D. (I '82, HEM '84); Kajetan von Eckardstein, M.D. (NS '08); John Loftus, M.D.; Mitchell Humphreys, M.D.; Eddie Greene, M.D. (NEPH '00), chair, Doctors Mayo Society.



For a complete list of board members, visit alumniassociation.mayo.edu/about/mayo-clinic-alumni-association-board.

Thank you for your service

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The 73rd Biennial Meeting included a changing of the guard in the Mayo Clinic Alumni Association.

OUTGOING BOARD MEMBERS AND EXECUTIVE COMMITTEE MEMBERS

Robert Bratton, M.D. (FM '93), Lexington, Kentucky M. Sertac Cicek, M.D. (CS '97), Istanbul, Turkey Sean Dinneen, M.D. (I '91, ENDO '94), Galway, Ireland Eric Edell, M.D. (THD '88), Rochester, Minnesota (past president) Bruce Horazdovsky, Ph.D. (BMB '02), Rochester, Minnesota Mitchell Humphreys, M.D. (U '06), Scottsdale, Arizona John Loftus, M.D. (MED '89, S '94, VASS '95), Napa, California David Skillrud, M.D. (I '82, THD '85), Bloomington, Illinois Erik St. Louis, M.D. (I '94, N '97, NEEG '98), Rochester, Minnesota Enrique Wolpert, M.D. (GI '69), Mexico City, Mexico

NEW BOARD MEMBERS

Kumar Bala, M.D. (GI '87, HEPT '88), Rialto, California Swarna Balasubramaniam, M.D. (MED '92, S '99), Sugar Land, Texas Linda Drozdowicz, M.D. (MED '14), Darien, Connecticut Saiyid "Akbar" Hasan, M.D. (TY '97), Ponte Vedra Beach, Florida Stephen Hogan, M.D. (PATH '90), Corvallis, Oregon Elizabeth Nesset Ferguson, M.D. (S'08, PLS'10), Cave Creek, Arizona Michael Pham, M.D. (I '16, RHEU '19), Scottsdale, Arizona (Executive Committee) Darcy Reed, M.D. (MED '00, I '03), Rochester, Minnesota (Executive Committee) Virginia Shapiro, Ph.D. (IMM '08), Rochester, Minnesota (Executive Committee) Matthew Wendt, M.D. (OR '12), Charlotte, North Carolina

NEW OFFICERS

Melanie Brown, M.D. (MED '98), Baltimore, Maryland (vice president)

STUDENT/TRAINEE BOARD REPRESENTATIVES

Hannah Berman, M.D. (I '22, DERM '25), Mayo Clinic School of Graduate Medical Education, Jacksonville, Florida Elaine Griffeth, M.D. (S '26, TS '28),

Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Hannah Lodin (MED '23), Mayo Clinic Alix School of Medicine, Scottsdale, Arizona

Taylor Orton, M.D. (S '24), Mayo Clinic School of Graduate Medical Education, Phoenix, Arizona Rameen Shah (BMB '25), Mayo Clinic Graduation School of Biomedical Sciences, Rochester, Minnesota •

Devotion to **DEI**

hen Michele Halyard, M.D., was a child, she thought she'd be a teacher. Her mother said, "Why don't you be a doctor instead?" Dr. Halyard combined education and medicine in a remarkable career. Dr. Halyard recently retired

from Mayo Clinic as the Suzanne Hanson Poole Dean of Mayo Clinic Alix School of Medicine – Arizona Campus and vice dean of Mayo Clinic Alix School of Medicine. She followed in the footsteps of **Raymond Pruitt, M.D.** (I '43, died 1993), the first dean of Mayo's medical school. Dr. Halyard was the first dean of the school's Arizona campus, a role she happened into.

Throughout her career, she was involved in high-level administrative roles, including starting the Center for Women's Health on the Arizona campus, serving on the Mayo Clinic in Arizona Board of Governors

Michele Halyard, M.D. (RADO '89)

Mayo Clinic Emeriti Staff

Scottsdale, Arizona



"I believe that **Mayo Clinic** is a gem that should be available to all. Everyone should be able to be part of it, to get care from and be comfortable at Mayo."

– Michele Halyard, M.D.

and on Mayo's Board of Trustees, and chairing the Department of Radiation Oncology. When leaders on the Arizona campus decided that having a medical school campus was the top strategic priority, colleagues suggested Dr. Halyard apply for the dean position. She served in that inaugural role for a decade.

While it may be one of the most high-profile roles in which Dr. Halvard has served, it's only part of her legacy. She played an important role in Mayo Clinic's anti-racism efforts, including recruitment of underrepresented residents and fellows and retention of trainees to become staff members. Mayo Clinic Graduate School of Biomedical Sciences' Student Life and Wellness Committee named a lecture series after Dr. Halyard. The monthly lectureship features Mayo speakers from underrepresented backgrounds talking about their careers.

Dr. Halyard helped to recruit her successor in the clinical area, **Sarah James, M.D., Ph.D.** (RADO '17). Dr. James was only the second Black resident in radiation oncology at Mayo Clinic in Rochester — Dr. Halyard was the first — and is now in the department on the Arizona campus.

"My devotion to diversity, equity and inclusion (DEI) has been an underlying component of everything I've done," says Dr. Halyard, an alum of Howard University, a historically Black research institution. "I believe that Mayo Clinic is a gem that should be available to all. Everyone should be able to be part of it, to get care from and be comfortable at Mayo. We're farther along that pathway than when I started, and Mayo will continue to progress in that area with dedication and persistence."

THE NEXT CHAPTER

Dr. Halyard's work in equity, inclusion and diversity isn't complete just because she retired from her medical career. She co-founded a nonprofit, the Coalition of Blacks Against Breast Cancer, which focuses on health disparities in the Black community and has expanded to include prostate cancer. She also plans to develop a coaching consultancy for women and people of color in middle and upper leadership, including at Mayo Clinic.

"I'm immensely grateful for the career Mayo Clinic afforded me," she says. "There has never been a day when I felt like I wanted to be somewhere else. I'll miss the daily interactions with my patients and colleagues.

"The Raymond Pruitt Lectureship recognizes integrity, scholarship, humility and the empathy of the truly concerned. I am honored and hope I've lived up to that."

The Raymond Pruitt Lectureship honors Raymond Pruitt, M.D., the first dean of Mayo Clinic Alix School of Medicine. The lecturer demonstrates qualities admired in Dr. Pruitt – integrity, scholarship, humility and the empathy of the truly concerned.





Michele Halyard, M.D. (top, center), at a 2019 Coalition of Blacks Against Breast Cancer fundraiser; Dr. Halyard with William Rule, M.D. (RADO '11), chair, Mayo Clinic Alix School of Medicine – Arizona Campus Diversity, Equity and Inclusion Council; medical students applaud Dr. Halyard at an event.



JUDD-PLUMMER LECTURER • 73rd Biennial Meeting

From farm to **(operating) table**

olonda Colson, M.D., Ph.D., grew up on a farm in Byron, Minnesota, near Rochester. Her mother had graduated from the Methodist–Kahler School of Nursing and had a career when many women didn't. Neither of Dr. Colson's parents had college degrees (although her father got a degree later, when Dr. Colson was in medical school), but they encouraged her to pursue her interests.

"When you have a farm, you have to figure things out," she says. "Some years, a flood can ruin your crop. Or the tractor quits on the back 40. When there's a problem, you figure it out. I think it's the Midwest work ethic — you work hard to get things done and take pride in doing the best possible job."

Yolonda Colson, M.D., Ph.D. (MED '89)

Chief, Division of Thoracic Surgery Hermes C. Grillo Professor in the Field of Thoracic Surgery Massachusetts General Hospital Professor of surgery, Harvard Medical School Member, Mass General Brigham Board of Directors

Boston, Massachusetts

"I always carry with me **Mayo Clinic's mission of patients coming first** and of being kind, thoughtful and respectful. That has served me well."

- Yolonda Colson, M.D., Ph.D.



Yolonda Colson, M.D., Ph.D., on the family farm where she grew up in Byron, Minnesota.

Dr. Colson's high school wasn't accredited by the state at the time, and she went to Rochester Community College to take calculus in anticipation of applying to engineering school. "My college tuition was money earned from the soybean bin," she says. "I liked math and science and the idea of helping people. I didn't really know what being a physician entailed but had a summer job in an orthopedics lab at Mayo Clinic during college and really liked it."

Dr. Colson was accepted to Mayo Clinic Alix School of Medicine and enrolled in the M.D.–Ph.D. program the first year it was offered. "I thought it would be a great way to combine my interests and serve as a pathway to discovery to help patients. I met cardiac surgeon **Dr. Michael Kaye** (S '74, died 2017) during my first week of medical school. I was fascinated by his talk about transplantation and approached him to ask how I could do what he was doing. This was at a time when very few women were in cardiac surgery. He was a great mentor who found a role for me in his lab and continued to call me every year until his death to ask how he could help."

Because Dr. Colson was interested in transplantation and it wasn't yet a key area at Mayo Clinic, she went to the University of Pittsburgh for the Ph.D. portion of the M.D.– Ph.D. program.

"When I finished my boards and graduated, I was only the 115th or so woman cardiothoracic surgeon in the U.S.," says Dr. Colson. "Some people had told me I couldn't do it. I just kept moving ahead, finding what worked for me, solving problems and surrounding myself with people who said, 'How can I help you?"

The rest is history.

BLAZING TRAILS

In 2022, Dr. Colson became the 103rd president of the American Association for Thoracic Surgery — the first female in that role. Only 8.4% of cardiothoracic surgeons are women. She is one of the few female cardiothoracic surgeons who has achieved full professorship, has NIH funding and is a division chief. She was the inaugural Michael A. Bell Family Distinguished Chair in Healthcare Innovation, executive director for Surgical Innovation

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and vice chair of Surgical Innovation in the Department of Surgery at Brigham and Women's Hospital. She was the examination chair for the American Board of Thoracic Surgery and developed the virtual oral exam platform used during the pandemic. She received the Edward M. Kennedy Award for Health Care Innovation from the Center for Integration of Medicine and Innovative Technology.

"I don't think of myself as a pioneer, but I know that my example matters," she says. "I don't dwell on barriers. If you encounter a roadblock or detour, find another way to get there. If you have a plan, you can deviate from it. I initially worked in lung transplantation and had NIH funding in that area, but when I started to collaborate with Dr. Mark Grinstaff (Boston University College of Engineering) on drug delivery using polymer films and nanoparticles, I switched my research focus there where I could be more impactful — and now have several grants in that area. Be willing to try new things. Don't be afraid to explore opportunities." Dr. Colson says being selected for the 2023 Judd– Plummer Lectureship is humbling. "I always carry with me Mayo Clinic's mission of patients coming first and of being kind, thoughtful and respectful. That has served me well. In my career, I'm most proud of the physicians and scientists I've mentored and the research we've collaborated on to help launch their careers. I tried to impart the Mayo Clinic values to them and others. I love taking care of patients and operating and have a responsibility to the surgeons in my division to facilitate and support their efforts in delivering excellent care to even more patients. The next generation in my subspecialty area is innovative and energetic. As a Mayo alum, I've done what I was supposed to do." •

The Judd–Plummer Lectureship was established to honor two early, distinguished members of the Mayo Clinic medical staff – E. Starr Judd, M.D. (S '04), chief of the surgical staff, and Henry Plummer, M.D. (I '01), chief of the Division of Medicine. This recognition is presented to an outstanding physician, surgeon, scientist or educator.



