

Letter from the secretary-treasurer

Earlier this year, the Alumni Association debuted a new mission statement:

Connecting our alumni and bringing Mayo Clinic values to the world

Picture us reaching out to and engaging with our 25,000 alumni in 83 countries. Picture extending the Mayo Clinic reach around the world. To reach more physicians and scientists. To reach more researchers. Consumers. Patients. Students, trainees and other learners.

As a result of the pandemic, we've learned that you don't always have to be there in person. During the pandemic, physicians treated patients across the country and in other countries via telemedicine and eConsults. Medical lectures were offered by Zoom, reaching all corners of the world. Our medical students learned in a remote curriculum. We demonstrated that we can effectively treat and be treated, teach and learn, train and be trained, advise and collaborate remotely.

The Mayo Clinic Alumni Association Biennial Meeting is planned as a hybrid meeting in Arizona, Oct. 15–17. You can look at hybrid or virtual meetings as a negative — not seeing colleagues and friends in person for networking and social needs. Or you can look at it as an opportunity for more people to participate — alumni who have young children or care for aging parents, alumni who have difficulty traveling or who do not wish to travel, international alumni who don't want to travel great distances. Hybrid meetings allow for important face-to-face connections as well as opportunities for those who wish to participate from afar.

The possibilities of extending the Mayo Clinic reach — including alumni — around the world are limitless. Mayo's 2030 strategic plan outlines how technology provides the opportunity for a seamless union between the physical and virtual environment, enabling innovative health care. Mayo Clinic is committed to developing the newest procedures, latest diagnostic strategies, innovative surgeries, medical artificial intelligence discoveries and next-generation care models, while leveraging advanced technology and platforms in ways that are unimaginable today. We've only just begun.

I hope to see you at the October Biennial Meeting ... whether you travel to Arizona or appear on a screen.

M. Molly Mc MAhm, M.D.



M. Molly McMahon, M.D. (ENDO '87) Secretary-Treasurer Mayo Clinic Alumni Association Division of Endocrinology, Diabetes, Metabolism, and Nutrition Mayo Clinic in Rochester

Contents

4 Expertise at an organization's fingertips Mayo Clinic Care Network



Taking testing to the world ... literally Mayo Clinic Laboratories

14 Look over the surgeon's shoulder ... from home Continuous professional development

18

Philip Fischer, M.D., wants to improve the health of children everywhere



An organizational & societal imperative Addressing racism & health disparities

28 Breaking barriers & blazing paths in GI In a league of their own



On the shoulders of giants Shannon Coombs and Alyx Porter Umphrey, M.D.

40

On the shoulders of giants Kamal Itani, M.D., and Onye Akwari, M.D.

44

Mayo Clinic Distinguished Alumni Award

52 Gift from Carl Soderstrom, M.D.

54 Mayo Clinic Update News & obituaries

Illustrations by Federico Gastaldi

COVID-19 photography disclaimer: Some photos were taken before the pandemic. In others, individuals were alone in nonpatient care, nonpublic settings and were, therefore, in compliance with Mayo Clinic's COVID-19 safety guidelines while unmasked.





Mayo Clinic Care Network

Experies by the second second



More than 6,000 times in 2020, Mayo Clinic Care Network organization physicians looked to Mayo Clinic for electronic consultations (eConsults) for their patients. This service was more important than ever before during the pandemic.

"Ideally, health care is delivered close to home," says **Mark Larson, M.D.** (I '86, GI '89), medical director, Mayo Clinic Provider Relations. "Collaborating with other health care organizations allows us to have deeper relationships with physicians, help lower costs, deliver better outcomes and, most importantly, help more patients across the country and around the world — especially when we're advised to avoid travel unless absolutely necessary. Patients get the benefit of Mayo Clinic expertise without having to travel. When patients do choose to come to Mayo Clinic for complex, serious conditions, their care is streamlined due to the relationships we have with their home physicians and hospitals."

THE RELATIONSHIPS

Mayo Clinic Care Network was established in 2011 to extend Mayo Clinic knowledge and expertise to physicians and providers in other health care organizations that have a formal contractual agreement with Mayo Clinic and share a goal of improving the delivery of health care in their organizations.

Mayo Clinic Care Network members have access to resources including eConsults for their patients; AskMayoExpert web-based medical reference tool; consulting about business operations and patient care; eBoard live interactive conferences to discuss management of complex cases; inpatient phone consultations; and consumer health and patient education materials.

"We provide so much more than eConsults to our members," says Dr. Larson. "And we managed rather seamlessly despite the pandemic, despite our team members and physicians being unable to travel to members' cities across the U.S. and world." •

"Collaborating with other health care organizations allows us to have deeper relationships with physicians, help lower costs, deliver better outcomes and, most importantly, help more patients across the country and around the world — especially when we're advised to avoid travel unless absolutely necessary."

– Mark Larson, M.D.



hospitals

15.6m

patients

17,534

physicians

member organizations including

international (China, Egypt, India, Mexico, Saudi Arabia, Singapore,

United Arab Emirates)

5

eConsults

Mayo Clinic Care Network eConsults in 2020 numbered 6,042 – a 7% increase from 2019. Top specialties in which eConsults were provided include:

- Hematology
- Neurology
- Gastroenterology & hepatology
- Cardiovascular diseases
- Endocrinology
- Pulmonary medicine
- Radiology
- Rheumatology
- Radiation oncology
- Neurologic surgery

Job search

Mayo Clinic students and trainees can search for employment opportunities with Mayo Clinic Care Network organizations, searching by specialty, organization or city. alumniassociation.mayo.edu/mccn/mccnjob-search



THE CONNECTIONS

Stacey Rizza, M.D. (MED '95, I '98, INFD '01), Division of Infectious Diseases and executive medical director, Clinical Practice, Mayo Clinic International; and **Andrew Badley, M.D.** (I '94, INFD '97), enterprise chair, Mayo Clinic Department of Molecular Medicine, and the HH Sheikh Khalifa Bin Zayed Al-Nahyan Professor of Infectious Diseases Honoring Walter R. Wilson, M.D., have been on the frontline of COVID-19. They were enlisted to conduct a virtual town hall for Mayo Clinic Care Network member St. Clair Hospital based in Lebanon, Pennsylvania, to share the latest information about the virus, what Mayo Clinic was doing and what to prepare for.

"Drs. Rizza and Badley didn't hop on a plane to Pittsburgh but provided state-of-the-art information to this Mayo Clinic Care Network member as well as others," says Dr. Larson. "Our experts have done similar forums for Breast Cancer Awareness Month, Women's Health Month and other topics — sharing Mayo Clinic expertise without being able to convene face to face. We gained significant efficiencies in time, energy and expense with the virtual model, especially related to physicians, and we're likely to continue this new model post-pandemic."



Top: Stacey Rizza, M.D., Mayo Clinic Division of Infectious Diseases

Bottom: Andrew Badley, M.D., enterprise chair, Mayo Clinic Department of Molecular Medicine

Opposite top: Brad Archer, M.D., CEO of Monument Health in Rapid City, South Dakota Opposite bottom: Alexander Schabauer, M.D., chief of staff, Monument Health

Mayo Clinic Alumni

MONUMENTAL CHANGE FOR MEMBER IN ONLY ONE YEAR

Monument Health (formerly Regional Health), based in Rapid City, South Dakota, became a Mayo Clinic Care Network member in January 2020 after a year of preparation. Monument Health, which has five hospitals and 24 clinics, had recently undergone a rebranding and organizational change, shifting to a dyadic governance style akin to Mayo Clinic.

"The timing couldn't have been better because we got on board right before the pandemic hit," says Brad Archer, M.D., chief medical officer, Monument Health. "It was very helpful for us to see how Mayo handled everything pandemic-related, from universal precautions on the floor to employee policies. I can't imagine facing COVID-19 without that relationship and our governance change."

When Monument Health announced its membership in Mayo Clinic Care Network, it was met with high enthusiasm from the public, physicians and employees, according to Dr. Archer. "Mayo Clinic has powerful brand identity in our market."

The excitement about the relationship is evident in the number of eConsults Monument Health physicians requested for patients in 2020 and clinician use of AskMayoExpert. Both ranked in the top tier of Mayo Clinic Care Network members.

Chief of Staff **Alexander Schabauer, M.D.** (CV '95, CVVM '96), is one of seven employed and 13 independent Mayo Clinic alumni at Monument Health. He says patients who have had specialty care at Mayo Clinic and returned to Rapid City talk about the holistic care at Mayo — and remark that Monument Health now has a similar approach. And Dr. Schabauer's physician colleagues comment that they can see the change throughout the organization. "The attitude of serving the call of being a physician and wanting to do the right thing for the patient has infused Monument Health," he says. "There's been a sea change in our culture as a result of witnessing that attitude among our Mayo contacts. Interactions with Mayo bring out the best in people."

Dr. Archer cites friendliness and ease of communication as keys to the relationship's success in the first year. "Everyone at Mayo has been warm and exceptionally collegial from the start. They know our goals, help us determine what to focus on and provide various ways to connect via technology."

Monument Health's physician engagement has improved dramatically, its financial outlook is rosier, recruiting efforts are more successful, the culture is evolving and its quality journey is underway. Members of its board of directors completed a course for board improvement, and future board members will do the same.

"Our physicians are happy, our board members are happy, our community is happy," says Dr. Archer. "We're becoming a learning organization just like Mayo Clinic."

An unexpected outcome of participation in Mayo Clinic Care Network is a new relationship and collaboration with Billings Clinic in Billings, Montana.

"We've become great friends and allies," says Dr. Archer. "As tertiary referral centers that are part of Mayo Clinic Care Network, we share goals, cultural attributes and focus. They've been part of the network since 2013 and are a little ahead of us. They've shared their experiences about physician evaluation, which we're tackling in the next fiscal year. Our common foundation in Mayo Clinic Care Network gives us a baseline level of trust in our new collaborative relationship." Dr. Schabauer says it has been a goal since he completed fellowship training at Mayo Clinic to bring a Mayo Clinic relationship to Monument Health. "I'm a bit over the moon that we've accomplished this." •





"The attitude of serving the call of being a physician and wanting to do the right thing for the patient has infused Monument Health."

- Alexander Schabauer, M.D.

Mayo Clinic Laboratories

Taking tothe world ...literally

The more than 26 million patient specimens that travel in distinctive berry-colored boxes to Mayo Clinic Laboratories in Rochester, Minnesota, from 50 states and more than 80 countries each year must have a near-perfect odyssey to arrive at the destination in optimal condition for testing. Myriad variables can affect a package's journey:

- Improper packaging that compromises the integrity of samples
- Outbound and inbound customs delays
- Aircraft mechanical delays
- Multiple shippers and transportation logistics
- Extreme temperatures

• Incomplete paperwork

In the last several years, there's an addition to the list – bureaucratic red tape.



MAYO CLINIC LABORATORIES

According to **Mohamed Salama, M.D.** (LABM & PATH '18), chief medical officer, Mayo Clinic Laboratories, some countries make it difficult for hospitals and laboratories to send their testing to the U.S., including to Mayo Clinic Laboratories, the global reference laboratory for Mayo Clinic. This, despite Mayo Clinic Laboratories offering unmatched breadth across specialties and depth within specialties. What is the solution, then, to continue to offer these unique, much-needed capabilities to hospitals, laboratories and patients around the world?

Take the testing to them. •



Mohamed Salama, M.D.

AN END-RUN

Mayo Clinic Laboratories' international strategy focuses on extending its core competencies of highly specialized testing within key countries so they don't have to export testing to the U.S.

"The world is changing, and some governments are limiting exportation of biological samples for testing," says Dr. Salama. "We anticipate having an embedded presence in regions where we have longstanding relationships, with some personnel from the U.S. living in those areas, working alongside local personnel."

CHINA

Since 2018, Mayo Clinic has had a joint venture for the development and delivery of world-class clinical diagnostic services in China with WuXi AppTec Group, a leading global pharmaceutical, biopharmaceutical, medical device and technology platform company. The arrangement gives WuXi access to Mayo Clinic tests for its hospital and health care provider customers. More than 1,700 Mayo Clinic Laboratories assays have been technically validated in China. Mayo and WuXi are co-developing other assays to benefit the American and Chinese markets. The two organizations share development costs, which allows Mayo to supplement its existing resources. WuXi also has staff members based in Rochester to learn about emerging technologies that can be applied to the Chinese market.