In 2022, Yolonda Colson, M.D., Ph.D., became the 103rd president of the American Association for Thoracic Surgery — the first female in that role. 73rd Biennial Meeting • PROFESSIONAL ACHIEVEMENT AWARD

A teacher at heart

regory Gores, M.D., has made enormous, unique and precedent-setting contributions to patient care, discovery, application research and education. Among his many accomplishments, Dr. Gores says he's most proud of the people he's helped train and the success they've achieved.

Throughout his career, Dr. Gores has mentored and helped to launch the careers of more than 80 fellows – 73% now working in academic medicine around the world. For his efforts, Dr. Gores has received an Outstanding Mentorship Award from the Department of Internal Medicine at Mayo Clinic in Rochester and a Mentorship Award from the American Gastroenterological Association. He is a past program director of the Transplant Hepatology Fellowship Program at Mayo Clinic in Rochester. And he received the Mayo Clinic Alumni Association Professional Achievement Award in 2023.

A FATHER'S ADVICE

Dr. Gores comes by his penchant for education naturally. His father, a teacher, suggested his son pursue medicine.

"I am naturally curious about how things work and showed a propensity for science," says Dr. Gores. "I grew up somewhat isolated in rural western North Dakota and used to read our encyclopedias to learn new things. When I was in my early teens, my dad told me medicine would be a good fit. I never considered anything else."

While attending medical school at the University of North Dakota in Grand Forks, Dr. Gores went to Mayo Clinic in Rochester as a visiting medical student clerk. Impressed by Mayo's subspecialization expertise, he thought it would be a good place to learn. His father weighed in again, telling him if he had the opportunity to train at Mayo Clinic, he should go there. Dr. Gores took his father's advice. He completed a residency in internal medicine at Mayo, followed by a fellowship in gastroenterology and concurrent research training in the Gastroenterology Research Unit with **Nicholas LaRusso, M.D.** (I '72, GI '75), a 2022 Mayo Clinic Distinguished Alumni Award recipient. Dr. Gores followed that up with training as a Mayo Foundation Scholar in the Department of Cell Biology and Anatomy at the University of North Carolina in Chapel Hill.

"I always knew I wanted to focus on internal medicine because I liked understanding organ systems, how they relate to each other and how to solve problems related to them," says Dr. Gores. "I enjoy making a diagnosis and executing a treatment plan. I chose GI and hepatology because the liver seemed like a nuanced organ, and I had many good role models in liver disease at Mayo Clinic."

Wanting to learn more about the liver, Dr. Gores focused his research in that area. "There was a lot of need for new knowledge in liver disease. And liver transplant was becoming a reality and starting at Mayo Clinic."

A LIVER DISEASE EXPERT

Four decades after Dr. Gores began training in medicine, he is one of the most well-known physician– scientists in liver disease. He is the world's expert at managing patients with hilar cholangiocarcinoma and has extensive expertise in the management of all types of patients with decompensated liver disease. He developed a protocol for the treatment of patients with unresectable perihilar cholangiocarcinoma that involves neoadjuvant chemoradiotherapy followed by liver

Throughout his career, Dr. Gores has **mentored and helped to launch the careers of more than 80 fellows** — 73% now working in academic medicine around the world.

Gregory Gores, M.D. (I '83, GI '86)

Mr. and Mrs. Ronald F. Kinney Executive Dean of Research Honoring Ronald F. Kinney, Jr.

Reuben R. Eisenberg Professor

Mayo Clinic

Rochester, Minnesota



Alumni Association President Carl Backer, M.D., presents Gregory Gores, M.D., with the Professional Achievement Award.

transplantation. The selection criteria and treatment plan are standardized, and the outcomes have been studied extensively. The protocol provides lifesaving access to liver transplantation for patients with a highly lethal cancer who have no other curative treatment options. This protocol was adopted by Medicare as an approved indication for liver transplantation in 2012, allowing insurance coverage and approval from the Organ Procurement and Transplantation Network so that patients are eligible for organ allocation scores and access to deceased donor liver transplantation. This lifesaving protocol has been adopted by centers around the world.

Dr. Gores has had continuous federal funding since 1988 for more than 80 projects and \$21 million in funding to study the mechanisms of liver injury, biliary tract disease and hepatobiliary neoplasia. He has more than 750 publications with more than 74,000 citations. In 2008, he received the Mayo Clinic Distinguished Investigator award for his research accomplishments.

While the cholangiocarcinoma liver transplantation protocol is the crowning glory of his leadership in clinical medicine, that work was preceded by extensive publications in biliary tract disease, helping Mayo investigators develop advanced cytological diagnostic tests for the early and definitive diagnosis of cholangiocarcinoma, and pioneering protocolized development of liver transplantation. After the success of that approach at Mayo Clinic, Dr. Gores' longstanding weekly clinic became an institution, with local, regional, national and international referrals. His internationally recognized expertise is evident from his leadership in the committees writing the practice guidelines for primary sclerosing cholangitis and intrahepatic cholangiocarcinoma and innumerable invited lectureships on the topic of cholangiocarcinoma.

He served as president of the International Liver Cancer Association and American Association for the Study of Liver Disease, and chaired the NIH Hepatobiliary Pathophysiology Study Section. His service to the liver community was recognized with the Distinguished Service Award from the American Association for the Study of Liver Diseases in 2016. He was recently named editor-in-chief of Hepatology, the flagship journal of the American Association for the Study of Liver Disease.

He served as chair of the Division of Gastroenterology and Hepatology at Mayo Clinic in Rochester from 2005 to 2013. As executive dean of Research, he serves on Mayo Clinic senior leadership committees and is responsible for research across Mayo Clinic locations. His vision has advanced discovery science, team science, clinical trials and entrepreneurship and provided the foundation for acceleration of work that has resulted in growth in extramural funding, increased numbers of scientists and innovators, new start-up companies and new research buildings to support the growth.

A MENTOR AT HEART

But mentorship holds Dr. Gores' heart. Some of his former trainees contact him on Father's Day — that's the esteem in which they hold him. "I like mentoring people on a daily, weekly and monthly basis, helping their scientific thinking evolve and seeing them develop the skills to communicate their findings in various ways. It's gratifying to see trainees succeed and make significant contributions to research to help solve the complexities of liver disease." •

The Mayo Clinic Alumni Association Professional Achievement Award acknowledges exceptional contributions by an alum in a clinical, research, educational or administrative field. Recipients demonstrate the commitment of the Mayo brothers to practice, education and research.

Always an achiever

Audrey Nelson, M.D. (I '69, RHEU '71)

Mayo Clinic Emeriti Staff

Rochester, Minnesota

udrey Nelson, M.D., grew up in Austin, Minnesota, where her family owned a grocery store. She started out wrapping lettuce, progressed to wrapping bakery goods and then cashiered, worked at the courtesy counter and served as night manager. She says she preferred traditionally male activities, so she played with her brother's Erector Set and Tinkertoys rather than the dolls her mother bought for her.

"There was a gender expectation that women be wives, mothers and homemakers," says Dr. Nelson. "My interests were mainly medicine. I did what I was drawn to and wasn't interested in the expectations of me based on gender."

Dr. Nelson was exposed to medicine and Mayo Clinic when she had arthritis in her teens. "As a junior in high school, I wrote a paper about being a doctor. The counselor said I should be a nurse. The following year I wrote a paper



Audrey Nelson, M.D., receives the Professional Achievement Award from Alumni Association President Carl Backer, M.D., at the President's Dinner.

about the pituitary gland, which spawned my interest in becoming an endocrinologist. I graduated as valedictorian and became the first in my family to go to college — at the University of Minnesota. I was self-guided and did my own thing."

FORGING HER OWN PATH

Medical school at the university followed college; then came an internship at the North Carolina Memorial Hospital in Chapel Hill and residency at Mayo Clinic in Rochester. Endocrinology gave way to rheumatology and a fellowship — also at Mayo.

"When I was in medical school, less than 5% of my class was female — eight of about 170 students. The class before mine had only one woman. When I joined the Division of Rheumatology at Mayo Clinic, I was the only woman in the entire Department of Internal Medicine."

Before she joined the Mayo Clinic staff, Dr. Nelson spent three months in Aylesbury and Taplow, England, studying pediatric arthritis. At the time, in the early 1970s, Mayo "I ended up chairing most things I got involved in. I delegated and didn't care who got the credit — **I just liked to get things accomplished.**"

- Audrey Nelson, M.D.

Clinic didn't have a pediatric rheumatology service. Several rheumatology consultants rotated through pediatrics on request. Recognizing the need, Dr. Nelson began seeing pediatric patients in her practice although she hadn't trained in pediatrics.

"We essentially started the pediatric rheumatology practice at Mayo Clinic," she says. "In 1974, Dr. Earl Brewer from Baylor, who is considered one of the pioneers of pediatric rheumatology, invited physicians from around the world who practiced pediatric rheumatology to a meeting in Park City, Utah, to discuss this emerging subspecialty — although it wasn't yet recognized as such. There were only 65 of us, so the discipline was tiny at the time and grew from there. I became a fellow of the American College of Pediatrics despite not being a pediatrician."

Dr. Nelson contributed to the literature on localized scleroderma and was the senior author on a landmark paper written by a fellow about the condition's classifications. She wrote textbook chapters about localized scleroderma, including the "Textbook of Pediatric Rheumatology," the standard in the subspecialty. She also has been instrumental in identifying talent and advancing the careers of young scientists and clinicians and has been a tireless campaigner to advance rheumatology.

LEADING THE WAY

But Dr. Nelson's greatest achievements were in leadership roles. She was the first woman to serve on the Mayo Clinic Board of Governors and was the vice chair, and was the first woman to serve on and chair the Mayo Clinic Personnel Committee. She served on the Board of Directors of the American College of Rheumatology and the American Medical Group Association. She was a delegate of the American Medical Association for 18 years and served in leadership positions. Dr. Nelson served the American College of Rheumatology's Council for Rheumatologic Care, Legislative Affairs Committee, Governmental Affairs Committee, Blue Ribbon Committee for Academic Pediatric Rheumatology, Finance Committee and Ethics Subcommittee. She was state director of the American Medical Women's Association, president of the Zumbro Valley Medical Society and chair of the American Medical Group Association. She also served on the Board of Directors of the Mayo Clinic Alumni Association and chaired the Mayo Clinic Division of Pediatric Rheumatology.

Dr. Nelson is a master of the American College of Rheumatology and has recognitions including the Distinguished Service Award from the Minnesota Medical Association and American College of Rheumatology; Edward Drewry Henderson, M.D., Leadership Award from the Zumbro Valley Medical Society; Alumni Society Recognition Award from the University of Minnesota; and Mayo Clinic Distinguished Alumni Award. In 2023, she received the Mayo Clinic Alumni Association Professional Achievement Award.

A 2001 story in Mayo Clinic Alumni magazine described Dr. Nelson as the most effective leader that you've never heard of. "I ended up chairing most things I got involved in. I delegated and didn't care who got the credit — I just liked to get things accomplished," she says. "I've always been an achiever." •

The Mayo Clinic Alumni Association Professional Achievement Award acknowledges exceptional contributions by an alum in a clinical, research, educational or administrative field. Recipients demonstrate the commitment of the Mayo brothers to practice, education and research.

Contributions to the welfare of **community**, **country** or **humanity**

The Mayo Clinic Alumni Association Humanitarian Award acknowledges significant contributions — beyond any volunteer service to Mayo Clinic — by alumni of Mayo's education programs to the welfare of the community, country or humanity.

The 2023 recipients excel in their service to others.

2023 Mayo Clinic Alumni Association Humanitarian Award recipients Peter Daly, M.D., Cumara O'Carroll, M.D., and James Munis, M.D., Ph.D.

73rd Biennial Meeting • HUMANITARIAN AWARD

'Where I am **more needed**'

s a result of his efforts, 68,000 patients have been served since 2008 and 8,700 surgical procedures performed in countries where surgical care, not to mention healthcare overall, is in short supply.

That's **Peter Daly, M.D.,** who is chief medical officer of One World Surgery. The nonprofit organization has built healthcare facilities in Honduras and the Dominican Republic. One World Surgery sprang from Dr. Daly's interest in global health.

"Social justice is a fundamental part of my Catholic faith," he says. "I always wanted to have a practical way to apply that to my professional life, and medicine provides the perfect platform. Medicine welcomes every faith through our natural urging to bind another's wounds. My wife, Lulu, was interested in the Peace Corps after college, but it was impractical at the time due to my college debt and anticipated medical school debt. Our urge to do humanitarian and global health work was deferred but not forgotten."

DEFERRED BUT NOT FORGOTTEN

After completing surgical training, Dr. Daly volunteered with Orthopaedics Overseas, primarily in Saint Lucia. He also volunteered with

Peter Daly, M.D. (MED '86, OR '91)

Summit Orthopedics

Chief medical officer, One World Surgery

St. Paul, Minnesota

St. Mary's Health Clinics in the Minneapolis–St. Paul area. In 1993, the Dalys became acquainted with Nuestros Penqueños Hermanos (NPH) in Tegucigalpa, Honduras, an organization that cares for vulnerable children across Latin America and the Caribbean with housing, education and family support services. The couple volunteered with NPH, including helping to build a small home for children with disabilities at an existing children's home.

Dr. Daly provided primary care at NPH's Honduras clinic, prescribing antibiotics for common bacterial illnesses and GI disturbances. He helped with basic orthopedic conditions to the degree possible, including tendon repairs and fracture care.

"The Honduran healthcare system is so overwhelmed with emergency trauma that it's not able to attend to other disabling surgical conditions," says Dr. Daly. "If it doesn't cause you to bleed out, it's often ignored. Fractures can become crippling if neglected and families negatively

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"Surgical work in global health is woefully behind global primary care availability."

- Peter Daly, M.D.

affected when the breadwinner is disabled. Additionally, there are many nonemergent but essential non-orthopedic surgeries to address. Eighty percent of the population in Honduras live below the WHO poverty line, and more people die each year from preventable surgical conditions than combined deaths related to tuberculosis, malaria and HIV."

FROM POSSIBILITY TO REALITY

Dr. Daly's experience with ambulatory surgical facilities prompted him to explore the possibility of building a surgical facility on the NPH Honduras site — a way around the overburdened public health setting.

"Surgical work in global health is woefully behind global primary care availability," he says. "Surgical care requires tools, machinery, facilities and sterilization. You need infrastructure and an in-country partner who can help with local operations, shipping and receiving, customs, regulatory needs, relationships with local medical professionals and having a finger on the pulse of what the community needs."

In 2008, the organization he founded, One World Surgery, built a medical center with an ambulatory surgical center, the Holy Family Surgery Center, adjacent to NPH Honduras. A Honduran-trained orthopedic surgeon who grew up in the NPH home now serves as the local medical director of the facility, which includes three operating rooms, a primary care clinic and a dental clinic. Four Honduran general practice physicians, two research coordinators, nurses and other professionals provide support. The model is being repeated in the Dominican Republic, with an orthopedic surgeon medical director, two primary care physicians and support personnel.

Dr. Daly is typically on site, mostly in Honduras, for one week each month. He's winding down in his private practice so he can serve through One World Surgery full time. His wife is a registered nurse who helps at the clinics. The couple's adult children grew up helping their parents in this endeavor. Dr. Daly has recruited help from physicians from around the U.S., including Mayo Clinic alumni, to support these efforts.

In-country teams of medical staff operate the surgery and primary care centers; and volunteers — in-country and from the U.S. — provide personnel support and education. This helps to ensure that One World Surgery facilities are sustainable.

"We want to do it well and to the best practice standards of high-income countries," says Dr. Daly. "We want to be part of the fabric of healthcare in the communities where we serve and provide free medical and surgical care to those who cannot access it in any other way. In low-income countries, unlike in the U.S., there are no safety nets."

In partnership with Dr. Daly's Summit Orthopedics private practice, the University of Minnesota and One World Surgery, four Honduran surgeons have participated in a one-year orthopedic surgical fellowship training program the first of its kind in Honduras. Through this unique program, the Honduran fellows can operate at both the Honduras One World





Surgery facility and with Summit Orthopedics surgeons in Minnesota. Additionally, U.S. orthopedic surgical residents have the opportunity to rotate to One World Surgery in Honduras, helping to perpetuate a bidirectional interest in global health.

One World Surgery in Honduras recently implemented an electronic medical record to track data for outcomes measurement. This has led to peer-reviewed publications that show the surgical outcomes at One World Surgery in Honduras are equivalent to those at high-income country medical centers — an infection rate lower than 1% and complication rate lower than 1.5%.

For his efforts, Dr. Daly received the 2016 Dr. Thomas A. Dooley Award from the University of Notre Dame Alumni Association and the 2022 Nap Gary Legacy Award for Lifetime Achievement in the ASC Community from the Ambulatory Surgery Center Association. In 2023, he received

Peter Daly, M.D. (right), and Bernard Morrey, M.D. (OR '76), Mayo Clinic Department of Orthopedic Surgery, look at a patient's images in Tegucigalpa, Honduras, in 2019. Dr. Daly with his wife, Lulu, outside an operating room in Honduras.

the Mayo Clinic Alumni Association Humanitarian Award.

INTENTIONAL

Dr. Daly has recently faced mortality. He was diagnosed with stage 4 cancer in 2021 and thus far has been successfully treated at Mayo Clinic. "Mayo Clinic is my home, and I am so grateful for their care," he says. Dr. Daly will continue an ongoing treatment trial for two more years.

"Whatever time I have on this earth, I want to be very intentional and do only that which the good Lord has for me to do," he says. "No one else can be husband, father and grandfather to my family. Other people can provide the surgeries here in the U.S., but it seems I can better serve One World Surgery with my family, my faith and my life's learnings at this point. I'd like to spend my time where I am more needed." • HUMANITARIAN AWARD • 73rd Biennial Meeting

Beyond the call of duty

James Munis, M.D., Ph.D. (ANES '01)

Mayo Clinic Emeriti Staff Rochester, Minnesota

"You can do more than you'd ever guess. **Find something** you love, are good at and have a passion for.

Take your medical skills where there's a gaping need."

- James Munis, M.D., Ph.D.

e's a risk taker. He rode a Ducati motorcycle to work. He's the son of an FBI agent and grandson of a Montana homesteader. James Munis, M.D., Ph.D., Mayo Clinic Emeriti Staff, feels drawn to helping in conflict zones around the world. He retired early in 2021 to devote more time to that pursuit.

"When we physicians retire, Mayo Clinic will continue on without us," he says. "When I go overseas, I practice medicine and help in ways that no one else could do at that place in that time. I never have felt more like a physician than when I'm in those places."

Those places have included Sudan, Egypt, Nigeria, Cameroon and Iraq in volunteer work that began in 2008. Dr. Munis made the first of three trips to Ukraine in 2022 as part of a disaster assistance response team through Samaritan's Purse, a humanitarian nongovernmental organization. His team established an emergency field hospital in Lviv on the first trip and staffed an underground mobile surgical field hospital in eastern Ukraine in his most recent trip. That facility was destroyed in a bombing.

Philip Fischer, M.D. (PD '99), Mayo Clinic Department of Pediatric and Adolescent Medicine, says, "While most of us shudder when hearing news reports of war, Jim packs. Repeatedly, he has headed into active war zones to serve. He doesn't just sing about 'rockets' red glare, bombs bursting in air' but has been in a building destroyed by a bomb while he worked."

NO JOB DESCRIPTIONS

Dr. Munis says there are no job descriptions or buck passing when you're setting up a hospital in an active war zone or conflict area. "You have to work together and figure it out. Those of us doing this work want to be there and have a passion for taking risks and doing things other people can't do. These areas of the world don't have the skills or resources to match the overwhelming trauma and disease associated with the ravages of war along with accidental trauma."

Dr. Munis says he was inspired by his father. "He was the first agent to enter a home on a SWAT team — the breacher who knocked down the door and was thrown into the room. Like him, I'm willing to take risks to help people. He inspired me to be prepared and willing to go beyond the call of duty."

Prior to becoming involved with Samaritan's Purse, Dr. Munis was involved in potentially more dangerous environments. He describes that work as more logistics than medicine, including getting victims of terrorism from dangerous to safe places — out of harm's way and to medical care.

"I stayed on the move while locating people, making arrangements, and assessing medical needs from machete and gunshot wounds and blast and burn injuries. I didn't stay in one place too long," he says. "I was often the only Westerner, which made me a target. I kept a small footprint and tried to stay one step ahead of being beheaded. It can be ridiculously dangerous to be in those locations when the enemies are groups such as Boko Haram and ISIS."

Steven Rose, M.D. (MED '81, I '82, ANES '84), Department of Anesthesiology and Perioperative Medicine at Mayo Clinic in Rochester, says that while Dr. Munis has earned the comfort of retirement after a long and successful career as a physician and educator, "Violence and disease come to many uninvited, leaving them with no choice but to respond. In contrast, Dr. Munis chooses to put himself at risk, to repeatedly demonstrate his conviction to principle and to put the interests of others



Mayo Clinic Alumni magazine reported on James Munis, M.D., Ph.D., and his work in Ukraine in issue 4, 2022. alumniassociation.mayo.edu/news/ magazines

ahead of his own. He has saved many lives and bettered the lives of others. As important, he has provided comfort and solace to many during times of great pain and loss. It is heartening to think of the serendipity of a wounded soldier or civilian being brought to a frontline hospital and to unexpectedly receive care from a world-class healthcare team."

ON THE JOB

Dr. Munis' bona fides are world class. He completed medical school at the University of Chicago Pritzker School of Medicine, got a Ph.D. in physiology and pharmacology from the University of California, San Diego, and completed an internship at Boston City Hospital and residency in anesthesiology at Massachusetts General Hospital, Harvard Medical School. He completed a postdoctoral research fellowship at The Johns Hopkins University School of Medicine and was on staff at Cleveland Clinic for six years before joining the Mayo Clinic staff in 2001.

"I sent one of my first neuroanesthesia fellows to Mayo Clinic, and he sang its praises," says Dr. Munis. "When I learned that Mayo needed a neuroanesthesiologist, I seized the opportunity. I've had the benefit of being at Mass General, Hopkins, Cleveland Clinic and Mayo Clinic. After 20 years at Mayo, I wanted to give my lifeblood to others around the world and my grandkids while I'm still young, strong and healthy enough. I've worked at big-name hospitals, had the best colleagues and loved my career at Mayo, but my decision to retire when I did was sound. I've had three deployments in Ukraine since the war started. I couldn't have gone on those if I hadn't retired. You can't tell your department you'll be gone for a month with three days' notice. What I'm doing now allows me the opportunity to teach others around the world, which I couldn't have done while I was a full-time physician."