Mayo Clinic and WuXi collaborated with a third entity, Thermo Fisher Scientific, in 2020 in response to a global call to ramp up testing during the pandemic. The collaboration took advantage of Mayo's laboratory expertise, WuXi's test development capabilities, and Thermo Fisher's commercialization experience to produce and market the Thermo Scientific OmniPath COVID-19 Total Antibody ELISA test. The test detects immunoglobin M and immunoglobin G to help clinicians determine if a patient has been exposed to SARS-CoV-2. •

"We anticipate having an embedded presence in regions where we have longstanding relationships, with some personnel from the U.S. living in those areas, working alongside local personnel."

– Mohamed Salama, M.D.





Brian Dukek, Mayo Clinic Department of Laboratory Medicine and Pathology, consults with WuXi Rochester-based staff members Wei Wang and Tracy Yab.

Sharing Mayo Clinic knowledge with low-& middle-income countries

William Morice II, M.D., Ph.D. (MDPH '94, IMM '94, PATH '98, SGPA '99, HEMP '00), president, Mayo Clinic Laboratories, cochairs the industry advisory group of the diagnostics pillar of Access to COVID-19 Tools (ACT) Accelerator, a global collaborative organized by the World Health Organization, Global Fund, Foundation for Innovation in New Diagnostics (FIND) and others. The collaborative aims to accelerate development, production and equitable access to COVID-19 tests, treatments and vaccines.

Mayo Clinic Laboratories is involved in the diagnostic portion of this initiative, tasked with increasing the availability of diagnostic tests to low- and middle-income countries.

"In keeping with our Mayo Clinic values and vision, we continue to promote global health," says Dr. Morice. "Our participation allows Mayo Clinic Laboratories to use what we know about diagnostic testing to advance the health and well-being of people who might not otherwise have access to the care we provide."



DUBAI

Now, Mayo Clinic Laboratories has formed a strategic partnership with American Hospital Dubai, a long-time customer and member of Mayo Clinic Care Network (page 4). The two organizations are collaborating to deliver laboratory testing from American Hospital Dubai. Mayo Clinic Laboratories is working with hospitals, providers and labs in Dubai — the most populous city in the United Arab Emirates, with approximately 3.4 million people — to encourage them to send their referral testing through the new strategic arrangement. Highly specialized testing will still be sent to Mayo Clinic Laboratories in Rochester, and a select subset of testing will be performed at American Hospital Dubai.

Mayo Clinic Laboratories and American Hospital Dubai also plan to establish a staging hub, where samples from throughout the Middle East and North Africa will be sent en route to their Rochester destination. The arrangement will improve transportability, support sample stability, and reduce logistics obstacles and costs.



"As we mark our 50th anniversary this year, our focus is on expanding what we do best to regions where we have longstanding relationships to overcome the difficulty of accessing our testing."

- William Morice II, M.D., Ph.D.

IN-REGION TESTING

"Our philosophy is that the best approach to lab testing is to keep it as close to the patient as possible to facilitate immediacy of results," says William Morice II, M.D., Ph.D. (IMM '94, MDPH '94, SGPA '99, HEMP '00), president, Mayo Clinic Laboratories, and chair, Department of Laboratory Medicine and Pathology at Mayo Clinic in Rochester. "Strategic partnerships such as these will help keep testing in regions as much as possible, with Mayo Clinic Laboratories in the U.S. as an additional resource when local capabilities and expertise aren't sufficient. As we mark our 50th anniversary this year, our focus is on expanding what we do best to regions where we have longstanding relationships to overcome the difficulty of accessing our testing." •

Mayo Clinic Laboratories at 50 years



Catalog of 3.5k+

screening, diagnostic, theranostic and prognostic tests and pathology services

25.6m

105 new tests launched in 2020

4.5m patients and 4,000 health care customers worldwide **Continuous professional development**

Look over the Surgeon's should be determined by the second second

Mayo Clinic alumni have participated in medical education from Mayo Clinic School of Continuous Professional Development for decades. Traditional in-person education has expanded to include livestreamed and online courses, podcasts and journal-based continuing medical education — particularly important during the pandemic.

In a further broadening of medical education, Mayo Clinic is collaborating with GIBLIB, a medical education streaming platform that works with leading academic medical centers. Since 2019, Mayo Clinic and GIBLIB together have produced hundreds of educational content assets, primarily in family medicine, primary care, orthopedic surgery, general surgery, urologic surgery and neurologic surgery.

Karan Arora, M.D. (S '19, U '23), a urology fellow at Mayo Clinic in Arizona, watches a surgery via a virtual reality headset and gets the feeling of being in the surgical suite.





2,164



HIGH-DEF & VR

That content includes high-definition video of Mayo Clinic surgical cases from open to close, edited down to reasonable lengths and with surgeon narration. Using a virtual reality headset, a learner can have an immersive surgical experience and see anatomy up close, with great acuity. An accompanying video features an interview with two surgeons discussing their different approaches to the case.

"Using a streaming service such as GIBLIB allows us to offer Mayo Clinic knowledge and expertise around the world," says **Mitchell Humphreys, M.D.** (U '06), dean, Mayo Clinic School of Continuous Professional Development, and chair, Department of Urology at Mayo Clinic in Arizona. "For example, I've performed 3,000 HoLEP (holmium laser enucleation of the prostate) procedures. It's a difficult procedure to learn, and only a handful of surgeons in the U.S. offer it. Surgeons from around the world have traveled to Arizona to see how I do it. Now, we've recorded and narrated me performing the HoLEP procedure, and it's accessible to anyone in the world."

Mayo Clinic also uses GIBLIB to provide on-demand curriculum to medical students, residents and fellows.

"Before residents come on my service, I ask them to watch procedure videos on GIBLIB," says Dr. Humphreys. "Having this high-quality material available to them enables us to accelerate their educational journey."

"We believe every learner will find content that appeals to their preferences and interests."

-Mitchell Humphreys, M.D.

BESPOKE

Dr. Humphreys emphasizes that virtual education is a companion resource to, rather than a replacement for, in-person education. "There will always be a place for in-person live courses, including social and networking purposes and the joy of returning to a Mayo Clinic campus and connecting with old friends. We believe on-demand educational content is a valuable way to reinforce and enhance traditional education for learners across the spectrum and around the world one part of the suite of CME Mayo Clinic offers.

"Education was moving toward more virtual content prior to the pandemic, which forced faster evolution to maintain excellence during a time when people couldn't travel. We now know we can successfully reach people around the world with high-quality, effective virtual curriculum. We see how this can break down frontiers in surgical education, in particular, and offer a more bespoke model of continuous learning. By knowing what a learner is watching repeatedly, we can use algorithms to suggest curriculum to assist them, and physicians and trainees can take a much more active role in creating plans for their own learning."

Dr. Humphreys likens the breadth of offerings in CME to sporting events. Some people like to buy a ticket to the game and watch it live in the stadium. Others prefer to watch live from home. Still others prefer to record the game and watch it later, rewinding to watch key plays over again.



"There's something for everyone, just as Mayo Clinic School of Continuous Professional Development offers in-person and online courses and new streaming offerings via GIBLIB," he says. "We believe every learner will find content that appeals to their preferences and interests."

Access to GIBLIB is available via annual subscription. The GIBLIB app will even allow a physician to complete a CME course while waiting for a flight in an airport when travel becomes safe.

Dr. Humphreys points out that the Mayo brothers traveled the world, curating knowledge and inviting physicians to Mayo Clinic to learn from what they'd learned. They believed in making the best techniques and practices available to everyone to benefit humanity. "Being a leader in virtual education is an extension of Mayo's educational roots, and helping to improve everyone's health fulfills Mayo's mission." •

giblib.com/mayoclinic

GIBLIB top 10

- 1. Outbreak: Past Lessons More Relevant Than Ever
- 2. Open Right Inguinal Hernia Repair
- 3. Interventional Alternatives to Opioids in Pain Management
- 4. Open Radical Nephrectomy RPLND
- Left Chest Multi-Level Rib Fixation through an Anterolateral Thoracotomy Incision
- 6. Breast Conserving Therapy for DCIS
- 7. Acute Abdomen
- 8. Joint Exams for the General Practitioner: Low Back Pain
- 9. Open Transforaminal Interbody Fusion
- 10. Carpal Tunnel Release

Philip Fischer, M.D., health of wants to improve the health of hea

TACKLING A DISEASE THOUGHT RELEGATED TO HISTORY BOOKS

Philip (Phil) Fischer, M.D. (PD '99), says he's always been interested in improving the health of children everywhere. He earned a diploma in tropical medicine and hygiene from the Liverpool School of Tropical Medicine in England to enhance his ability to do so. He worked at a medical center in what is now the Democratic Republic of Congo from 1985 to 1991.

Dr. Fischer has studied calcium and vitamin D deficiencies with rickets in

Dr. Fischer

anticipates that

the results will help

and treat beriberi so

the next generation

of children will be

healthier than

the last.

prevent, diagnose

Nigeria. His rickets research led to significant reductions in crippling bone disease in Nigeria, Bangladesh and other countries. His other research led to awareness of congenital malaria as a significant clinical problem in Africa, prevention and treatment of the disease in pregnant women, and improved child health.

In the last two decades while in the Department of Pediatric and Adolescent

Medicine at Mayo Clinic, Dr. Fischer also has focused attention on beriberi, a disease caused by vitamin B₁, or thiamine, deficiency. Beriberi can affect metabolic, neurologic, cardiovascular, respiratory, gastrointestinal and musculoskeletal systems. The disease was largely eradicated in developed countries more than 70 years ago via dietary diversification and food fortification.

Dr. Fischer became aware of infants in Cambodia dying from what sounded like beriberi about 20 years ago when a nurse practitioner who lived in that country shared information when they met at conferences. She'd observed that approximately 6% of babies in Cambodia died before their first birthday and that about half of those deaths seemed to be due to beriberi.

"She was convinced that these babies had beriberi, and she saw them recover rapidly when she gave them injections of thiamine (vitamin B₁)," says Dr. Fischer. "I had vague recollections of learning that thiamine deficiency causes beriberi,

> but I — along with most U.S.-trained pediatricians assumed it was a problem for history books, not for babies in this century."

Dr. Fischer and his colleague **Mark Topazian, M.D.** (GI '03), Division of Gastroenterology and Hepatology at Mayo Clinic in Rochester, visited

Cambodia to see the phenomenon themselves. They designed a study that determined that children who appeared to have beriberi did indeed have a low blood level of thiamine. The study also revealed that seemingly healthy babies in the province also had low thiamine levels. All of the babies were thiamine-deficient. The team found that about two-thirds of infants hospitalized for breathing difficulties in another part of the country were thiamine-deficient. But it was impossible to diagnose beriberi without a blood test, which wasn't available in Southeast Asia in the early 2000s. ► "We'd determined that thiamine deficiency was common in parts of Cambodia and that it was killing babies, but we didn't know which of the sick babies would improve with thiamine," says Dr. Fischer. "We had, however, learned that giving breastfeeding mothers oral thiamine supplements helped their babies get more thiamine. But there were no good systems to supplement at-risk mothers or fortify diets with thiamine. We were stymied about how to prevent beriberi at the population level."

According to Dr. Fischer, thiamine deficiency is common in developing countries in babies of breastfeeding mothers who are thiamine-deprived, in large part, because a main staple of their diet is white rice. The thiamine in the husk of the rice is removed during processing.

In 2016, the Bill and Melinda Gates Foundation gathered physicians and scientists from around the world who were studying thiamine to help determine if thiamine deficiency deserved the foundation's attention. Dr. Fischer was invited to participate in these meetings. As a result of the group's findings, the Gates Foundation decided to invest in resolving thiamine deficiency and initiated projects including determining the extent of the problem around the world, how best to prevent it through fortification of foods, and how to choose and use blood tests to confirm it.

Dr. Fischer is part of a Gates Foundationfunded group determining how to diagnose thiamine deficiency in areas where thiamine blood tests aren't available. This project is focused on a children's hospital in Laos. Dr. Fischer has help from Mayo Clinic colleagues, including **Casey R. Johnson, M.D.** (MED '19, PD '22), a resident in the Department of Pediatric and Adolescent Medicine, and medical student **Kristin Cardiel Nunez** (MED '22, CTSA '23), who has taken a year off from medical school to get a master's degree.