In his volunteer work, Dr. Munis says he feels a duty to represent the best of the West. "My duty extends beyond logistical and medical. I put my hands on people in their world, examine them, hear their stories, and help them to safety and medical care. It's a privilege to do that, and it's often not expected from Westerners. That one-on-one concern can yield more good than the medical or logistical care. The reward I see in people's faces is something I rarely see at home."

STRONG FINISH

Dr. Munis says he won't go to conflict zones forever.

"I know an orthopedic surgeon in his 70s who still goes to war zones to patch together people who've been injured from terrorism," says Dr. Munis. "That's an example of how to finish your life strong. I want to be like that."

Dr. Munis also says he has an obligation to inspire others. "You can do more than you'd ever guess. Find something you love, are good at and have a passion for. Take your medical skills where there's a gaping need. Conflict zones aren't for everyone. There's much need domestically, including tornado and earthquake zones that need hands-on help. You can bring love and relationship to people who need it."

Dr. Munis received the 2023 Mayo Clinic Alumni Association Humanitarian Award for his efforts.

"A long line of incredible people has received this award, and I'm privileged to be acknowledged along with them," he says. \bullet



A fire in the belly

umara O'Carroll, M.D., says she was raised with the expectation that she do something with the gifts of mind, soul and body she'd been given.

Dr. O'Carroll assumed she'd follow in the public health profession path of her parents. Her father, who is from Ireland, worked in health policy and planning systems in ministries of health in countries in the Caribbean and Latin and South America. Her mother, who is from Nicaragua, worked in maternal and child health and HIV. The family served in hardship posts — countries torn by civil war and cholera outbreaks.

"I had a loving family, support and a focus on education," says Dr. O'Carroll. "My parents wanted me to be aware of how much I had compared to others and to make sure I had an appreciation of and dedication to serving others. As young as age 9, I wanted to be a physician."

Dr. O'Carroll's school from age 13 to 17 was by correspondence because the area where the family lived didn't have a high school. She came to the U.S. to live for the first time for college at the University of California, Berkeley, followed by a master's degree in public health at Loma Linda University School of Public Health in Loma Linda, California.

"Having been schooled in other countries, I wasn't aware of college entrance exams, the importance of mentors and the complexities of the higher education process in the U.S.," she says. "My path was filled with obstacles and perceived failures. I didn't get into medical school the first two times I applied. But I had a fire in my belly and picked myself up and continued toward my goal. My father grew up in extreme poverty and worried about having food on the table. With the support I'd had by comparison, I was going to figure out a way to achieve my goal."

While applying to and saving money for medical school, Dr. O'Carroll worked in the California Department of Public Health as a communicable disease investigator specializing in sexually transmitted infections. She was accepted to Ponce

Cumara O'Carroll, M.D. (TY '10, N '13, CBVD '14)

Division of Stroke and Cerebrovascular Diseases

Department of Neurology

Mayo Clinic

Scottsdale, Arizona

School of Medicine in Ponce, Puerto Rico. The program required Spanish fluency and offered an environment where English and Spanish were used interchangeably. She married during medical school. Because her husband got a job in California, she applied to residency at Mayo Clinic in Arizona and Florida.

"Mayo Clinic was like a magical place," she says. "I applied out of curiosity because I had heard of Mayo's reputation when I was living overseas and for geographic location. When I interviewed, I was captivated by the programs and program directors and really wanted to be at Mayo. For the first Cumara O'Carroll, M.D., and Sam Olum, M.B., Ch.B., check a patient's images at Mbarara Regional Hospital in Uganda. With Dr. O'Carroll's help, Dr. Olum went to Mayo Clinic in Arizona for a clinical neurophysiology course.



time, people told me I had unique skills and offered to mentor me. At the time, physicians interested in global health usually pursued internal medicine or pediatrics, not a specialty area. Dr. David Dodick (I1 '91, N '94, Mayo Clinic Emeriti Staff) was the neurology residency program director in Arizona. When I told him about my interest in global health, he told me about the Mayo International Health Scholarship Program and said I could be the first neurology resident at Mayo in Arizona to get an award in that program. I received the award and did a rotation to Nicaragua."

INTEREST IN HEALTH DISPARITIES TAKES FLIGHT

As a resident at Mayo Clinic in Arizona, Dr. O'Carroll noticed a lack of economic and other diversity in the patient population. "I wanted the best possible education and incredible mentors Mayo Clinic offered but also wanted to explore how to expand Mayo Clinic into the community," she says.

Marion Kelly, manager in Mayo Clinic Community Engagement, arranged for her to visit community clinics and meet their medical directors to determine if there was a need for neurology services. Kelly mentored Dr. O'Carroll, then in the second year of neurology training, in drafting a proposal for decisionmakers in the Mayo Clinic School of Graduate Medical Education about an off-campus rotation for residents.

That led to Dr. O'Carroll establishing a free neurology clinic at St. Vincent de Paul in Phoenix in 2013. The monthly clinic was staffed by Mayo Clinic neurology residents and supervised by **Brent Goodman, M.D.** (I1 '00, N '03, NEMG '04), Department of Neurology.

"None of it would have been possible without Dr. Goodman," says Dr. O'Carroll. "He made a commitment to me and to the community and believed in me and my vision. He helped to get equipment donated and performed EMGs on his own, when normally he would have a technician specialist assisting him. Because of him, we were able to help many people."

In 2014, Dr. O'Carroll established a free neurology clinic to serve unhoused people at Circle the City in Phoenix. She also established two community service-learning clinics for the Mayo Clinic in Arizona Neurology Residency Program to serve the underserved. She established a fully funded service-learning rotation in Winslow, Arizona, for neurology, emergency medicine, family medicine and internal medicine residents to serve the Navajo Nation.

"I felt like I was able to take flight at Mayo," says Dr. O'Carroll. "People in abundance were opening doors for me, believing in me and coming to me. **Dr. Bart Demaerschalk** (N '01, chair, Division of Stroke and Cardiovascular Diseases at Mayo

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Clinic in Arizona) said, 'I don't know about global health or have a path for it, but I will open doors and help you along the way.' He and others saw something in me and kept the fire in me going. Suddenly, I had opportunities and resources — the richest of which were incredible people who helped me along the way."

FINDING HER PLACE IN GLOBAL HEALTH

During her stroke fellowship, Dr. O'Carroll went to Uganda for an elective rotation. Today, two neurologists serve the entire 43 million people who live in that country, where approximately one-third of admissions to hospital internal medicine are primary neurologic conditions. That means internal medicine physicians care for neurologic disease.

During her time in Uganda in 2014, Dr. O'Carroll became acquainted with Mbarara Regional Referral Hospital at Mbarara University of Science and Technology (MUST) in southwestern Uganda on the border of Rwanda. She saw an opportunity to offer neurology training to residents in MUST's internal medicine residency program. Since 2014, Dr. O'Carroll has visited MUST for a month each year to teach neurology curriculum to internal medicine residents as well as teach third- and fifth-year medical students.

"The residents are some of the most remarkable people I've ever met," says Dr. O'Carroll, who assisted in developing the neurology curriculum for the approximately 11 residents per class. "I'm impressed by their stories, their paths to medicine, their obstacles, their compassion and the way they take care of patients in the hardest of conditions. They are hungry to learn. I can lecture for hours, and they want more. They have a tremendous desire to take advantage of every opportunity to train. They have to pay to be in the "From metropolitan Phoenix and remote underserved Indian Health System and tribal hospital facilities in the U.S. to sub-Saharan Africa, **Dr. O'Carroll has contributed to the welfare of people with neurological diseases.**"



– Bart Demaerschalk, M.D.

residency program, so they complete medical school and then work in the community, taking care of people for years to save enough for the tuition. They put their lives on hold. How can you not be inspired by them? They are superbly trained but don't have the luxury of MRIs or fancy diagnostic studies, so they must be superb clinicians."

In addition to creating curriculum, Dr. O'Carroll worked with local physicians to develop clinical protocols to treat neurologic emergencies in the resource-limited setting. She has served as a research mentor to several residents for the longitudinal research projects that are required for graduation. She also has supervised Mayo Clinic trainees who have rotated to MUST through the Mayo International Health Scholarship Program.

Residents who have completed training in internal medicine at MUST and have benefited from the neurology curriculum have gone to different locations to expand neurology knowledge across sub-Saharan Africa. Two residents who graduated from the program, Amir Mbonde, M.B., Ch.B. (TY '19, N '22), and Abdirahim Aden, M.B., Ch.B. (TY '23), have gone to Mayo Clinic in Arizona to train in neurology. And MUST is working to establish a neuroscience center of excellence to help train the next generation of neurologists and enhance neurological care in the region. According to Dr. Mbonde, that dream would be unimaginable without Dr. O'Carroll's devotion to the success of her mentees.

"The **future of neurological care in Uganda** is promising, thanks to her efforts."

– Amir Mbonde, M.B., Ch.B.

"The future of neurological care in Uganda is promising, thanks to her efforts," says Dr. Mbonde.

Dr. Mbonde was the first resident from MUST to be accepted into the neurology residency program at Mayo Clinic in Arizona. "He grew up in a small village in Uganda where a local teacher saw his potential and encouraged him to apply for a merit-based scholarship to medical school, which he was awarded at MUST without ever having even met a doctor," says Dr. O'Carroll. "From those humble beginnings, Amir found a way to succeed and thrive against all odds. He is someone I admire tremendously, and I'm proud to say he has completed a vascular neurology fellowship at Massachusetts General Hospital and returned to Mayo Clinic for an EEG fellowship. He received an NIH grant to study the impact of HIV infection on stroke characteristics and outcomes in Uganda and plans to return there to build local neurology capacity. He is a shining star and, because of what he will accomplish, my greatest career accomplishment is having mentored him."

Dr. O'Carroll helped to obtain scholarships from Mayo Clinic Abroad for two other graduates from MUST, Adrian Kayanja, M.B., Ch.B., and Sam Olum, M.B., Ch.B., to go to Mayo Clinic in Arizona to participate in an eight-week clinical neurophysiology course.

"My work at MUST has been about mentoring as much as teaching," says Dr. O'Carroll. "For example, when the residents there become interested in research and scholarly activity or have a manuscript to publish or presentation accepted at a conference, I assist them in their research and find scholarships and funding through organizations. Or pay for it myself. How could I not help them?"

Dr. O'Carroll notes that Dr. Demaerschalk funded her first research project in Uganda, a study that looked at stroke mortality outcomes in Uganda. She's been attentive at paying forward that generosity and trust.

She says that working in a developing nation has had a dramatic effect on how she practices medicine and teaches trainees. "It's about being mindful of resources and thoughtful of the patient in front of you. Residents hear me talk every day about being mindful of patients' social situations. 'Have you asked patients if they can afford the medication we recommend? Can we find another way to access the medication — a substitute or a coupon? Just because you can order every test under the sun, could you glean the same information from a more thorough neurological exam?""

ESTABLISHING OMUKAGO

Dr. O'Carroll's experience, including creating a health equity track for Mayo Clinic School of Graduate Medical Education trainees, has led to her being assistant dean of Service Learning for Mayo Clinic School of Graduate Medical Education, program director of the Vascular Neurology Fellowship Program at Mayo Clinic in Arizona, director of a telestroke program at Mayo Clinic in Arizona and medical director of the comprehensive stroke center at Mayo Clinic Hospital in Phoenix. She received a Mayo Clinic in Arizona Diversity & Inclusion Award; established a diversity, equity, inclusion and anti-racism book club; and was selected to participate in the American Academy of Neurology Diversity Leadership Program. She's working to expand telestroke services to rural Arizona, with specific attention to Native American populations. She continues to volunteer in the neurology clinics at Wesley Health Center and The Neighborhood Christian Clinic. She engages with medical students, residents, fellows and colleagues to encourage their participation.

In 2023, Dr. O'Carroll started a nonprofit to help patients at Mbarara



Cumara O'Carroll, M.D., with Ugandan mentees Amir Mbonde, M.B., Ch.B., Adrian Kayanja, M.B., Ch.B., Sam Olum, M.B., Ch.B., and Abdirahim Aden, M.B., Ch.B.

Regional Referral Hospital in Uganda. The initial focus is on nutritional support for malnourished hospitalized patients. Over time, she plans to expand to providing diagnostics, therapeutics and financial support to patients who can't afford their care. The nonprofit is called Omukago, which means friendship in action in Runyankole, a language in southwestern Uganda.

Her yearslong commitment to managing complex medical expedition logistics, directing clinical care for patients with neurological conditions in underresourced clinical and hospital settings, contributing to the education of medical students and residents, and performing research to understand the unique underpinnings of stroke and coma in sub-Saharan Africa has allowed for an enduring impact. Patients and their families travel hundreds of miles from their villages in Uganda to line up for specialty consultations with Dr. O'Carroll during her visits. According to Dr. Demaerschalk, who has accompanied her on these trips, Dr. O'Carroll sees every person, closing only after the last evaluation.

"I witnessed how dozens of medical students and clinicians clamor around her every day, hoping to advance their knowledge of clinical neurology," says Dr. Demaerschalk. "Her annual trips and teachings have resulted in sustained improvements in local neurological care. Ugandan internists have been inspired to study neurology, evidence-based neurology clinical practice algorithms have been introduced and implemented, and neurological centers have been developed. From metropolitan Phoenix and remote underserved Indian Health System and tribal hospital facilities in the U.S. to sub-Saharan Africa, Dr. O'Carroll has contributed to the welfare of people with neurological diseases."

Dr. O'Carroll received the 2023 Mayo Clinic Alumni Association Humanitarian Award for her contributions. Friendship in action is an apt name for her nonprofit. A friend to all indeed.

Doing good

a theme becomes evident: doing good. Dr. Jatoi grew up in a rural area of South Dakota. Her parents were immigrants and physicians. Her father trained as a surgeon and worked as a general practitioner who made house calls. Her mother had completed pathology residency and retrained in the specialty after raising three children.

hen one talks to Aminah Jatoi, M.D.,

"My parents had a strong commitment to medicine and worked very hard," says Dr. Jatoi. "I remember knowing I wanted to be a doctor when I was 3. I simply wanted to emulate my parents. I could tell they felt good about what they did and did good for the community."

Thriving on patient contact, Dr. Jatoi gravitated toward internal medicine. "During residency, the patients who I felt I made the most difference with were those who had cancer."

Aminah Jatoi, M.D. (ONCL '98)

Department of Oncology Betty J. Foust, M.D., and Parents' Professor Mayo Clinic

Rochester, Minnesota

"Mayo is special. ... I feel privileged to have been on staff at Mayo Clinic for these past 25 years."

– Aminah Jatoi, M.D.

Her residency was at University Hospitals of Cleveland, Ohio, and fellowships were in medical oncology and hematology at the University of Minnesota, Minneapolis, and clinical nutrition at Tufts University in Boston, Massachusetts. Upon completion of training in 1998, she joined the Mayo Clinic staff.

"Growing up in the Midwest, I'd heard about Mayo Clinic for a long time," she says. "I trained at institutions in different parts of the country but when the opportunity arose to work at Mayo Clinic, I jumped at it."

Dr. Jatoi's clinical practice focuses on gastrointestinal and gynecological cancers, and her research on supportive care — helping patients have better symptom control. She seeks to mitigate side effects from cancer treatment, anxiety related to cancer and its treatment, and the distressing symptoms of the cancer itself.

"We often focus on the cancer and do everything we can to treat it and this approach is essential," says Dr. Jatoi. "But there are sometimes gaps in our outlook. I've tried to focus my research career on those gaps or unaddressed needs. Working to lessen the side effects of cancer treatment and helping patients cope with the uncertainties of cancer is very meaningful to me. I want to be there to try to help with the spectrum of cancer care. Additionally, I try to help patients benefit from Mayo Clinic's three shields, including the education shield, through mentoring of talented colleagues who are early in their careers.

"They're eager to work hard and excited to care for patients. Mayo provides these younger colleagues with the possibility of added dimensions to their careers, enabling them to become skilled researchers and educators. Helping those colleagues realize their potential with respect to all three Mayo shields for the benefit of patients is what I'm most proud of in my career."

To that end, Dr. Jatoi is the program director and principal investigator of the Paul Calabresi Program in Clinical–Translational Research at Mayo Clinic, which is funded by the National Cancer Institute. This career development program aims to increase the number of clinicians trained in clinical and translational cancer research and to foster career development.

"Many of the good things we do at Mayo Clinic, such as creating and sustaining this career development program, are possible and easier because of synergies among medical disciplines and because of the amazing infrastructure at Mayo," says Dr. Jatoi. "I don't think I would have been able to serve as director of this career development program for more than a decade if I weren't at Mayo Clinic. We have many generous colleagues who want to help the next generation, and Mayo invests in the development of our junior colleagues."

HELPING THOSE WHO NEED IT MOST

Because doing good is important to Dr. Jatoi, she and her life partner of 43 years, who also is a physician at Mayo, worked with Mayo Clinic's Department of Development to create a charity care endowment in honor of their respective parents to benefit patients with financial challenges. For her years of giving back through contributions in cancer care, her commitment to Mayo Clinic values and her philanthropy, Dr. Jatoi received the 2023 Doctors Mayo Society Lifetime Achievement Award.

"I feel humbled to have been chosen for this award," she says. "Being part of the Mayo Clinic environment means a lot to me, and I want to contribute to help Mayo's three-shield mission. Mayo is special. Our institution has a strong, durable commitment to its well-defined core values. I feel privileged to have been on staff at Mayo Clinic for these past 25 years." • 73rd Biennial Meeting • NEW ALUMNI ASSOCIATION PRESIDENT

Meet **Theresa Emory, M.D.**

Theresa Emory, M.D. (PATH '94)

Anatomic and clinical pathologist

Peninsula Pathology Associates

Newport News, Virginia

Residency: Anatomic and clinical pathology, Oakland Naval Hospital, California; anatomic and clinical pathology, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Internship: Naval Hospital Oakland, California

Medical school: Eastern Virginia Medical School, Norfolk

Undergraduate: University of Virginia, Charlottesville

Hometown: Arlington, Virginia

heresa Emory, M.D.

(PATH '94), grew up with physician parents. Her father was a neurosurgeon, and her mother a pediatrician who practiced public health.

"I thought I wanted to be a veterinarian and studied animal science in college," she says. When Dr. Emory volunteered at a hospital as a teen, she met a pathologist who invited her to shadow him. "I saw how his work affected people's lives; how science, medicine and research aligned in his work; and how close his relationship with his family was. He loved what he did, appeared to have a balanced life and had a great sense of humor. He was something of a father figure to me. As a result of his influence, I went into medicine solely to become a pathologist.

"Many people don't know what pathologists do; we're not just doctors behind microscopes. At least 70% of medical decisions arise from laboratory medicine. Pathologists are aware that there's a patient behind every diagnosis and the implications behind the diagnosis and what it will mean to the patient."

Dr. Emory wanted to have the freedom to pursue her own path independently, and the military offered her an opportunity to go to medical school without indebtedness. While she was in service at a U.S. Navy hospital in California, her husband, **Roger Emory Jr., M.D.** (S '94), was at the nearby Army hospital.

"Roger's surgical residency was going to be terminated by closure of military hospitals, so we had to find a place that would take both of us as second-year residents — him in surgery and me in pathology," says Dr. Emory. "Roger interviewed at Mayo and loved it. I interviewed soon after having our son, Kyle. Roger and I feel fortunate to have been able to train at Mayo Clinic."

Dr. Emory says Mayo values aligned with her own and were reinforced by her mentors at Mayo Clinic — **Herschel Carpenter, M.D.**

"I felt like a kid in a candy store once I was at Mayo, with **an opportunity to be trained by the people who'd written the textbooks**."

– Theresa Emory, M.D.



Carl Backer, M.D., passes the Alumni Association president's gavel to Theresa Emory, M.D.

Fast 5 with Dr. Emory

- 1. She's the youngest of five children in her family.
- She interviewed for residency at Mayo Clinic five weeks after she gave birth to her son.
- 3. She's been married for 36 years to a fellow alum. "Teamwork is important. We have the same values of integrity, honesty, hard work and taking care of others. He's the wings beneath me who has pushed me to the sky the strength behind the scenes. We've weathered many things through the years and still had fun."
- 4. Her hobbies include reading, cooking, travel, skiing and scuba diving.
- She introduced a free women's health clinic to the Appalachia area of southwestern Virginia in 2017 to provide cervical and breast cancer screenings and treatment.

(SGPA '77), Mayo Clinic Emeriti Staff; Thomas Colby, M.D. (APTH '86), Mayo Clinic Emeriti Staff; Krishnan Unni, M.D. (PATH '70, SGPA '74), Mayo Clinic Emeriti Staff and a 2014 Mayo Clinic Distinguished Alumni Award recipient; Henry Tazelaar, M.D. (PATH '88), Division of Anatomic Pathology and the Geraldine Colby Zeiler Professor of Cytopathology at Mayo Clinic in Arizona; and Bernd Scheithauer, M.D. (PATH '79), who died in 2017.

"When I was in medical school and internship, most of the medical books I read were written by Mayo Clinic physicians," says Dr. Emory. "I recognized that I could be trained by giants in pathology and other fields at Mayo. I felt like a kid in a candy store once I was at Mayo, with an opportunity to be trained by the people who'd written the textbooks." After completing residency at Mayo Clinic, including serving as the first female chief resident in the Department of Laboratory Medicine and Pathology, Dr. Emory went to the Armed Forces Institute of Pathology in Washington, D.C., on active duty for six years in its Department of Hepatic and Gastrointestinal Pathology. During that time, Dr. Emory collaborated with Dr. Carpenter and **Christopher Gostout, M.D.** (I '79, GI '81), Mayo Clinic Emeriti Staff, on the "Atlas of Gastrointestinal Endoscopy and Endoscopic Biopsies."

"Dr. Carpenter taught me to look at GI biopsies in a different way, which led to our collaboration on the book," says Dr. Emory. "For four years, I spent one week each month with Dr. Carpenter, working on the book, and Roger was home with our son. I couldn't have done it without his support."



Theresa Emory, M.D., with mother-in-law Soon Ja "Nancy" Emory, daughter-in-law Carolyn Emory, son Kyle Emory, father-in-law Roger Emory Sr., and husband Roger Emory Jr., M.D.

"I can't wait to meet more alumni, **foster the unique Mayo Clinic values**, develop new friendships and be rejuvenated by the qualities that connect us all."

- Theresa Emory, M.D.