Data collection for these projects ended in 2020, and Dr. Fischer anticipates that the results will help prevent, diagnose and treat beriberi so the next generation of children will be healthier than the last.

"We've learned that beriberi isn't limited to Cambodia and Laos," says Dr. Fischer. "We've teamed up with colleagues in India and Bhutan to find out what they're seeing. Dr. Johnson has written a couple of review articles to educate medical professionals around the world about the problem of beriberi and solutions to thiamine deficiency.

"It's been a 20-year journey, but we're making progress. The scientific community is now aware that beriberi is a problem in other countries, and there is new awareness that beriberi also happens in North America. Within the next couple of years, we should have improved diagnostic methods and effective food-fortification strategies."

In the meantime, in furtherance of his desire to help children around the world, Dr. Fischer has relocated to Sheikh Shakhbout Medical Center, a joint venture of Mayo Clinic and Abu Dhabi Health Services in the United Arab Emirates. He'll serve as a pediatrician for at least three years and strive to impart the Mayo Model of Care to new colleagues in Abu Dhabi.

Philip Fischer, M.D., guides a nurse in Luang Prabang, Laos, in the elements of a physical examination, including liver palpation.

"It's been a 20-year journey, but we're making progress. The scientific community is now aware that beriberi is a problem in other countries, and there is new awareness that beriberi also happens in North America."



Addressing racism & health disparities

An organizational & societal imperative

Last year brought social unrest across the U.S. and world due to racism issues, prompted by the murders of Ahmaud Arbery, Breonna Taylor and George Floyd. The emotions over these deaths were compounded by data showing that Black people and other communities of color were more negatively affected by COVID-19 in terms of severity of disease and treatment of it. As the confluence of events came to a head, Mayo Clinic saw the effects on its employees — especially Black employees. >



A global effort

Mayo Clinic is a founding member of the World Economic Forum's Racial Justice in Business initiative — part of a global coalition to tackle exclusion, bias and discrimination related to race, gender, ability, sexual orientation and all other forms of human diversity. The coalition will work to eradicate racism by setting new global standards for racial equity in business and providing a platform for institutions to collectively advocate for inclusive policy change.

Mayo Clinic is investing

\$100m

over the next 10 years to address health disparities, eliminate racism and advance equity and inclusion on Mayo Clinic campuses "Many of our Black and Brown employees routinely experience racism in their communities and at work," says **Anjali Bhagra, M.D.** (I1 '05, I '08), medical director, Mayo Clinic Office of Equity, Inclusion and Diversity. "Seeing horrifying high-profile incidents of racism happen to people who look like them causes trauma even when they don't witness the incidents in person. These things take a toll on overall well-being, and these staff members can't help but carry that emotional burden into the workplace. We are an organization that cares about the well-being of our employees and decided we cannot not address these issues.

"Mayo Clinic has an opportunity to lead in the space of race, racism and health care disparities. Mayo Clinic isn't immune to these issues, and many of our employees have been unaware of or inattentive to these inequities. Many of our employees have challenged us to consider our social responsibilities in myriad areas, including race and racism. We may be ranked as the No. 1 hospital in the U.S., but we do not currently lead in equity and health care disparities. We are committed to changing that."

CLOSING THE DOOR

To put its money where its mouth is, Mayo Clinic announced its commitment to invest \$100 million over the next 10 years to address health disparities, eliminate racism, and advance equity and inclusion on its campuses. To mark the moment, Mayo closed the doors to the Plummer Building — closing the door on racism, only the 11th time in 92 years that the 4,000-pound bronze doors have been closed.

Success in this endeavor will require Mayo Clinic to:

Reflect diversity. Improve inclusiveness and participation of diverse employees at all levels of the organization.

Help the underrepresented. Increase the proportion of women and minority students, faculty, administrators and staff where underrepresented.

Have diversity at the top. Make opportunities available to facilitate an increased proportion of women and minorities in senior leadership.

Lead in health care. Own a leadership role in health care by identifying and eliminating health disparities and promoting health equity. •

Closing of the Plummer doors represents one of the highest expressions of respect at Mayo Clinic — marking solemn events in the history of Mayo Clinic and the United States. Ceremonial closings have occurred on 11 documented occasions, from 1939, when each of the Mayo brothers died, to 2020, marking closing the door on racism.

RARARARARARARA

CREATING SOLIDARITY

An important step in the vision for a more diverse, inclusive and equitable organization free of racism and prejudice is promoting understanding and inclusion among Mayo Clinic staff members. Last year, Mayo Clinic established EverybodyIN, a staff initiative to promote inclusion and express solidarity against racism and discrimination.

"Mayo Clinic's values compel us to be part of solutions that improve the lives of our staff, patients and community members, regardless of their race," says Dr. Bhagra. "By participating in EverybodyIN, employees can learn from each other, discuss race and racism, and educate themselves about race issues. We want employees to be part of the solution to advance diversity and inclusion at Mayo Clinic and in communities Mayo serves."

EverybodyIN offers resources and tools that hundreds of employees have used or participated in, including:

- A series of on-demand conversations about race and equity
- Listening sessions hosted by leaders to allow employees to share their views about race issues, equity and social justice at Mayo Clinic; speakers have addressed what it means to be Black in America, what it feels like to face microaggressions and racism, what it means to be a white ally, what privilege is, how to combat systemic racism and what role each person can play in addressing racism
- A Facebook group for staff to participate in conversations about diversity, inclusion, equity and systemic racism (alumni are allowed; let us know you're an alum when you ask to join facebook.com/groups/mayocliniceverybodyin)
- A pledge employees can take to show their commitment to support equity and diversity
- "Voices of Mayo" intranet series that highlights staff and their stories, exploring their diverse backgrounds, challenges they face and their experiences at Mayo Clinic
- Tips for physicians to use when a patient displays biased comments or behaviors (alumniassociation.mayo.edu/resources)
- Opportunity to donate to the EverybodyIN Fund for Change, an effort to support nonprofit organizations working to advance equity, diversity and inclusion, and fight racism in the communities Mayo Clinic serves

"Mayo Clinic stands united in strong commitment toward anti-racism and rejecting all discrimination," says Dr. Bhagra. "Our vision is to create a global environment of empowered belonging for everyone. This vision of belonging is a welcoming culture, where all voices and perspectives are encouraged, acknowledged, celebrated and valued."

"Within its walls, all classes of people, the poor as well as the rich, without regard to color or creed, shall be cared for without discrimination."

> William J. Mayo, M.D., upon construction of the 1914 Building on the Rochester, Minnesota, campus

EVERYBODYIN FUND FOR CHANGE

Mayo Clinic awards grants from the EverybodyIN Fund for Change to nonprofit organizations working to advance equity, diversity and inclusion, and fight racism. Recipient organizations must be in a community served by Mayo. Mayo Clinic matches contributions to the fund.

In the first round of grants, Mayo Clinic awarded 36 organizations and programs \$200,000 - more than \$88,000 from staff contributions and a Mayo Clinic match. Grants ranged from \$1,000 to \$15,000.

Grant recipients and their projects include:

- Fair and impartial police training, La Crosse, Wisconsin, Police Department
- Rochester area COVID-19 resource hotline for Spanish speakers, Hispanic Advocacy and Community Empowerment through Research
- Coalition of Blacks Against Prostate Cancer in Arizona
- Outreach to people of color and marginalized groups, LGBT Community Center of Chippewa Valley, Wisconsin
- Equitable and domestic sexual violence services in Northwest Wisconsin
- Closing the provider of color gap within behavioral health care, Minnesota University, Mankato College of Allied Health & Nursing
- A game app that reinforces racial healing and equity through deep conversations and learning in Jacksonville, Florida

"Mayo Clinic stands united in strong commitment toward anti-racism and rejecting all discrimination."

– Anjali Bhagra, M.D.







Maria Vazquez Roque, M.D. Assistant Professor of Medicine Mayo Clinic





In a league of their OWN

Breaking barriers ප blazing paths in GI

Women represent 18% of gastroenterologists in the U.S. The gastroenterology subspecialty ranks No. 22 of 26 in the percentage of female physicians. The percentage of women who pursue GIH fellowships has remained relatively unchanged despite increasing numbers of women entering medical school, 40% of whom pursue internal medicine. Currently, women make up 25% to 30% of GIH trainees nationally.

TRENDING AHEAD OF THE CURVE

Mayo Clinic's Division of Gastroenterology and Hepatology is ahead of the national figures, with women representing 21% of GIH faculty in Rochester, Minnesota; 23% in Arizona; and 24% in Florida. On the trainee front, 31% of the GIH fellows are women.

There's good news on the horizon: On the Rochester campus, women comprise 50% of the class of first-year GIH fellows and 71% of the class that started in July.

But Mayo women's success in GIH isn't relegated to numbers. Women who've been on staff or trained at Mayo Clinic are leaders in GIH professional associations and in practice, education, research and administration. They've been mentored, sponsored, promoted and advanced through their own initiative as well as valuable assistance from other women and, importantly, supportive men at Mayo Clinic.

Mayo Clinic Alumni zeroes in on some of these Mayo-affiliated women, dating back to the first in the Division of Gastroenterology and Hepatology on the Rochester campus. ►



"The changes that occurred beginning in the late 1990s happened because they were supported by supportive men."

– J. Eileen Hay, M.B., Ch.B.

ADVOCATING FOR CHANGE

J. Eileen Hay, M.B., Ch.B. (I '86, GI '89), Mayo Clinic Emeriti Staff, has the distinction of being the first woman on the GIH staff.

Dr. Hay came to Mayo Clinic from Scotland in 1983 along with her husband, **Ian Hay, M.D., Ph.D.** (ENDO '81). While their British qualifications were comparable, it took three years for her to be accepted into the Mayo GIH training program. "When I started my fellowship in 1986, there were no women on staff in GIH, cardiology, endocrinology or surgery," she says.

"From the beginning, I really enjoyed Mayo and felt that my contribution to the clinical practice was appreciated by my colleagues. But, in the early years, being the first and only woman was isolating, both professionally and socially. I had no mentor and lacked the informal advice and encouragement afforded to my male counterparts by their daily interaction with colleagues. With a working husband and three small children, I was too busy to pay much attention to this."

Dr. Hay says things began to change around 1999 when division chair **Keith Lindor, M.D.** (MED '79, GI '86), now at Mayo Clinic in Arizona, recognized the trends in medical schools and need to actively recruit women.

"Only five of our 70 staff members were women, one of the lowest among medical divisions," says Dr. Hay. "Dr. Lindor and I met weekly to talk about women's issues, and he asked me to chair our division's first Diversity Committee. He was the driving force in recruiting women to GIH. Because the division hires largely from the fellowship program, it was problematic to have only men on the Interview Committee. With the addition of a woman to the committee and the decision to assign at least two of the fellowship slots to female candidates over the next two years, the recruitment of women increased and has continued to do so."

Not only did Dr. Lindor improve representation of women in the division, but he also realized that women were receiving little academic mentoring, according to Dr. Hay. He pushed her to pursue full professorship. "I wouldn't have done it without his encouragement," she says. "Everyone does better with mentoring. In the early years, I was focused on surviving and proving myself. In the first 10 years of my career at Mayo, I don't feel like women in the division could have accomplished much more. The changes that occurred beginning in the late 1990s happened because they were supported by supportive men."

Mayo's current GIH Division Chair **Darrell Pardi, M.D.** (GI '98, CTSA '09), credits Dr. Hay with questioning the underrepresentation, calling it unacceptable and advocating for change.

"Within a few years, making the division more diverse became an important parameter and forced us to think about where we needed to be," says Dr. Pardi. "Today, we're intentional in our efforts to attract women to our fellowship program and staff. Once they're here, we are equally deliberate about helping them develop as leaders. Diversity isn't about checking boxes. We want the best physicians in the world to work and train at Mayo Clinic. That requires demonstrating no perceived biases or inequities that would cause the best to not come here."

PROMOTING WOMEN AT UCLA

Lin Chang, M.D. (GI '92), now a professor of medicine at the David Geffen School of Medicine at the University of California, Los Angeles (UCLA), was the third woman in Mayo's GIH division.

"I'd been recruited to work in a large private practice in Los Angeles but instead went to Mayo Clinic because my then husband (**Christian de Virgilio, M.D.** [VASS '93], chair, Department of Surgery, Harbor-UCLA Medical Center) was completing a fellowship there," says Dr. Chang.