CHANGE IN PLANS

The couple had a curveball thrown at them during that time. When Dr. Roger Emory's aunt died, her four children were in need. The Emorys became their legal guardians, expanding their family from three to seven.

"After writing a textbook and considering an academic position at Johns Hopkins, I needed to step back from academic medicine and go into private practice in Virginia in the best interest of our family," says Dr. Emory. "While it wasn't the path I'd planned, I had to navigate through the change and rebalance my life. It was the right choice."

An anatomic and clinical pathologist, Dr. Emory continues in private practice and is medical director for the laboratories at two acute care hospitals, responsible for testing, quality, personnel qualifications and competencies. Her group of five pathologists diagnoses 30,000 patients per year. She is an active member of the health system's multidisciplinary tumor boards. Dr. Emory also consults on legal cases involving patients who have developed cancer due to asbestos and other matters of disease causation.

"I take cases where I can explain how someone's underlying disease, condition or exposure is the cause of the clinical outcome," she says. "Thanks to my mentors at Mayo Clinic, I have developed an ability to make complex medical topics simple, which helps nonmedically trained individuals understand."

Dr. Emory is vice chair of the Economic Affairs Committee of the College of American Pathologists and chair of the group's Payment Policy Subcommittee. That work involves reviewing the payment policies of private insurance companies and Medicare and working with them to develop appropriate coverage policies for diagnostic, prognostic and therapeutic testing.

"Medicine is changing, and payment issues are a significant part of medicine," says Dr. Emory. "We need to be engaged so patients can get the care they need and make sure physicians and medical centers are appropriately reimbursed. 'Doing no harm' includes not causing financial harm. The committee is very focused on healthcare costs and healthcare disparities. We engage with legislators to reinforce the importance of appropriate oversight, access to care and reasonable coverage." Dr. Emory also is involved in her community, having served as capital campaign chair of the United Way in southwestern Virginia, and working with a shelter for women who have been abused and for a nonprofit that provides equine therapy for people who have autism.

EYE TO THE FUTURE

For the immediate future, Dr. Emory's eyes are turned toward the Mayo Clinic Alumni Association as she assumes the presidency of the group that represents more than 34,000 alumni around the world.

"I'm incredibly proud of my affiliation with Mayo Clinic and serving the Alumni Association for the last decade," she says. "I look forward to focusing on keeping alive the connections between alumni and with the institution. Primarily, I want us to better understand how the next generation of alumni want to engage with the Alumni Association and be willing to innovate how we do that. I can't wait to meet more alumni, foster the unique Mayo Clinic values, develop new friendships and be rejuvenated by the qualities that connect us all." •

Mayo Clinic

Distinguished Alumni Award

HONORING EXCELLENCE IN PATIENT CARE, RESEARCH & EDUCATION

The Mayo Clinic Board of Trustees established the Mayo Clinic Distinguished Alumni Award in 1981 to acknowledge and show appreciation for the exceptional contributions of Mayo alumni to medicine, including practice, research, education and administration. Individuals who have received the award have been recognized nationally and often internationally in their fields.

> The 2023 Mayo Clinic Distinguished Alumni Awards were presented on Sept. 27 to the following recipients: Stephen Burkhart, M.D. Mary Burritt, Ph.D. Gerald Gleich, M.D. Morey Haymond, M.D. Celestia Higano, M.D. Ronald Petersen, M.D., Ph.D.

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Mayo Clinic Distinguished Alumni Award

Stephen Burkhart, M.D.

Clinical associate professor Department of Orthopaedic Surgery University of Texas Health Science Center at San Antonio Baylor College of Medicine San Antonio, Texas

Fellowship: Sports medicine, University of Oregon, Orthopaedic and Fracture Clinic of Eugene, Oregon

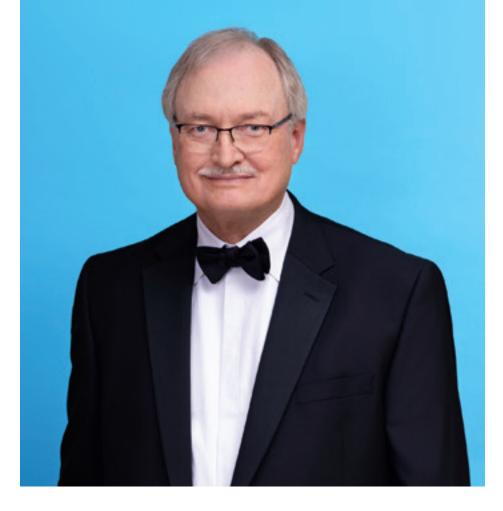
Residency: Orthopedic surgery, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Internship: Scott and White Hospital, Temple, Texas

Medical school: University of Texas Medical Branch, Galveston

Undergraduate: Rice University, Houston, Texas

Hometown: Taylor, Texas



PIONEER OF SHOULDER ARTHROSCOPY

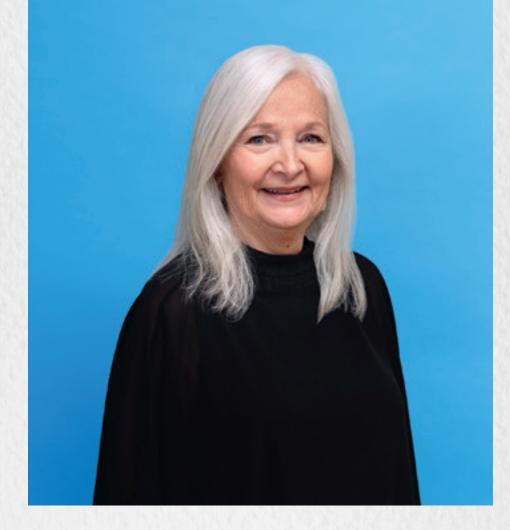
Stephen Burkhart, M.D. (OR '81), is internationally recognized as a leader, educator, researcher, innovator and practitioner who has expanded the body of knowledge in and transformed orthopedic surgery.

With an undergraduate degree in mechanical engineering, Dr. Burkhart became an orthopedic clinician but never lost his passion for engineering. He revolutionized operative arthroscopic surgery of the shoulder and changed the way many shoulder conditions are managed. His innovations center around anchoring soft tissues to bone arthroscopically using suture anchors. He developed the techniques, instrumentation and devices — innovations that made arthroscopic surgery reproducible for the masses with less morbidity. The principles, techniques and products he developed for the shoulder were adapted for the knee, hip and smaller joints. Dr. Burkhart performed the research that validated his techniques and educated others, inspiring a generation of surgeons.

Dr. Burkhart spent his career in private practice, retiring from clinical practice in 2020. He established and directed an independent fellowship in arthroscopic shoulder surgery for 20 years. Recognizing that hands-on education is essential to learn correct technique and skills, he established a nonprofit foundation, the Burkhart Research Institute in Orthopaedics.

Dr. Burkhart developed 700 instruments or mechanical fixation products that have enabled surgeons to repair pathology with less pain, shorter or no hospital stays, and improved results. A native Texan, his many publications include three shoulder arthroscopy textbooks: "The Cowboy's Guide to Advanced Shoulder Arthroscopy," "The Cowboy's Companion" and "The Cowboy's Conundrum." This trilogy of books has won worldwide acclaim and received the Medical Book Award first prize and High Commendation from the British Medical Association.

Dr. Burkhart served as president of the Arthroscopy Association of North America from 2002 to 2003. In 2020, that group established the annual Stephen S. Burkhart Shoulder Innovation Research Award.



LEGEND IN CLINICAL CHEMISTRY

Mary Burritt, Ph.D. (PATH '78), is regarded as a leader in clinical chemistry and a key figure in establishing it as a discipline in laboratory medicine. By proposing improvements and advocating for change, she instilled Mayo Clinic values in countless future laboratories.

Dr. Burritt is informally considered the first woman graduate of Mayo Clinic's Clinical Chemistry Fellowship program, the first woman member of Mayo's Clinical Chemistry faculty and the first woman to direct a clinical laboratory. She was instrumental in the formation of the Hospital Clinical Lab and Central Clinical Lab at Mayo Clinic.

Dr. Burritt shepherded Mayo Clinic laboratories through rapid change. She leveraged her clinical practice role into a highly productive research career focused on plasma electrolyte methods, circadian rhythms of calcium and bone markers. She contributed to the emerging field of routine electrode-based and colorimetric measurement — now routine tests in patient care. Dr. Burritt was a pioneer in defining limitations of these technologies and developing ways to better support clinical care and improve the tests' reliability.

Dr. Burritt had leadership roles in prominent national and international organizations, including 30 years of activity in the American Association for Clinical Chemistry. She was president of the AACC in 1996 and received the organization's award for Outstanding Contributions Through Service to the Profession of Clinical Chemistry in 2000 and Outstanding Lifetime Achievement Award in Clinical and Laboratory Medicine in 2008.

Dr. Burritt played a prominent role in the International Federation of Clinical Chemistry and received the IFCC award for Distinguished Contributions in Education in 2011. She consulted for the Centers for Disease Control and Prevention, providing scientific and technical advice to the government during the creation of the Clinic Laboratory Improvement Act. Mayo Clinic Distinguished Alumni Award

Mary Burritt, Ph.D.

Emeriti professor of laboratory medicine Mayo Clinic College of Medicine and Science Phoenix, Arizona

Mayo Clinic: Supplemental consultant, Department of Laboratory Medicine and Pathology, Arizona, 2007-2011; associate dean, Mayo Clinic School of Health Sciences, 2000-2006; director, Metals Laboratory, 1997-2006; professor of laboratory medicine, 1996-present; medical co-director, Central Clinical Laboratory, 1996-2006; director, Clinical Chemistry training programs, 1991-1999; associate professor of laboratory medicine, 1990-1996; consultant, 1981-2006; director, General Chemistry Laboratory, 1981-1995; assistant professor of laboratory medicine, 1978-1990; associate consultant, Department of Laboratory Medicine and Pathology, Rochester, 1978-1981

Fellowship: Pathology, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Postgraduate: Ph.D., biochemistry, University of Illinois Medical Center, Chicago

Undergraduate: Clarke University, Dubuque, Iowa

Hometown: Chicago, Illinois

Mayo Clinic Distinguished Alumni Award

Gerald Gleich, M.D.