"I joined the division at Mayo and pivoted my sights from private practice to academic practice. My career would've been very different if not for Mayo Clinic. I was very inspired by working there. Everyone at Mayo functions at a high level and wants to succeed."

Succeed she has. Dr. Chang is vice chief of the Vatche and Tamar Manoukian Division of Digestive Diseases, and co-director of the G. Oppenheimer Center for Neurobiology of Stress and Resilience. She has received the Janssen Award in Gastroenterology for Basic or Clinical Research, and American Gastroenterological Association (AGA) Distinguished Clinician Award and 2021 Distinguished Educator Award.

The GIH fellowship program Dr. Chang oversees at UCLA is second in size only to Mayo's program.



"I joined the division at Mayo and pivoted my sights from private practice to academic practice. My career would've been very different if not for Mayo Clinic."

- Lin Chang, M.D.

PROMOTING WOMEN AT SAINT LOUIS UNIVERSITY

Charlene Prather, M.D. (GI '93), is director of the GIH fellowship at Saint Louis University School of Medicine in St. Louis, Missouri; president of the university's medical staff; and chair of the American Board of Internal Medicine Gastroenterology Board Exam Committee.

Dr. Prather arrived at Mayo Clinic in 1990 for a GIH fellowship. She was one of two women fellows in a division that had two women faculty members.

After completing training, Dr. Prather joined the Mayo staff for five years and was director of the Upper Gastrointestinal Motility Lab. Dr. Prather counts her mentors at Mayo Clinic as including Dr. Lindor, **David Ahlquist, M.D.** (MED '77, I '80, GI '83, deceased), and **Michael Camilleri, M.D.** (GI '88), the Atherton and Winifred W. Bean Professor.

"Dr. Lindor was an amazing fellowship program director who matched trainees with the right people. He connected me with Dr. Camilleri, who I did my research training with. He welcomed me into his lab and home. He and his wife were like second parents to me. **Dr. Nicholas LaRusso** (I '72, GI '75, the Charles H. Weinman Professor) hired me onto the faculty, believed in me and gave me many opportunities, including leadership. The strong mentorship I had at Mayo Clinic was very important to my career."

Dr. Prather is particularly proud of two Saint Louis University School of Medicine alumni she encouraged to apply at Mayo Clinic and who are now on its GIH staff— **Alina Allen, M.D.** (GI '14, HEPT '15, CTSA '23), and **Robert Kraichely, M.D.** (GI '07).



"The strong mentorship I had at Mayo Clinic was very important to my career."

– Charlene Prather, M.D.

PROMOTING RESEARCH AT STANFORD

Natalie Torok, M.D. (GI '96, I '99, GI '03), now vice chief of research and director of the T32 Program in the Division of Gastroenterology and Hepatology at Stanford University in Stanford, California, came to Mayo Clinic in Rochester in 1992 to work with **Mark McNiven, Ph.D.** (GI '88) — Division of Gastroenterology and Hepatology and the George M. Eisenberg Professor — on liver research. In 12 years at Mayo, she advanced from researcher, clinician-investigator fellow, resident and GIH fellow to staff member.

"I was lucky to have this opportunity," says Dr. Torok. "I consider Mayo my alma mater and Dr. McNiven and **Dr. Gregory Gores,** (I '83, GI '86, Mayo Clinic executive dean for Research, the Mr. and Mrs. Ronald F. Kinney Research Director in Honor of Ronald F. Kinney, Jr., and the Reuben R. Eisenberg Professor) to be my research mentors. Dr. Hay was a life mentor. She had three kids and a physician husband and taught me that you can do it all. She just carried on and was an amazing physician."

Dr. Torok, who also has three children, says only a few women among her 40 or so internal medicine classmates pursued gastroenterology. "As a procedural specialty, it was seen as less attractive, and not as compatible with having a family. Today, this trend has changed. At Stanford, the majority of the hepatologists are women, which is a big shift in the specialty. GI/hepatology offers endless opportunities to pursue research. In my role as vice chief, I promote and mentor young physician scientists, especially women."



"As a procedural specialty, it was seen as less attractive, and not as compatible with having a family. Today, this trend has changed."

– Natalie Torok, M.D.

Dr. Torok is in good company at Stanford, with at least five other Mayo alumni in her division, including the chief, **W. Ray Kim, M.D.** (GI '97, HEPAT '98).



"Mayo Clinic recognizes the value women bring to patient care, education and research, and provides the best mentorship and support."

– Shabana Pasha, M.D.

RENOWNED FOR SMALL BOWEL ENTEROSCOPY EXPERTISE

Shabana Pasha, M.D. (I1 '01, I '03, GI '07), Division of Gastroenterology and Hepatology at Mayo Clinic in Arizona, joined the internal medicine residency at Mayo Clinic in Rochester as a foreign graduate and completed a GIH fellowship at Mayo Clinic in Arizona. She serves as vice chair of the division in Arizona and was the first woman course director of the annual Mayo Clinic Gastroenterology and Hepatology Course. She also serves on the Admissions Executive Committee of Mayo Clinic Alix School of Medicine.

"Mayo Clinic recognizes the value women bring to patient care, education and research, and provides the best mentorship and support," she says.

Dr. Pasha specializes in inflammatory bowel disease (IBD), colorectal neoplasia and small bowel enteroscopy. She cites **Jonathan Leighton, M.D.** (GI '91), the Barry M. and Virginia S. Weinman Investigator in Gastroenterology Research, with mentoring her in those areas. The two co-founded the Mayo Clinic IBD Biobank. "Dr. Leighton provided opportunities in research and publications. I was, therefore, invited for presentations and research collaborations internationally, which helped establish my niche," says Dr. Pasha, who was invited to perform enteroscopy on an international dignitary due to her endoscopic expertise.

"It's vital for women to consciously and consistently pay it forward to other women," says Dr. Pasha. She has extended invitations to women faculty for CME presentations, provided mentorship to international medical students and fellows, written letters of recommendation for academic promotion of women colleagues and successfully advocated for recruiting women faculty to the GIH division at Mayo Clinic in Arizona.

SOARING IN EDUCATION & ADMINISTRATION

Amy Oxentenko, M.D. (I '01, CMR '02, GI '05), chair, Department of Internal Medicine at Mayo Clinic in Arizona, did a monthlong GIH elective as a fourth-year medical student at the University of North Dakota School of Medicine & Health Sciences in Grand Forks. She was paired with a recent graduate of Mayo Clinic's GIH fellowship, **Jorge Gilbert, M.D.** (GI '96), now at Sanford Center for Digestive Health, Sioux Falls, South Dakota. "He was so passionate about GIH, which hadn't been on my radar until then. I applied only to residency programs that had strong GIH fellowship programs."

Mayo Clinic was a good match: Dr. Oxentenko says she had incredible support and phenomenal mentors and sponsors. Notably, **Joseph Kolars, M.D.** (GI '99), now senior associate dean for Education and Global Initiatives, University of Michigan Medical School. "He opened the door for me to become involved with the American College of Physicians, which led to ACGME (Accreditation Council for Graduate Medical Education) Review Committee involvement."

Sponsorship by another Mayo physician, **Amy Foxx-Orenstein, D.O.** (GI '02), Division of Gastroenterology and Hepatology at Mayo Clinic in Arizona and past president of the American College of Gastroenterology (ACG), led to Dr. Oxentenko becoming involved with the ACG. "When I was a GIH fellow, Dr. Foxx-Orenstein was president of the ACG, and she put me on a committee. I've been involved ever since, serving on the ACG Board of Trustees and now on the ACG's executive team as secretary.

"I pay it forward. If I am offered to give a talk and can't do it, I pass along the opportunity to someone else. When the program director of the GIH fellowship was going to be open, I alerted **Dr. Laura Raffals** (GI '11, fellowship program director from 2016 to February 2021), and helped her prepare for it. And when the ACG president asked me for faculty to run a meeting, I suggested Dr. Raffals, who became a course director in 2020."



"I pay it forward. If I am offered to give a talk and can't do it, I pass along the opportunity to someone else."

– Amy Oxentenko, M.D.



"Diversity matters. The varied experiences women have matter."

– Maria Vazquez Roque, M.D.

EXCELLING AS ENDOSCOPY CHAIR

Maria Vazquez Roque, M.D. (GI '06, CTSA '07, GI '11), says the low percentage of women in GIH didn't matter to her when she was a trainee. "I was just going on my merry way." She's changed her opinion. "Knowing what I know now, it matters. Diversity matters. The varied experiences women have matter. It's important for female fellowship applicants to have female counterparts in the practice who can speak to the challenges women face during and after training. I've had the privilege to work with many talented women in GIH at Mayo. Our future is really bright."

Dr. Vazquez Roque says she had unique research experiences while training at Mayo Clinic in Rochester. Then, at Mayo Clinic in Florida, she was selected for leadership opportunities, thanks to **Kenneth DeVault, M.D.** (GI '92), who nominated her. Dr. Camilleri also mentored Dr. Vazquez Roque during four years in his lab. "He helped me advance in publications and, after I moved to Florida, continued to mentor me. Instead of focusing on writing papers, our relationship focused on questions about life and career decisions. I'm now endoscopy chair on the Florida campus and focus my practice on pelvic floor disorders." •



"We have strong institutional support to promote women GIH leaders, provide leadership training and other opportunities to ensure that women continue to advance."

– Sunanda Kane, M.D.

'THE' NAME IN IBD & PREGNANCY

When you mention inflammatory bowel disease and pregnancy, you think of **Sunanda Kane, M.D.** (GI '07). "Everybody knows who she is," says **Xiao Jing (Iris) Wang, M.D.** (GI '20). Dr. Kane has done research on that topic for more than 20 years. She was recruited to Mayo Clinic from the University of Chicago mid-career, in 2007.

"Mayo was interested in building a strong GIH faculty with the best people available, and I wanted to be part of that," says Dr. Kane. "We have strong institutional support to promote women GIH leaders, provide leadership training and other opportunities to ensure that women continue to advance. Women in GIH at Mayo are prominent meeting course directors and faculty for CME programs, they have a good track record of NIH funding, they're sought-after clinicians and their names are on peer-reviewed publications on par with our male colleagues."

Dr. Kane has been active in the ACG for more than 20 years, was the group's president from 2018 to 2019 and continues to serve on its Board of Trustees.

"I've been able to choose who would serve as ACG course directors and committee chairs," she says. "I supported Dr. Oxentenko to serve on the ACG Board of Trustees; **Dr. Neena Abraham** (GI '13, Mayo Clinic in Arizona) on the ACG Institute for Clinical Research & Education, which oversees a multi-billion-dollar research budget; and Dr. Raffals as course director for an ACG postgraduate course that attracts 3,500 people annually and is the leading GIH clinical course."



"On day one, I realized Mayo provided a unique career opportunity. I was impressed by the talent across the division but more impressed by the sense of community."

– Laura Raffals, M.D.

NURTURING & GUIDING GIH FELLOWS

Dr. Laura Raffals completed internal medicine residency and GIH fellowship in Chicago and thought she'd remain there forever. Then she met Dr. Gores at a conference in Japan. Her career trajectory changed forever.

"He asked if I was interested in interviewing at Mayo Clinic, and I did it out of curiosity," says Dr. Raffals. "On day one, I realized Mayo provided a unique career opportunity. I was impressed by the talent across the division but more impressed by the sense of community. I convinced my husband to uproot and give Rochester three years. That was 10 years ago. I liked how women were treated in the division at Mayo, including the salary system. Everyone in the division made the same amount. I was very aware of salary gaps at other institutions."

Dr. Raffals says her champions, in addition to Dr. Gores, have included **Amy Williams, M.D.** (I '87, NEPH '90), executive dean of Practice; **Vijay Shah, M.D.** (GI '98), chair, Department of Medicine, Mayo Clinic in Rochester, and the Carol M. Gatton Professor of Digestive Diseases Research Honoring Peter Carryer, M.D.; and **Michael J. Brown, M.D.** (ANES '99), chair of the Operations Coordinating Group at Mayo Clinic in Rochester.