Research professor University of Utah Emeritus professor of immunology and medicine Mayo Clinic College of Medicine and Science Salt Lake City, Utah

Mayo Clinic in Rochester: George M. Eisenberg Professor of Medicine and Immunology, 1995–2001; Distinguished Investigator, 1988–2001; chair, Department of Immunology, 1982–1991; professor of immunology and medicine, 1977–2001; consultant, Department of Medicine, 1965–2001; associate professor of medicine and microbiology, 1965–1968

Fellowship: Allergy and immunology, Strong Memorial Hospital, Rochester, New York

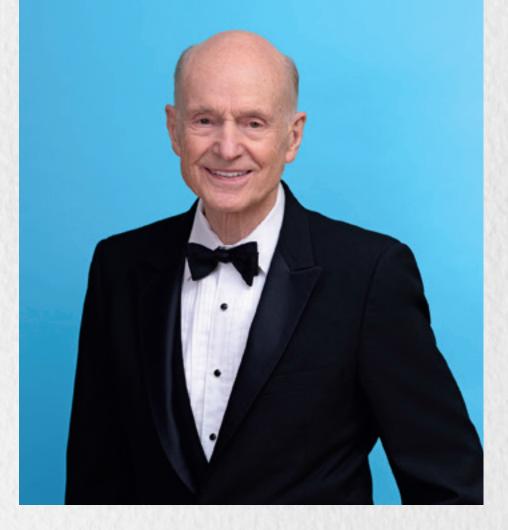
Residency: Internal medicine, Jackson Memorial Hospital, Miami, Florida

Internship: Medicine, Philadelphia General Hospital, Philadelphia, Pennsylvania

Medical school: University of Michigan, Ann Arbor

Undergraduate: University of Michigan

Hometown: Escanaba, Michigan



WORLD'S PREEMINENT EXPERT IN BIOLOGY & PATHOPHYSIOLOGY OF EOSINOPHILS

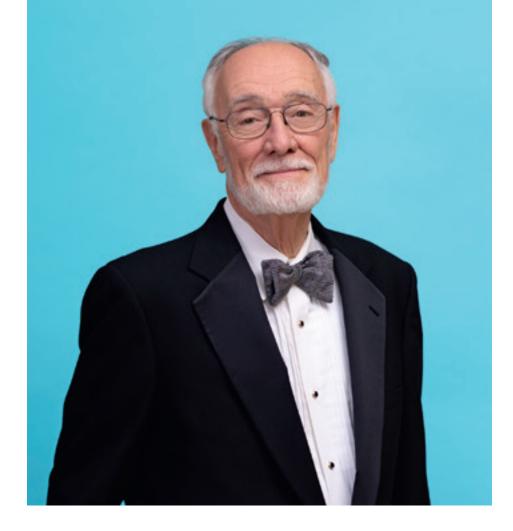
Gerald Gleich, M.D. (IMM '65), has made unique contributions in a remarkably long and productive career in which he established the destructive properties of eosinophils to human tissue. He is regarded as one of the most prolific contributors in the world in eosinophilic research and has expertise in basic mechanistic studies, clinical research and entrepreneurial activities.

The establishment of eosinophils as destructive cells became the pathophysiological foundation on which new anti-eosinophil therapies were developed. Based on that work, four currently approved monoclonal antibody treatments that reduce or eliminate eosinophils from the body are in use for eosinophil-related inflammatory disease, including asthma and hypereosinophilic syndrome.

Through Dr. Gleich's work with eosinophils, he and his colleagues discovered and described five novel syndromes including the Gleich Syndrome. They also discovered three novel eosinophil proteins and characterized the pathogenic activities these proteins have on tissues and organisms.

In the allergy and immunology community, Dr. Gleich is a recognized leader who provides objectivity about data integrity and patient safety. He has more than 1,000 publications, including abstracts and reviews, in high-impact journals. His publications are pivotal to the understanding of inflammation and consequences of it. He is past president of the International Eosinophil Society and a prior board member of the American Partnership for Eosinophilic Disorders and National Institute of Allergy and Infectious Diseases – Data and Safety Monitoring Board. He is former chair of the National Institutes of Health Immunological Sciences Study Section; National Institute of Allergy and Infectious Diseases Board of Scientific Counselors; American Association of Immunologists Clinical Immunology and Immunopathology Committee; American Academy of Allergy, Asthma and Immunology Postgraduate Education Committee; and World Health Organization Subcommittee on Standardization of Allergens.

Dr. Gleich retired from Mayo Clinic and is now at the University of Utah, where he established an allergy division and developed an imaging tool for esophageal diseases.



GLOBAL EXPERT IN DIABETES & PEDIATRIC ENDOCRINOLOGY

Morey Haymond, M.D. (PD '78), defined the regulation of leucine and protein metabolism, including the effects of substrates and hormones on intracellular and extracellular amino acid flux and metabolism. He developed new models for the measurement of in vivo gluconeogenesis and kinetic measures of a number of metabolic substrates in humans. Using stable isotope tracers, he determined the impact of lactation on glucose and substrate metabolism. He isolated mRNA and micro-RNA from the milk fat globules of human milk and used those unique reagents to determine the uncharacterized molecular events involved in secretory activation of mammary epithelial cells in humans. He used commercially available glucagon for the treatment of impending mild to moderate hypoglycemia in children and adolescents with gastroenteritis. His use of mini-dose glucagon and a dosing algorithm are used in almost every pediatric practice and diabetes camp around the world. Recently, it has been used to prevent post-exercise hypoglycemia, and it is being explored for commercialization.

In Mayo Clinic's Endocrine Research Unit, he was an investigator for the pediatric aspects of the Mayo component of the Diabetes Control and Complications Trial. The unit became internationally recognized as a leader in the study of the pathogenesis and treatment of diabetes and obesity, benefitting generations of students from Dr. Haymond's unrelenting commitment to excellence.

Dr. Haymond left Mayo Clinic in 1990 for Nemours Children's Clinic in Jacksonville, Florida. He moved to Baylor College of Medicine in 1996, where he established a laboratory and became director of the Stable Isotope Core Laboratory at the Children's Nutrition Research Center.

His more than 350 peer-reviewed publications have had a significant impact on practice. He received the first Mentor Award from the Pediatric Endocrine Society. Dr. Haymond retired in 2019 and continues to mentor faculty and fellows and participate in research studies. Mayo Clinic Distinguished Alumni Award

Morey Haymond, M.D.

Distinguished Professor Emeritus Baylor College of Medicine Houston, Texas

Mayo Clinic in Rochester: Director, Clinical Research Center, 1988, 1990; professor of pediatrics, 1984–1990; consultant, Division of Pediatric Endocrinology and Metabolism, 1978–1990; associate professor of pediatrics and medicine, 1978–1984

Fellowships: Research, Children's Hospital and Washington University School of Medicine; pediatric endocrinology and metabolism, St. Louis Children's Hospital, St. Louis, Missouri

Residency: Pediatric endocrinology and metabolism, St. Louis Children's Hospital

Medical school: Washington University School of Medicine

Undergraduate: Grinnell College, Grinnell, Iowa

Hometown: Greeley, Colorado

Mayo Clinic Distinguished Alumni Award

Celestia Higano, M.D.

Madrona Oncology Seattle, Washington

Fellowship: Hematology/oncology, University of Washington, Seattle

Residency: Internal medicine, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Medical school: University of Massachusetts, Worcester

Undergraduate: Bryn Mawr College, Bryn Mawr, Pennsylvania; Clark University, Worcester, Massachusetts

Hometown: Shrewsbury, Massachusetts



INTERNATIONALLY RENOWNED LEADER IN PROSTATE CANCER

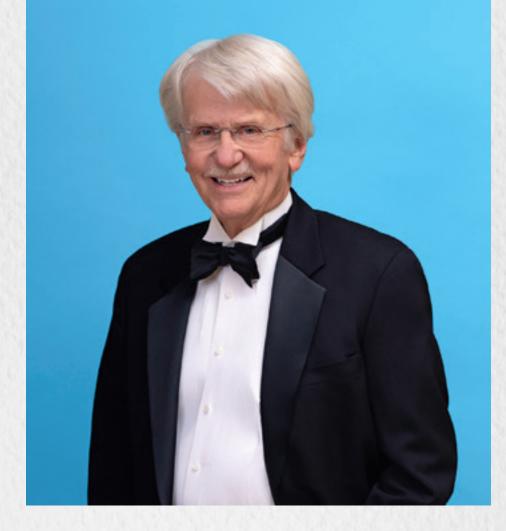
Celestia Higano, M.D. (I '82), is an internationally renowned key opinion leader in prostate cancer and was one of the first women to succeed as an academic urologic oncologist. She has inspired many who have followed in her footsteps in academic oncology.

After training at Mayo Clinic, Dr. Higano went to the University of Washington in Seattle for fellowship training and stayed to become a faculty member. Dr. Higano was the first medical oncologist at the university to specialize in genitourinary oncology and one of the first oncologists to see a new group of patients with a rising PSA after radical prostatectomy but no evidence of metastases. She became a pioneer in the use of intermittent androgen deprivation therapy. Her team observed that intermittent ADT could ameliorate loss of bone mineral density due to ADT. The intermittent nature of the treatment meant that patients' symptoms would resolve after discontinuing ADT — a phenomenon Dr. Higano was among the first to describe in several publications. Her team published one of the first studies to rigorously demonstrate that ADT affects cognition.

Dr. Higano helped design the initial trial testing the use of zoledronic acid in men on ADT and described the natural history of that disease state. This led to a critical understanding of which patients with non-metastatic castration-resistant prostate cancer are at high risk for metastatic progression. These observations formed the basis for designing several trials in this disease state that led to the first drug approvals for these patients.

As a leading trialist over three decades, Dr. Higano participated in a period of enormous change in medicine and treatment opportunities for men with prostate cancer — evolving from "there is no role for chemotherapy in prostate cancer" to the vast array of options patients have today.

In 2013, Dr. Higano became the consulting medical director of the Prostate Cancer Supportive Care Program associated with the Vancouver Prostate Centre in Vancouver, British Columbia.



FATHER OF MILD COGNITIVE IMPAIRMENT

Ronald Petersen, M.D., Ph.D. (MED '80, N '84), has made significant contributions to clinical neurology, neuroscience, and the growth and development of scientific programs in Alzheimer's disease and related disorders at Mayo Clinic that extend over decades. His most enduring scientific contribution has been the novel conceptualization and subsequent development of mild cognitive impairment as an important diagnostic entity. The MCI construct fundamentally shifted the research focus of the field from the late stages of dementing illnesses to the earliest clinical manifestations of these disorders. Dr. Petersen's work constituted a paradigm shift that has affected all areas of the field, clinical research, therapeutic trials and clinical practice.

His pioneering work paved the way for the most recent FDA approval of disease-modifying Alzheimer's therapies that work in the early symptomatic stages of the disease. Recent clinical trials have resulted in approval by the FDA of two anti-amyloid therapies, and a third drug is likely to be approved soon. These are historic developments and the first disease-modifying treatments for Alzheimer's disease to receive regulatory approval. Dr. Petersen has authored more than 1,000 peer-reviewed papers yielding more than 144,000 citations.

Dr. Petersen has contributed to national and international endeavors involved in creating policy and promoting research funding and awareness of Alzheimer's disease and related disorders. He served as inaugural chair of the Advisory Council for Research, Care and Services for the National Alzheimer's Plan; chaired the Medical Scientific Advisory Council of the National Alzheimer's Association and served on its board; and served on the World Dementia Council and the National Advisory Council on Aging and NIA Board of Scientific Counselors. His recognitions are numerous and include the Potamkin Prize and the MetLife Award for Medical Research in Alzheimer's Disease. Mayo Clinic Distinguished Alumni Award

Ronald Petersen, M.D., Ph.D.