Dr. Raffals, in turn, has paid it forward. When asked to present at CME programs, she offers the opportunity to other women in the division when she can't do it herself. "I led an e-board for our IBD interest group and passed the baton to **Dr. Nayantara Coelho-Prabhu** (GI '10). She has taken the conference to a whole new level of success. I'm grateful for those who have sponsored me for opportunities, and hope to always recognize when I can sponsor others for opportunities that will help their careers."



"Mayo's GIH division is huge, and the women in it are among the giants in the field." - Iris Wang, M.D.

SEEKING THE COMPANY OF GIANTS IN THE FIELD

Dr. Iris Wang, who joined the Mayo Clinic staff in 2020, completed her residency at Emory University in Atlanta, Georgia, and didn't think she'd ever leave. "My associate program director and mentor said I needed to interview at Mayo Clinic to get the best GIH fellowship training. He'd had colleagues who'd worked at Mayo and said it has had the best GIH department in the U.S. for 30 years.

"I looked for GIH departments that had women in leadership roles. One program where I interviewed hadn't hired a woman in three years. That was a red flag. They were trying to attract women but couldn't get them because they didn't have many. Mayo Clinic stood out because it was one of few places that had a woman fellowship program director. **Dr. Elizabeth Rajan** (ENDO '98, GI '01, GIEU '02), an advanced endoscopist, was on the Interview Committee, and that stood out to me."

Dr. Wang says she chose Mayo Clinic, in part, for its mentorship and sponsorship by giants in the field, citing her research mentor Dr. Camilleri. "He makes sure I get projects that help my career. When he presents at national meetings, he always provides the name of the mentee who worked with him—it's on the slide—and gives you credit and points you out in the audience.

"Mayo's GIH division is huge, and the women in it are among the giants in the field. **Dr. Jean Fox** (GIMO '01), is an amazing clinician and well regarded for her work with motility patients. Dr. Kane was ACG president and made a huge impact on GIH societies. Dr. Raffals is on a consortium for IBD physicians, is active in writing guidelines and has an international presence. **Dr. Ferga Gleeson** (GIEU '06, GIPN '07) is chair of gastroenterology/hepatology marketing and communications at Mayo, past enterprise chair for GIH's Supply and Technology Committee and current chair of the American Society for Gastrointestinal Endoscopy (ASGE) Women in Endoscopy Committee. Dr. Oxentenko is superwoman and was program director of the GIH fellowship and Internal Medicine residency — one of the largest programs in the country. They're pushing the envelope and writing the guidelines in GIH."

Dr. Wang says the emphasis Mayo places on family support and child care is important to her. "I was five months pregnant when I started my fellowship. When I told the schedulers so they could help plan my maternity leave, they congratulated me and said they'd take care of me — not to worry about anything. That was amazing. I could go to my own doctor appointments without feeling guilty. I had accommodations for breastfeeding when I returned to work. It was important to me to be able to have a family without losing out on the education and research parts of my career.

"We've created a supportive environment – a culture where you can succeed in your work life and have a successful family life." \blacktriangleright

TAKING BABY STEPS IN GIH LEADERSHIP

Amanda M. Johnson, M.D. (I '16, GI '19, GIBD '20), came to Mayo Clinic for residency from Sanford School of Medicine at the University of South Dakota, where she worked closely with Mayo Clinic alum **Tim Ridgway, M.D.** (I '88, GI '91), vice president for Health Affairs and dean, University of South Dakota Sanford School of Medicine, and Dr. Jorge Gilbert, whose mentorship and passion for the field piqued her interest in GIH.

"Then, during my resident interviews, I met with Dr. Oxentenko and other women from the Midwest like me who were accomplished despite not coming from families of physicians," says Dr. Johnson. "I was able to relate to them, and it provided confidence in my ability to pursue similar aspirations."

Dr. Johnson's sponsors and mentors have included the division's **Edward Loftus Jr., M.D.** (GI '95), who she says has been immensely supportive as a clinical and research mentor, consistently advocating for opportunities aligned with her career goals. Dr. Johnson identifies with Dr. Raffals as a powerful professional and personal role model, and says Dr. Kane is another role model who has sponsored her for myriad opportunities.

In addition to taking baby steps in GIH leadership, Dr. Johnson recently had her first child. "It was helpful to see women including Dr. Raffals, Dr. Coelho and others in the division who have families and lives outside of work. I worked hard for and very much enjoy my career but didn't want it to limit my ability to have a family. Drs. Loftus and Raffals were wonderful in planning my leave; figuring out how to complete the last two months of my fellowship, which was interrupted by my due date; and planning my transition to staff. The division as a whole is extremely supportive, and the collegiality is palpable. I feel fortunate that the environment at Mayo Clinic has resulted in my experiencing far fewer barriers than female friends I have at other institutions. A lot of that has to do with having women in GIH leadership roles."



"I feel fortunate that the environment at Mayo Clinic has resulted in my experiencing far fewer barriers than female friends I have at other institutions. A lot of that has to do with having women in GIH leadership roles."

– Amanda M. Johnson, M.D.

PREVIEWING THE FUTURE

Former GIH fellowship program director Dr. Raffals says 2020 was an important year in the evolution of the diversity effort in the division's training program, which often serves as a pipeline to the division's faculty. The fellowship program implemented a proactive recruitment strategy to attract highly sought-after women.

"Because we want the greatest talent of the women who pursue gastroenterology and hepatology, we are making a very deliberate attempt to attract and recruit top women fellowship applicants. In the past, we've sought women, and our success was in line with the national average. But we wanted better. We are very intentional about sharing the experiences and stories of the women on our staff so trainees know this is a welcoming environment where women can thrive. And we are more successful in our recruitment of women. Now, half of our 2020 fellows and more than half of the incoming class are women, which is a step in the right direction to move the needle.

"Diversity makes any team more successful. The more our workforce is representative of our patients, the better we will be at achieving our mission. Having more women represented in GIH helps to ensure we're addressing the needs of our women patients." •

"Diversity makes any team more successful. The more our workforce is representative of our patients, the better we will be at achieving our mission."

– Laura Raffals, M.D.



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'Someone saw something special in me'

J.N.

Like many women of color in medicine, Shannon Coombs (MED '22), a third-year student at Mayo Clinic Alix School of Medicine – Florida campus, has experienced imposter syndrome. "Do I belong here?" And she's been underestimated.

Coombs is Jamaican-American; her parents moved to the U.S. in search of a better life for their children. She was valedictorian of her high school class but was discouraged from applying to Ivy League schools. During college at Howard University in Washington, D.C., she decided to pursue medicine, figuring out the steps needed to apply on her own. After a two-year stint teaching English in South Korea on a Fulbright grant, she was accepted to Mayo Clinic Alix School of Medicine – Arizona campus.

"During the first week of medical school, my classmates talked about STEP scores and research they planned to do, and I felt out of place," says Coombs. "I hadn't looked further than getting into medical school. Everyone seemed to have a playbook for their career in medicine. Many of them already had social networks and social capital to help them figure things out. I was intimidated and lost. It took me a while to commit to running my own race and letting that be enough."

Coombs was assisted in finding her comfort zone by **Alyx Porter Umphrey, M.D.** (I1 '04, N '07, NONC '08), Department of Neurology at Mayo Clinic in Arizona. Dr. Porter Umphrey teaches a medical school course on cultural humility and communication. The two women also interacted when Dr. Porter Umphrey spoke to the Student National Medical Association, which focuses on the needs and concerns of Black medical students and where Coombs is secretary. "I thought Dr. Porter was phenomenal a neuro-oncologist at the top of her field, being authentic and working on her vision," says Coombs. "And she made time for me."

In 2019, Dr. Porter Umphrey and her husband, **Gregory Umphrey, M.D.** (PMR '08), Barrow Brain and Spine in Phoenix, created ElevateMeD, a nonprofit that focuses on elevating medicine to an ideal where the physician workforce racially and ethnically represents the community served. The organization provides scholarship support for medical school, mentorship, leadership development and financial wellness education for underrepresented students. Coombs received one of those scholarships in 2020.

"I knew Shannon already, so I recused myself from voting on her nomination for a scholarship," says Dr. Porter Umphrey. "But it was evident she has a desire to be the very best she can, learn all she can and do all she can."

Scholarship criteria include demonstrating resiliency and leadership in adversity. Coombs describes her family as living paycheck to paycheck due in large part to her brother's struggles with substances and the justice system, and her father's chronic illness. "No matter what happened at home, I had to power through it."

Coombs says she was shocked to be nominated for an ElevateMeD scholarship. "Everyone in my medical school is amazing. I couldn't believe someone saw something special in me."

"Dr. Porter speaks frankly about what it's like to be a woman of color in medicine — how people don't expect much from you and are surprised by your capabilities."

- Shannon Coombs, medical student (left)

After receiving the scholarship, Coombs says she and Dr. Porter Umphrey became closer. Coombs describes it as a big sisterlittle sister relationship. "When I was studying for the STEP1 exam during the pandemic shutdown, Dr. Porter was one of few people to reach out to see if I needed anything.

"She taught me about positive affirmations to help combat imposter syndrome. It's reassuring to know that she feels that way sometimes too. Dr. Porter speaks frankly about what it's like to be a woman of color in medicine — how people don't expect much from you and are surprised by your capabilities."

Dr. Porter Umphrey says she identifies with Coombs' fire and passion and has counseled her on refining her fire and expressing it in a way that can be used for influence. "It's a journey to find your voice and learn how to express it in a way others can hear. Shannon's an incredible person. I'm happy to help her find her way, but she's well on the way to finding it herself. I wouldn't underestimate Shannon."

Confident in using her voice for influence, Coombs led the way in organizing a memorial and reflection vigil for medical students and residents on Mayo's Arizona campus after the murder of George Floyd. Dr. Porter Umphrey (below) spoke at the event. •



On the shoulders of **glants** 'I wouldn't be where I am without his mentorship'

It was the mid-1980s, and they bonded over grits, eggs and sausages. Onye Akwari, M.D. (S '78), Department of Surgery at Duke University in Durham, North Carolina, and Kamal Itani, M.D., a research fellow in Dr. Akwari's lab.

Dr. Akwari took Dr. Itani, who had completed medical school at the American University of Beirut in his native Lebanon, under his wing. Dr. Itani says Dr. Akwari treated him like a younger brother—always looking out for him.

The relationship between the two men started when Dr. Itani wrote to Dr. Akwari, seeking a position as a research fellow.

"I was completing surgical electives at the Massachusetts General Hospital in Boston and considering staying in the U.S.," says Dr. Itani. "A civil war was raging in Lebanon, and I knew there would be no opportunities at home. It wasn't easy for international medical graduates to find training positions in the U.S. I thought it would be smart to secure a research position." •

"He was always there to advise and totally selfless in giving of himself to my education and career."

– Kamal Itani, M.D.





Society of Black Academic Surgeons

In 1987, Onye Akwari, M.D., cofounded the Society for Black Academic Surgeons (SBAS), the first national organization dedicated to Black academic surgeons. At the time, Black surgeons pursuing academic careers had few role models and few opportunities for recruitment and tenure. The group held its first meeting in 1989 at Duke University and started a pipeline for Black surgeons in the U.S. Dr. Akwari was the second president of the SBAS, from 1991 to 1993.

SERENDIPITY

Dr. Itani had completed an elective rotation with Andrew Warshaw, M.D., at Mass General. "He performed pancreas resection using a modified Whipple procedure that involved leaving the pylorus and stomach in place," he says. "Those patients experienced a lot of delay in gastric emptying. I was interested in learning more about this problem and ran across Dr. Akwari's name as a leader in gastrointestinal surgery and physiology. I contacted him along with five others, inquiring about research positions. As luck would have it, Dr. Akwari was the only one who responded. I didn't know him when I wrote to him, but he was looking for a research fellow and was interested in my observations. It was a lucky coincidence."

After a phone call and in-person visit at Duke, Dr. Akwari called Dr. Itani to say he'd arranged for the latter's visa and salary for a two-year fellowship. It was the start of a lifelong relationship. Dr. Akwari died in 2019, his surgical career tragically cut short in 1995 as the result of a stroke. "Dr. Akwari was a pioneer — the first African American faculty member in Duke's Department of Surgery."

– Kamal Itani, M.D.

Until his death, Dr. Akwari stayed informed about Dr. Itani's career and successes and never hesitated to pass along praise.

GO-TO PERSON

"Dr. Akwari was my go-to person," says Dr. Itani. "I called him when I got my first job offer, when I had challenges as a faculty member, when I was offered new positions and when I needed a letter of recommendation. He was always there to advise and totally selfless in giving of himself to my education and career."

Today, Dr. Itani is chief of surgery at the VA Boston Health Care System, a professor of surgery at Boston University School of Medicine, and a faculty member at Harvard University School of Medicine and Brigham and Women's Hospital.

"Dr. Akwari wanted me to grow as an academic surgeon," says Dr. Itani. "Most research mentors met with their fellows once a week or so. I met with Dr. Akwari every day. We had breakfast together before his clinic time. It was a ritual, and he introduced me to grits, eggs and sausage and to many aspects of American culture — how to collaborate and interact with other researchers, colleagues, lab personnel and senior faculty. "Despite the fact that I was a research fellow and had no clinical role, he took the time to train me clinically and asked me to go on rounds with him. He expected me to attend Grand Rounds and other clinical conferences. He taught me how to develop a research idea and write IRB protocols. And he offered me to stay in his lab for a third year, which I happily grabbed."

SIMILAR STRUGGLES

Dr. Itani says he's not sure why Dr. Akwari took such an interest in helping him succeed; the two men never discussed it. Dr. Itani speculates that Dr. Akwari, who had come to the U.S. in 1962 from Nigeria for college and medical school, identified with the difficulties his trainee would have faced training in surgery during Lebanon's civil war. Dr. Akwari was undaunted by Dr. Itani's international medical degree.

When Dr. Akwari studied medicine at the University of Southern California, a civil war in Nigeria destroyed his family's home and businesses. As that war ended, Dr. Akwari started surgical training at Mayo Clinic, initially with **Martin Adson, M.D.** (S '55). Dr. Adson lent Dr. Akwari the funds to replace the roof on his family's home in Nigeria and remained a lifelong friend, serving in Dr. Akwari's wedding to **Anne Micheaux Akwari, M.D.** (I '78). In addition to repaying the loan, Dr. Akwari helped six of his seven siblings emigrate to the U.S. for their education.

"Through my time and many meals with Dr. Akwari, I realized the struggle he went through as an African American surgeon," says Dr. Itani. "Dr. Akwari was a pioneer - the first African American faculty member in Duke's Department of Surgery. During my time there, I don't recall any surgical residents of color. I had the assumption that if you were a professor at Duke University, you had it all and no one could do you harm. I naively felt the same way about myself – that even if I were an international medical graduate, I would be well regarded for my hard work and strong performance. Little did I know that was not always the case. We were going through similar struggles - him because of race and me because I was from another country and a non-U.S. medical school. I had great difficulty matching in surgery residency. If not for my research work and Dr. Akwari's help, I probably wouldn't have made it to a surgical training program.

"Because of my unique relationship with Dr. Akwari, my years at Duke were some of the best of my life. He was a tremendous example of honesty, integrity, calm, generosity, selflessness and so much more. I'm very proud of what I've accomplished in my life but wouldn't be where I am without his mentorship." •

Lasting impressions

Melanie Brown, M.D. (MED '98), Johns Hopkins Children's Center, assistant professor of pediatrics at Johns Hopkins Medicine in Baltimore, Maryland, and a member of the Mayo Clinic Alumni Association Board of Directors, met Onye Akwari, M.D., when she was an electrical engineering undergrad at Duke. "When Dr. Akwari learned I was interested in medicine, he offered to let me shadow him in the OR. In addition to surgical expertise, Dr. Akwari demonstrated great compassion to his patients and young scholars like me. He made an impression on me. After getting my master's degree in systems engineering, I pursued a medical degree at Mayo Clinic. Through the years when we saw each other at conferences, Dr. Akwari always remembered me and remained a supportive presence."



"If not for my research work and Dr. Akwari's help, I probably wouldn't have made it to a surgical training program."

– Kamal Itani, M.D.

Mayo Clinic Distinguished Aumana 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 2020 Mayo Clinic Distinguished Alumni Awards will be presented when in-person gatherings are possible.



SURGEON'S SURGEON & MASTER SURGEON

Miguel Cabanela, M.D. (OR '73), has been an integral part of the history of the Mayo Clinic Department of Orthopedic Surgery. His impeccable career and accomplishments have led to international recognition - for himself and the department. During his practice years, Dr. Cabanela was arguably the most recognized and respected Spanish-speaking orthopedic surgeon and was in constant demand at meetings around the world. He hosted and inspired surgeons from multiple countries as he built a reputation in hip surgery and a practice that attracted patients from many countries. He has been a strong presence in the international community as an educator, including visiting the developing world to teach the practical aspects of surgical techniques. He started an education program for orthopedic surgeons in Vietnam. Dr. Cabanela chaired the International Committee of the American Academy of Orthopaedic Surgeons for six years, and was president of the North American Hip Society and International Hip Society. His international presence has given him recognition as the surgeon's surgeon and a master surgeon. In 1998, Dr. Cabanela co-wrote "Hip Surgery: Material and Development," which became the basis of hip surgery. Dr. Cabanela received the Mayo Clinic Distinguished Clinician Award in 1994. Perhaps his greatest legacy is having trained residents and fellows who are now preeminent orthopedic surgeons.

Miguel Cabanela, M.D.

Emeritus professor of orthopedics Mayo Clinic College of Medicine and Science Rochester, Minnesota

Mayo Clinic in Rochester: Joined staff, 1974; consultant, Department of Orthopedic Surgery, 1974–2010; professor of orthopedics, 1992–present; head, Division of Adult Reconstruction, 1988–1993; chair, Division of Adult Reconstruction, 1993–1999; chair, Doctors Mayo Society, 2002–2010; retired, 2010

Postgraduate: Master's degree, orthopedic surgery, University of Minnesota, Minneapolis

Residency: General surgery, University Hospital of Santiago de Compostela, Spain; orthopedic surgery, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Internship: University Hospital of Santiago de Compostela; Mercy Hospital, Des Moines, Iowa

Medical school: University of Santiago de Compostela Medical School

Undergraduate: University of Santiago de Compostela

Native of: Lugo, Galicia, Spain



PREEMINENT TRANSLATIONAL INVESTIGATOR IN CARDIOVASCULAR MEDICINE & VASCULAR BIOLOGY

John Cooke, M.D., Ph.D. (I '82, CV '84, PHYS '85, CV '87), is an international leader in vascular medicine and biology who has left an indelible mark on the field. He has a distinguished record of generating fundamental insights in endothelial cell biology and vascular diseases and translating these novel insights toward transformative therapies. Dr. Cooke was propelled into the steep trajectory of his career by his training at Mayo Clinic, which served as the foundation for his stellar accomplishments. After training, Dr. Cooke began a program of independent investigation in endothelial cell biology that had great impact on the field. He co-founded the Society for Vascular Medicine and served in roles including president, co-founded the journal Vascular Medicine and helped organize the American Board of Vascular Medicine. He went from Brigham and Women's Hospital and Harvard to Stanford, where he started a program in vascular medicine and biology. After 20 years at Stanford, he went to the Houston Methodist Research Institute. He was the first to document that asymmetric dimethylarginine was a mediator of endothelial vasodilator dysfunction associated with cardiovascular risk factors. He investigated the mechanisms by which tobacco accelerates vascular disease, making the paradoxical discovery that nicotine enhances angiogenesis. He has expertise in the generation and characterization of induced pluripotent stem cells (iPSCs) and has developed methods to differentiate iPSCs and embryonic stem cells into endothelial cells. Dr. Cooke has 30 patents, founded four biotechnology companies and was named Stanford's Inventor of the Year in 2015.

John Cooke, M.D., Ph.D.

Director, Center for Cardiovascular Regeneration Chair, Department of Cardiovascular Sciences Houston Methodist Research Institute

Houston, Texas

Postgraduate: Ph.D., physiology, Mayo Clinic Graduate School of Biomedical Sciences, Rochester, Minnesota

Fellowship: Cardiovascular medicine and research, Mayo Clinic School of Graduate Medical Education

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

Medical school: Wayne State University, Detroit, Michigan

Undergraduate: Cornell University, Ithaca, New York

Native of: Eastpointe, Michigan



LEADER, PIONEER & STATESMAN FOR INTERVENTIONAL CARDIOLOGY

David Holmes Jr., M.D. (1 '74, CV '76), has made enormous and sustained contributions to interventional cardiology as a gifted clinician, educator, innovator, scholar with a remarkable record of productivity, and widely recognized and admired ambassador for Mayo Clinic. He was director of pacing and electrophysiology at Mayo Clinic during the early days when there was robust growth in science and practice of those disciplines. He was responsible for major changes in clinical practice as permanent pacemaker implantation evolved from the cardiothoracic surgical operating room to a procedure performed by invasive cardiologists in the catheterization laboratory. He co-developed surgical approaches and electrophysiologic mapping techniques for supraventricular arrhythmias - an area in which Mayo became a world leader and attracted international visiting physicians. He published the initial work on radiation safety and developed a means to decrease radiation exposure - a technique that is standard throughout the industry. His reputation for successful outcomes in the most complex settings of percutaneous coronary intervention is world-renowned. He has trained two generations of interventional cardiologists who have gone on to stellar careers. Dr. Holmes has multiple patents and is the named inventor of the Watchman Left Atrial Appendage Occluder device. His contributions to scientific literature are remarkable and place him among the world's outstanding clinical scientists. Dr. Holmes is past president of the American College of Cardiology and Society for Cardiac Angiography and Interventions. The former has been a capstone of his career, giving him the opportunity to impact the largest professional group of cardiologists.

David Holmes Jr., M.D.

Department of Cardiovascular Medicine Edward W. and Betty Knight Scripps Professor in Honor of Dr. George M. Gura, Jr., M.D. Mayo Clinic Rochester, Minnesota

Mayo Clinic in Rochester: Joined staff, 1976; consultant, Department of Cardiovascular Medicine, 1978– present; director, Electrophysiology and Pacing, 1981–1985; director, Cardiac Catheterization Laboratory, 1984–2003; professor of medicine, 1987–present

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

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

Internship: Virginia Mason Hospital, Seattle, Washington

Medical school: Medical College of Wisconsin, Milwaukee

Undergraduate: Princeton University, Princeton, New Jersey

Native of: Oak Park, Illinois



ONE OF MOST RECOGNIZED NAMES IN NEUROLOGIC SURGERY IN LAST CENTURY

Edward Laws Jr., M.D. (NS '72), has achieved one of the most remarkable neurosurgical careers ever. He is the undisputed international leader in the treatment and management of pituitary and other sellar and suprasellar tumors. His papers, ideas and thoughts on these diseases emerged as the gold standard for trainees and practitioners over the last several decades. His time at Mayo Clinic is often considered the golden age of neurosurgery, and his contributions helped establish Mayo Clinic as one of the world's leading pituitary centers. Dr. Laws joined the medical staff at Mayo Clinic after neurosurgery residency, achieved full professorship within nine years and was the Joseph I. and Barbara Ashkins Professor of Surgery. By the middle of his 15-year tenure at Mayo, he was already the world's pituitary surgery expert. Dr. Laws left Mayo Clinic to become chair of neurosurgery at George Washington University. From there he went to the University of Virginia, where he developed a multidisciplinary pituitary center, and then to Stanford University to serve as chair of neurosurgery before joining Brigham and Women's Hospital. Dr. Laws has operated on more than 8,000 brain tumors, including 6,000 pituitary tumors. He has sustained a feat no other neurosurgeon has achieved - president of all three major neurosurgical organizations. He has been president of the Congress of Neurological Surgeons, American Association of Neurological Surgeons, World Federation of Neurological Societies, American College of Surgeons, and Pituitary Society. He was editor-in-chief of Neurosurgery. Dr. Laws has influenced physicians and scientists all over the world.

Edward Laws Jr., M.D.