Chester and Debbie Cadieux Director, Mayo Clinic Alzheimer's Disease Research Center Cora Kanow Professor of Alzheimer's Disease Research Department of Neurology Mayo Clinic Rochester, Minnesota

Mayo Clinic in Rochester: Chester and Debbie Cadieux Director, Mayo Clinic Alzheimer's Disease Research Center, 2010-present; clinician investigator, 2003-present; director, Mayo Clinic Study of Aging, 2000-present; Cora Kanow Professor of Alzheimer's Disease Research, 2000-present; vice chair for Research, Department of Neurology, 1998-2006; professor of neurology, Mayo Clinic College of Medicine and Science, 1996-present; joint appointment, Department of Health Sciences Research, 1992-present; director, Mayo Clinic Alzheimer's Disease Center, 1992-present; associate professor, 1992-1996; consultant, Department of Neurology, 1989-present; senior associate consultant, 1986–1989; assistant professor, 1984-1986

Fellowship: Behavioral neurology, Harvard Medical School/Beth Israel Deaconess Medical Center, Boston, Massachusetts

Residency: Neurology, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Internship: Stanford University Medical Center, Stanford, California

Medical school: Mayo Clinic Alix School of Medicine, Rochester, Minnesota

Postgraduate: Ph.D., experimental psychology, University of Minnesota, Minneapolis

Undergraduate: Hamline University, St. Paul, Minnesota

Hometown: Milwaukee, Wisconsin



Mayo Clinic 'mini-brain' study reveals possible key link to autism spectrum disorder

sing human "mini-brain" models known as organoids, Mayo Clinic and Yale University scientists discovered that the roots of autism spectrum disorder may be associated with an imbalance of specific neurons that play a critical role in how the brain communicates and functions. The specific cells are known as excitatory cortical neurons.

The team found an abnormal imbalance of excitatory neurons in the forebrain of people with the disorder, depending on their head size.

"The organoid technology allowed us to recreate the brain development alteration that happened in the patients when they were in the uterus, which is believed to be the time when autism spectrum disorder originates," says **Alexej Abyzov, Ph.D.** (QHS '14), Division of Computational Biology at Mayo Clinic in Rochester and a senior author of the study, which was published in Nature Neuroscience.

For the study, the scientists created miniature 3D brain-like models called organoids. The pea-sized clusters of cells began as skin cells from people with autism spectrum disorder. The skin cells were placed in a culture dish and reprogrammed back into a stem cell-like state, called induced pluripotent stem cells. These so-called master cells can be coaxed to develop into any cell in the body, including brain cells.

The scientists used single-cell RNA sequencing to study the gene expression patterns of individual brain cells. They examined 664,272 brain cells at three stages of brain development.

The scientists discovered that the neuron imbalance stemmed from changes in the activity of genes known as transcription factors, which play a crucial role in directing the development of cells during the initial stages of brain formation.

This study builds on 13 years of published studies on autism spectrum disorder by Dr. Abyzov and his collaborators.

"Autism is mostly a genetic disease," says Dr. Abyzov. "Our goal is to be able to determine the risk of autism spectrum disorder and possibly prevent it in an unborn child using prenatal genetic testing. However, this would require detailed knowledge of how brain regulation gets derailed during development. There are many aspects in which organoids could help in this direction."

Mayo Clinic earns top U.S. News rankings

ayo Clinic is top ranked in more specialties than any other hospital and has been recognized as an Honor Roll member, according to U.S. News & World Report's 2023–2024 "Best Hospitals" rankings.

U.S. News no longer numerically ranks hospitals on its Honor Roll but continues to publish a list of the nation's best hospitals. Mayo Clinic in Rochester has been on this list since it was first published in 1990.

"We are honored that Mayo Clinic is once again the nation's top-ranked hospital across the most specialties," says **Gianrico Farrugia, M.D.** (I '91, GI '94), Mayo Clinic president and CEO. "Our staff work tirelessly to deliver the highest level of care to every Mayo Clinic patient. This recognition is a testament to them and their daily commitment to providing hope and healing to those in need, and to their creativity, ingenuity and drive to create the future of healthcare."

U.S. News continues to rank hospitals regionally in states and major metropolitan areas. Mayo Clinic again ranks No. 1 in Minnesota, Arizona and Florida and is the top hospital in the Phoenix and Jacksonville metro areas. Mayo Clinic Health System in Eau Claire, Wisconsin, has been recognized as a "Best Regional Hospital" in northwestern Wisconsin.

The U.S. News & World Report "Best Hospitals" Honor Roll continues to feature hospitals with the highest



combined overall scores in 15 medical and surgical specialties and 21 common procedures and conditions. Hospitals are measured on factors such as patient experience, nurse staffing, advanced technology, patient services, reputation with other specialists and survival.

"Mayo Clinic is the only healthcare organization that consistently ranks as the top provider nationwide," says **Sean Dowdy, M.D.** (OBG '01, GYNO '04), Mayo Clinic's chief value officer. "Mayo Clinic's top ratings from several organizations that spotlight quality in healthcare demonstrate the deep commitment of Mayo Clinic staff to providing empathic and high-quality care."

Sameer Keole, M.D., named president-elect, American Society for Radiation Oncology

S ameer Keole, M.D. (RADO '12), Department of Radiation Oncology at Mayo Clinic in Arizona, was named presidentelect of the American Society for Radiation Oncology, the world's largest association of healthcare professionals specializing in treating patients with radiation therapies.

Dr. Keole began his four-year term in October. He will represent the society's 10,000 members by serving one-year terms as president-elect, president, board chair and immediate past chair. He also will oversee the 2025 ASTRO annual meeting. Dr. Keole focuses on treating pediatric patients and adults diagnosed with brain, spine and other central nervous system tumors. He also sees patients at Phoenix Children's Hospital. He previously served on the ASTRO Board as head of the Government Relations Council, helping lead ASTRO's work with Congress and other policymakers on prior authorization and Medicare payment reform. He is an assistant professor of radiation oncology in the Mayo Clinic College of Medicine and Science.



Sameer Keole, M.D.

S. Vincent Rajkumar, M.D., named chair-elect, International Myeloma Foundation



S. Vincent Rajkumar, M.D. (HEMO '99), Division of Hematology at Mayo Clinic in Rochester, was appointed chair-elect of the International Myeloma Foundation, the first and largest global foundation focused on multiple myeloma. The foundation's reach extends to more than 525,000 members in 140 countries. The IMF is dedicated to improving the quality of life of myeloma patients while working toward prevention and a cure. Dr. Rajkumar will begin his term in spring 2024.

Dr. Rajkumar is a member of the National Cancer Institute Myeloma Steering Committee; chair of the Myeloma Committee, ECOG-ACRIN Cancer Research Group; editor-inchief of Blood Cancer Journal; and associate editor of Leukemia and the European Journal of Haematology. He served as principal investigator of several clinical trials for the treatment of myeloma, including pivotal trials that led to the regulatory approval of thalidomide for the treatment of the disease in the U.S. He has published more than 480 peer-reviewed papers, primarily in the field of multiple myeloma and related plasma cell disorders. Dr. Rajkumar's accolades include the Jan Waldenstrom Lifetime Achievement Award (2021), Mayo Clinic Distinguished Investigator Award (2018) and Robert A. Kyle Lifetime Achievement Award (2016). Dr. Rajkumar is the Edward W. and Betty Knight Scripps-Edward C. Rosenow, III, M.D., Professor of Medicine.

Dr. Rajkumar succeeds **Brian G. M. Durie, M.D.** (I '70, HEM '72), a 2014 Mayo Clinic Distinguished Alumni Award recipient. Dr. Durie specializes in multiple myeloma and related disorders at Cedars-Sinai Medical Center in Los Angeles, California.

Obituaries

David Brender, M.D.

(PHYS '70), died Oct. 10, 2022. Leonard "Drew" Brennan Jr., M.D. (I '66, NEPH '69), died Aug. 2, 2023. Paul Didisheim, M.D. (PATH '65), died Aug. 19, 2023. William Furlow, M.D. (U '67), died July 22, 2023. Richard Ivance, M.D. (OR '75), died Sept. 2, 2023. Jerry Katzmann, Ph.D. (LABM '76), died June 18, 2023. Laurence McCarthy, M.D. (PATH '65), died Sept. 6, 2023. Robert Phyliky, M.D. (HEM '75), died Sept. 8, 2023. Franklyn Prendergast, M.D., Ph.D. (BIOC '77), died Oct. 12, 2023. Dr. Prendergast was a 2019 recipient of the Mayo Clinic Distinguished Alumni

Award. James Prentice, M.D. (ANES '70), died May 19, 2023. Jean Reiher, M.D. (I '61, N '65), died Jan. 28, 2022. Donald Sherrick, M.D. (I '60, RD '63), died June 26, 2023. Jennifer Tracy, M.D. (I1 '03, N '06, PND '08, NMD '09), died Sept. 26, 2023. Richard Underwood, M.D. (DERM '73), died Jan. 28, 2023. Alfred Valles, M.D. (I '08, CV '11, CVIC '12), died Oct. 13, 2023. Charles Wilcox, M.D.

(OBG '57), died Aug. 23, 2023.

Mayo Clinic Board of Trustees elects new member

The Mayo Clinic Board of Trustees has elected a new member:

 Kristin Peck, CEO of Zoetis, the world's leading animal health company and a member of the Fortune 500

EARLY AND MID-CAREER ALUMNI AWARDS

he Alumni Association has introduced new awards for early and mid-career alumni of Mayo's education programs. These awards acknowledge contributions by alumni of Mayo's education programs based on a person's tenure of service in their area of expertise. The awards aim to acknowledge alumni throughout their professional lives by recognizing dedication to Mayo Clinic values while advancing medical practice, research and education. Recipients will receive an award certificate and recognition gift and will be announced in Mayo Clinic Alumni magazine.

- Early Career working in area of expertise for 10–15 years
- Mid-Career working in area of expertise 15+ years

Alumni of Mayo Clinic's education programs who meet one or more of the following criteria are eligible for the awards:

- Robust contributions to their area of expertise in education, clinical practice, clinical or scientific research, or administration
- Demonstration of community service and/or patient advocacy
- · Character aligned with Mayo Clinic values

To nominate an alum, a Mayo Clinic Alumni Association member should send a letter and completed nomination form for the nominee along with the nominee's curriculum vitae, bibliography and letters of recommendation. Nominations will be reviewed by a committee of representatives from Mayo Clinic Alumni Association; Mayo Clinic Education, Practice and Research; and by the medical director and director of Alumni Relations.

Nominations are due March 1. alumniassociation.mayo. edu/people/awards/early-and-mid-career-alumni-awards

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Matthew Wendt, M.D. Charlotte, North Carolina

Elaine Yacyshyn, M.D. Edmonton, Alberta, Canada

Patricia Yugueros, M.D. Atlanta, Georgia

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If you don't yet have an online profile, create one at alumniassociation.mayo.edu/register. Use your alumni ID on the magazine mailer. Or email mayoalumni@mayo.edu or call 507-284-2317 to update your contact information.

CORRESPONDENCE AND ADDRESS CHANGES

Mayo Clinic Alumni Center Siebens 7, Mayo Clinic 200 First Street SW Rochester, MN 55905 **mayoalumni@mayo.edu** 507-284-2317 Fax 507-538-7442

ABOUT THE MAGAZINE

Mayo Clinic Alumni magazine is published quarterly and mailed free of charge to physicians, scientists and medical educators who studied and/or trained at Mayo Clinic, and to Mayo consulting staff. The magazine reports on Mayo Clinic alumni, staff and students and informs readers about newsworthy activities at Mayo Clinic.

EXECUTIVE EDITOR
Judith D. Anderson

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A 1950 GATHERING OF PRESIDENTS

Three past presidents of the Mayo Clinic Alumni Association look at photos of staff members. Gilbert Thomas, M.D. (S '10), was president 1928–1929; Arthur Collins, M.D. (S '07), was president 1922–1923; and Robert Sanders, M.D. (S '17), was president 1929–1930. June 27-29, 2024

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Mayo Clinic Alumni Association International Program

2.2.1

Trondheim, Norway For information and registration, visit alumniassociation.mayo.edu/events/2024-international-norway