Professor of neurosurgery Harvard Medical School Brigham and Women's Hospital Boston, Massachusetts

Residency: Neurologic surgery, Johns Hopkins School of Medicine, Baltimore, Maryland

Internship: Surgery, Johns Hopkins School of Medicine

Medical school: Johns Hopkins School of Medicine

Undergraduate: Princeton University, Princeton, New Jersey

Native of: New York, New York



SERVANT LEADER IN DIABETES CLINICAL RESEARCH & DIABETES COMMUNITY

Robert Rizza, M.D. (ENDO '80), has been an outstanding ambassador for Mayo Clinic in national roles including president of the American Diabetes Association (ADA). His research has directly affected patients with diabetes who use multiple daily injections of insulin. The insight of combining long-acting basal insulin with short-acting bolus insulin prior to meals arose directly from his work at Mayo Clinic. Because of this, he received the highest award of the ADA in 2010 - the Banting Award for outstanding achievement in diabetes research. Dr. Rizza's engagement in committees of the ADA, American Association of Clinical Endocrinologists and Endocrine Society brought about important practice guidelines that affected the delivery of care throughout the country. Through his involvement in diabetes organizations, the National Institutes of Health, the European Association for the Study of Diabetes and leading journals, he promoted consensus statements, cooperation in research and the implementation of research findings in optimal practice. Dr. Rizza did all of this for the common goal of improving public health. He has nurtured the careers of established investigators in the endocrine world – many who emulate the Rizza model through active engagement in clinical practice and research. Dr. Rizza's many awards include Mayo Clinic Distinguished Investigator in 1997, Merit Award from the National Institute of Diabetes and Digestive and Kidney Diseases in 1996, and Yank D. Coble Distinguished Service to Endocrinology Award from the American College of Endocrinology in 2001.

Robert Rizza, M.D.

Emeritus professor of medicine Mayo Clinic College of Medicine and Science Rochester, Minnesota

Mayo Clinic in Rochester: Joined staff, 1980; consultant, Division of Endocrinology, Diabetes, Metabolism, and Nutrition, 1980–2017; professor of medicine, 1987–present; director, Endocrinology Fellowship Program, 1987–1989; director, Endocrine Research Unit, 1988–1992; division chair, 1992– 2002; co-director, Robert and Arlene Kogod Program on Aging, 2003–2005; Earl & Annette McDonough Professor, 2003–2011; executive dean for Research, 2005–2013; principal investigator Mayo Clinic Center for Translational Science Activities, 2006–2011; retired, 2017

Fellowship: Clinical endocrinology and research, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Residency: Medicine, Johns Hopkins School of Medicine, Baltimore, Maryland

Internship: Medicine, Johns Hopkins School of Medicine

Medical school: University of Florida College of Medicine, Gainesville

Undergraduate: Johns Hopkins University

Native of: Baltimore, Maryland



ONE OF MOST PROMINENT GASTROENTEROLOGISTS & INFLUENTIAL RESEARCHERS IN THE WORLD

Nicholas Talley, M.D., Ph.D. (GI '89), has had a meteoric rise in academic medicine, is a foremost leader in neurogastroenterology and functional gastrointestinal diseases, and is one of the most influential clinical researchers in the world. He began to reshape gastroenterology research while at Mayo Clinic, applying an epidemiological approach to common GI diseases long before anyone else. He performed pioneering treatment trials, established a new phenotype of dyspepsia, and led the development of consensus criteria for the diagnosis of functional GI disorders and development of novel avenues of research into the pathobiology of functional dyspepsia. His impact on dyspepsia and functional GI disorders cannot be overestimated, and he has written or co-written almost all of the important practice guidelines on these topics. After a research fellowship at Mayo Clinic, Dr. Talley served as chair of the Department of Internal Medicine at Mayo Clinic in Florida and remained on staff until 2010, when he was recruited to the University of Newcastle. His more recent focus has been on establishing a new phenotype of dyspepsia marked by duodenal eosinophilia. The idea of treating this eosinophilia as an endpoint of therapy is innovative and of potentially great importance. In 2017, Dr. Talley was named Australia's most cited academic by Google Scholar. Dr. Talley has transformed the University of Newcastle into a powerhouse, increasing research funding by \$80 million. He was elected president of the Royal Australasian College of Physicians and chair of the Council of Presidents of Medical Colleges. On Australia Day 2018, Dr. Talley was honored with the Companion of the Order of Australia.

Nicholas Talley, M.D., Ph.D.

Pro vice-chancellor, Global Research University of Newcastle, Callaghan Callaghan, Australia

Residency: Prince of Wales Hospital, Sydney, Australia; gastroenterology, Royal North Shore Hospital, Sydney, Australia

Postgraduate: Master of Medical Science, Clinical Epidemiology, University of Newcastle, Australia

Medical school: University of New South Wales, Sydney, Australia

Fellowship: Gastroenterology and research, Mayo Clinic School of Graduate Medical Education, Rochester, Minnesota

Doctorate: Ph.D., University of Sydney, Australia

Undergraduate: University of New South Wales

Native of: Australia

Alumni Awayo Clinic Distinguished Aumni Award

2019

S. Ann Colbourne, M.D. (I '93, ADGM '94) Edmonton, Alberta, Canada

Timothy O'Brien, M.D., Ph.D. (ENDO '93) Galway, Ireland

Franklyn Prendergast, M.D., Ph.D. (BIOC '77) Broomfield, Colorado

Patricia Simmons, M.D. (PD '80, PDE '82) Lakewood, Washington

Joseph Szurszewski, Ph.D. (PHYS '73) Rochester, Minnesota

Enrique Wolpert, M.D. (Gl '69) Mexico City, Mexico

2018

Robert Avant, M.D. (FM '77) Bonita Springs, Florida

C. Terrence Dolan, M.D. (M '68, PATH '68) Tulsa, Oklahoma

Judith Kaur, M.D. (ONCL '94) Jacksonville, Florida

Vanda Lennon, M.D., Ph.D. (N '78) Rochester, Minnesota

Chung Owyang, M.D. (GI '78) Ann Arbor, Michigan

2017

Stephen Challacombe, Ph.D. (IMM '79) London, England

Donald Greydanus, M.D. (S '74, PD '76) Kalamazoo, Michigan

Robert Nirschl, M.D. (OR '63) Arlington, Virginia

Thomas Spelsberg, Ph.D. (BIOC '73) Waunakee, Wisconsin

Robert Waller, M.D. (I '67, OPH '70) Memphis, Tennessee

2016

Kai-Nan An, Ph.D. (BIOM '75) Rochester, Minnesota

Albert Czaja, M.D. (GI '77) Rochester, Minnesota

James Eisenach, M.D. (ANES '85) Winston-Salem, North Carolina

David Feliciano, M.D. (S '78) Indianapolis, Indiana

2015

C. Garrison Fathman, M.D. (IMM '77) Stanford, California

Bernard Gersh, M.B., Ch.B., D.Phil. (CV '79) Rochester, Minnesota

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

Kristina Rother, M.D. (PD '88, PDE '94) Bethesda, Maryland The award has been given since 1981. Visit alumniassociation.mayo.edu for names of other recipients.

Gift from Carl Soderstrom, M.D., will support alumni International Meetings

Carl Soderstrom, M.D. (I '70, DERM '72), made an endowed gift to support the Alumni Center's International Meetings through the Dr. Carl and Crystal Soderstrom Fund for Mayo Clinic Global Initiatives. Specifically, the \$10,000 biennial gift will facilitate programming focused on global initiatives to keep Mayo Clinic's international strategy at the forefront with alumni.

"With Mayo Clinic International, Mayo Clinic has a vision beyond anything I've heard of," says Dr. Soderstrom. "If I had my wildest wish come true, I'd have more years to see what happens with Mayo's international efforts in the next 100 years. Since that's not possible, all I can do is give my support, encouragement and philanthropy to be part of it."

Dr. Soderstrom says he hopes his gift will help bring together external alumni, Mayo Clinic staff, residents and fellows in support of Mayo's global expansion. "Mayo Clinic's international plans are very exciting. I wanted to be part of supporting the best of the best in health care — Mayo being the premier global system for health care teaching, research and practice around the world.

"When I was a resident, I started a trust fund that I could donate to all my life for Mayo, and I have. I'm proud of Mayo Clinic and the people who manage it and make it run — proud of their bold visions. To have a part in that — to play a small role as a cheerleader and participant — what a wonderful opportunity."

Dr. Soderstrom completed residency in internal medicine and fellowship in dermatology at Mayo Clinic, and worked on policies that benefited residents, fellows and their families. He served two terms as president of the Mayo Fellows' Association and was a charter member of the Doctors Mayo Society and O'Leary Society. In 2014, he and his wife funded the Carl W. Soderstrom, M.D., and Crystal D. Soderstrom Seminar Room in the Department of Dermatology on Mayo's Rochester campus to provide a space for trainee and staff education. Dr. Soderstrom has a multispecialty dermatology practice based in Peoria, Illinois, with nine locations in Illinois and Iowa.

> Carl Soderstrom, M.D., and Crystal Soderstrom



Mayo Clinic Update

Mayo Clinic awards named professorships

Mayo Clinic awarded named professorships - the highest academic distinction at Mayo Clinic.

Matthew Abdel, M.D. (OR '12) Andrew A. and Mary S. Sugg Professor of Orthopedic Research Chair, Division of Orthopedic Surgery Research Department of Orthopedic Surgery* Mayo Clinic in Rochester

Samuel Asirvatham, M.D. (CVEP '00) James M. and Lee S. Vann Professor of Cardiovascular Diseases Division of Heart Rhythm Services Department of Cardiovascular Medicine* Mayo Clinic in Rochester

Sophie Bakri, M.D. (OPH '05) Whitney and Betty MacMillan Professor of Ophthalmology in Honor of Robert R. Waller, M.D. Chair, Department of Ophthalmology Mayo Clinic in Rochester

Michael Fautsch, Ph.D. (MBIO '92) Joseph E. and Rose Marie Green Professor of Visual Sciences Department of Ophthalmology Mayo Clinic in Rochester

Matthew Goetz, M.D. (HEMO '03) Erivan K. Haub Family Professor of Cancer Research Honoring Richard F. Emslander, M.D. Division of Medical Oncology Department of Oncology Mayo Clinic in Rochester

John Halamka, M.D. (I '20) Michael D. Brennan, M.D., President's Strategic Initiative Professor President, Mayo Clinic Platform Mayo Clinic in Rochester

Haojie Huang, Ph.D. (BMB '97)

Gordon H. and Violet Bartels Professor of Cellular Biology Department of Biochemistry and Molecular Biology* Mayo Clinic in Rochester

Aminah Jatoi, M.D. (ONCL '98) Betty J. Foust, M.D., and Parents' Professor Division of Medical Oncology Department of Oncology Mayo Clinic in Rochester

Keith Josephs, M.D. (TY '98, N '01, MD '02, CTSA '08) Ani Professor of Alzheimer's Disease Research Division of Movement Disorders Department of Neurology Mayo Clinic in Rochester

Kejal Kantarci, M.D. (RD '04, CTSA '09) Katherine B. Andersen Professor Division of Neuroradiology Department of Radiology Mayo Clinic in Rochester

Keith Knutson, Ph.D. (IMM '05) Andrew A. and Mary S. Sugg Professor of Cancer Research Department of Immunology* Mayo Clinic in Florida

Shaji Kumar, M.D. (I '99, HEMO '03) Mark and Judy Mullins Professor of Hematologic Malignancies Division of Hematology Department of Medicine Mayo Clinic in Rochester

Giuseppe Lanzino, M.D. (NS '08)

Joseph I. and Barbara Ashkins Professor of Surgery Department of Neurologic Surgery* Mayo Clinic in Rochester

Tushar Patel, M.B., Ch.B. (I '93, GI '96)

Alfred D. and Audrey M. Petersen Professor of Cancer Research at Mayo Clinic Jacksonville Dean of Research Division of Transplant Medicine Department of Transplantation* Mayo Clinic in Florida

Lisa Rimsza, M.D. (HEMP '15) Getz Family Research Professor in Mayo Clinic Arizona Division of Hematopathology Department of Laboratory Medicine and Pathology Mayo Clinic in Arizona

Steven Schild, M.D. (I '86, RADO '89) David F. and Margaret T. Grohne Professor of Novel Therapeutics for Cancer Research Department of Radiation Oncology Mayo Clinic in Arizona

Kristin Swanson, Ph.D. (NS '15) Vasek and Anna Maria Polak Professor of Cancer Research Department of Neurologic Surgery* Mayo Clinic in Arizona

Ayalew Tefferi, M.D. (HEM '89) Barbara Woodward Lips Professor Division of Hematology Department of Medicine Mayo Clinic in Rochester

*Primary appointment; joint appointments not listed

Mayo Clinic names Investigators of the Year for Florida & Arizona

Alan Fields, Ph.D. (CBS '03), Department of Cancer Biology and the Monica Flynn Jacoby Professor of Cancer Research at Mayo Clinic, was named Mayo Clinic's Florida Investigator of the Year. Lisa Rimsza, M.D. (HEMP '15), Division of Hematopathology in the Department of Laboratory Medicine and Pathology and the Getz Family Research Professor, was named Mayo Clinic's Arizona Investigator of the Year. These awards honor researchers at Mayo's Southern sites who have made significant advances that have strongly influenced their fields of research.

Dr. Fields is a cancer biologist and world-renowned scientist who leads a laboratory that develops and studies the molecular and genetic mechanisms that drive lung tumor formation to identify new targets for cancer therapy. His research has received continuous National Cancer Institute grant funding for more than 25 years. His research program focuses on the signaling pathways key to tumors of the lung and, more recently, of the ovaries, pancreas and brain. He and his colleagues were the first to discover the connection between a cancer-causing gene called protein kinase C iota (PKCiota) and the initiation, promotion and spread of lung cancers.





Alan Fields, Ph.D.

Lisa Rimsza, M.D.

Dr. Rimsza is the founder and director of Mayo Clinic's Molecular Diagnostic Laboratory in Arizona. She has transformed lymphoma care through her research for more than 20 years. Her research focuses on clinical assay development in B-cell non-Hodgkin's lymphoma, HIV-related lymphomas, and immune evasion and oncogene dysregulation in lymphomas.

Research finds potential target to control rare genetic disease

Patients who have familial adenomatous polyposis (FAP), a rare genetic disease that typically starts in adolescence, often face debilitating challenges. FAP is characterized by hundreds to thousands of tiny polyps in the colon and rectum. Patients have an almost 100% likelihood of getting colon cancer unless they have lifealtering surgery to remove the entire colon.

A Mayo Clinic study shows that patients with the most severe FAP may benefit from a novel combination therapy — eflornithine and sulindac. The investigation is the largest international phase 3 FAP trial to date involving pharmaco-prevention.

In the trial, the overall incidence of disease progression wasn't lowered, but the combination drug therapy reduced disease progression in pre-colectomy patients by 70–80% compared to either drug alone. None of the patients treated with the combination therapy needed colon surgery during the four-year trial.

Niloy "Jewel" Samadder, M.D. (GIAE '11), Division of Gastroenterology and Hepatology at Mayo Clinic in Arizona and author of the study, says the combination of the two drugs is key to mitigating disease progress in the most severe FAP cases. "When we looked at the 37 highest risk patients, who were placed in the trial before needing colon surgery, we saw a significant benefit. We now need a full trial looking just at pre-colectomy patients to see if this combination drug can work."

The study was part of Mayo Clinic's commitment to researching rare genetic cancers.



Mayo Clinic contributes to diagnostic, therapeutic advance for rare neurodegenerative disorder

Mayo Clinic researchers, along with national and global collaborators, have developed a potential test for Machado-Joseph disease, or spinocerebellar ataxia type 3 (SCA3) — a disease that has no cure. They also clarified the role of a gene target associated with the disease.

SCA3 is defined by the characteristic accumulation of a mutant protein: polyQ ataxin-3. Researchers think this protein bunches up inside the cell and causes toxicity by interfering with cell actions.

"We developed an immunoassay that can quantify the amount of mutant protein in human biofluids," says **Mercedes Prudencio, Ph.D.** (NSCI '12), Division of Molecular Neuroscience at Mayo Clinic in Florida and first author of the study. "We can use the test to determine the effectiveness of new therapies aimed at decreasing the amount of mutant protein." The researchers also clarified that a genetic alteration previously identified and linked to SCA3 was strongly associated with the mutant ATXN3 gene among study samples — offering an opportunity to develop therapies that attack it.

Historically, SCA3 was more common in people from the Azores and Portugal. However, cases have been found across Europe, Asia and the Americas. The study cohort included samples from around the globe, including Japan, Mexico, the Netherlands, Norway, Portugal, Sweden and the U.S. Mayo Clinic researchers plan to follow patients with SCA3 through the Mayo Clinic Ataxia Program.

Ionic liquid formulation delivers chemotherapy to tumors & destroys cancer cells

A team from Mayo Clinic, in collaboration with a researcher at Harvard University, has developed a new ionic liquid formulation that killed cancer cells and facilitated uniform distribution of a chemotherapy drug into liver tumors and other solid tumors in the lab.

Rahmi Oklu, M.D., Ph.D. (RD '15), Division of Interventional Radiology at Mayo Clinic in Arizona, director of the Mayo Clinic Minimally Invasive Therapeutics Laboratory and the study's author, says uniform drug delivery to tumors is often riddled with challenges. "If the drug cannot penetrate the tumor and remain there, then it cannot do its job."

The ionic liquid was used to deliver drugs into tumors through an ultrasound-guided needle injection. Once the ionic liquid was injected, researchers say it deposited the chemotherapy drugs uniformly, killing the cancer cells as the liquid engulfed the tumors. The researchers report this approach was successful in preclinical studies using freshly resected human tumors in the lab and liver tumors in animal models. The chemotherapy remained in the targeted zone for the length of the 28-day trial.

The ionic liquid, which the authors call a locally active agent for tumor treatment and eradication (LATTE), encouraged immune cell infiltration in the microenvironment of the tumor, which may play a role in achieving immunotherapy in solid tumors. "Ionic liquids are an exceptionally versatile group of materials," says Dr. Oklu. "We have already demonstrated that they are able to overcome biological barriers for delivering drugs. In this study, we demonstrate a novel application to deliver chemotherapeutic drugs in the liver tumor."



Proton therapy induces biologic response to attack treatment-resistant cancers



Robert Mutter, M.D.

Mayo Clinic researchers have developed a novel proton therapy technique to more specifically target cancer cells that resist other forms of treatment. The technique is called LEAP, an acronym for biologically enhanced particle therapy.

"The human body receives tens of thousands of DNA lesions per day from internal and external sources," says **Robert Mutter, M.D.** (RADO '12), Department of Radiation Oncology, Mayo Clinic in Rochester and co-principal investigator of the study. "Cells have evolved complex pathways to efficiently repair damaged DNA. Defects in these repair pathways can lead to the development of diseases, including cancer. "Defects in the ATM-BRCA1-BRCA2 DNA repair pathway are commonly observed in cancer. Breast and ovarian cancer mutations in BRCA1 and BRCA2 repair genes are the most common cause."

Dr. Mutter, along with co-principal investigator **Zhenkun Lou, Ph.D.** (PHAR '01, ONCL '06), Division of Medical Oncology, and colleagues studied a novel method of delivering proton therapy to target tumors with inherent defects in the ATM-BRCA1-BRCA2 DNA repair pathway.

"We compared the effects of delivering the same amount of energy or dose into cancer cells using a dense energy deposition pattern with LEAP versus spreading out the same energy more diffusely, which is typical of conventional photon and proton therapy," says Dr. Mutter. "Surprisingly, we discovered that cancers with inherent defects in the ATM-BRCA1-BRCA2 pathway are exquisitely sensitive to a new concentrated proton technique."

Dr. Lou says surrounding normal tissues were spared, and their full complement of DNA repair elements remained intact. "We also found that we could rewire the DNA repair machinery pharmacologically by co-administration of an ATM inhibitor, a regulator of the body's response to DNA damage, to make repair-proficient cells exquisitely sensitive to LEAP."

Dr. Mutter says LEAP is a paradigm shift in treatment. "Newly discovered biologic responses, induced when proton energy deposition is concentrated in cancer cells using novel radiation planning techniques, may enable the personalization of radiotherapy based on a patient's tumor biology."

Dr. Mutter and the radiation oncology team at Mayo Clinic are developing clinical trials to test the safety and efficacy of LEAP in multiple tumor types.



Zhenkun Lou, Ph.D.

Mayo Clinic names leaders for international practice

Stacey Rizza, M.D. (MED '95, I '98, INFD '01), Division of Infectious Diseases at Mayo Clinic in Rochester, was named executive medical director, Clinical Practice, Mayo Clinic International. She will collaborate with physician and administrative leaders across all locations and shields to ensure the international practice is safe, effective and innovative, and that it advances institutional and international strategies.

Jorge Pascual, M.D. (I '94), Division of Pulmonary and Critical Care Medicine at Mayo Clinic in Florida, was named associate medical director, Clinical Practice, Mayo Clinic International. He will share responsibilities for the international clinical practice.

Gurpreet Sandhu, M.D., Ph.D. (MBIO '92, BIOC '94, CV '03, CVIC '04), chair, Division of Interventional Cardiology at Mayo Clinic in Rochester, was named medical director for the European region of Mayo Clinic International. Dr. Sandhu will lead all efforts for the region, including Mayo Clinic Healthcare in London.

Samuel Asirvatham, M.D., inducted in National Academy of Inventors

Samuel Asirvatham, M.D. (CVEP '00), Division of Heart Rhythm Services, Department of Cardiovascular Medicine at Mayo Clinic in Rochester, was inducted as a fellow into the National Academy of Inventors, the highest professional distinction accorded solely to academic inventors. Dr. Asirvatham has joint appointments in Pediatric Cardiology, Physiology and Biomedical Engineering, and Anatomy.

National Academy of Inventors fellows embody a spirit of innovation, and create or facilitate outstanding inventions that have had tangible effects on quality of life, economic development and the welfare of society.

Dr. Asirvatham has produced 212 invention disclosures, filed 203 patents, issued 59 patents, and licensed or optioned 40

technologies that have improved people's health. He has deep expertise in catheter navigation and electrical systems that affect the heart, and keen interest in neuroelectrophysiology. He brought together a team of engineers, neurologists and electrophysiologist imagers to develop a catheter-based navigation system to locally treat brain tissues causing seizures.

Three Mayo Clinic physicians have previously been inducted as fellows in the National Academy of Inventors: the late **David Ahlquist, M.D.** (MED '77, I '80, GI '83), Division of Gastroenterology and Hepatology, 2019; **Richard Ehman, M.D.** (RD '85), the Blanche R. and Richard J. Erlanger Professor of Medical Research, 2016; and **Michael Yaszemski, M.D., Ph.D.** (OR '96), the John and Posey Krehbiel Professor of Orthopedics Honoring Bernard F. Morrey, M.D., 2014.

Research shows removal of senescent cells improves cognitive function during aging

Mayo Clinic research findings indicate that removal of senescent cells in aging mice improves cognitive ability in animals that show signs of dementia.

Senescent cells are those that have ignored the order to expire and exist in a suspended state. They're powerful enough to avoid the body's signal to die but aren't powerful enough to keep dividing. Instead, they linger, spewing out toxic chemicals. The cells and their toxic chemicals often are grouped together as senescence.

Physical states such as chronic inflammation are linked to human cognitive decline. But recent studies also have examined the link between cognitive impairment and senescence.

Diana Jurk, Ph.D., Department of Physiology and Biomedical Engineering at Mayo Clinic in Rochester and the Mayo Clinic Robert and Arlene Kogod Center on Aging, and her colleagues used pharmacogenomics and pharmacologic approaches to explore whether cognitive decline can be reversed. While senescent cells have been previously identified in the brain, it is still unknown which cell types in the brain become senescent during aging. Using single-cell RNA sequencing, which provides gene expression information from thousands of cells, Dr. Jurk and her team identified that during aging, senescence is more pronounced in microglia and oligodentrocyte progenitor cells.

The team then aged genetically modified mice and used two senolytic methods to clear senescent cells. Both methods significantly improved cognitive function in the mice.

This finding in mice provides a proof of concept for studies on senescent cell removal as a potential therapy for age-related cognitive impairment in patients. Dr. Jurk's finding reinforces a 2018 paper in the journal Nature by Mayo Clinic authors, which showed that clearance of senescent cells improved cognitive decline in a mouse model of Alzheimer's disease, as well as previous work by Dr. Jurk and colleagues on senescent cells and anxiety.

Distinguished Mayo Clinic Investigators named

The 2020 Distinguished Mayo Clinic Investigator Award recipients are **Evanthia Galanis, M.D.** (I '94, HEMO '98), Division of Medical Oncology, Department of Molecular Medicine at Mayo Clinic in Rochester and the Sandra J. Schulze Professor of Novel Therapeutics; and **Cynthia McCollough, Ph.D.** (RD '91), Department of Radiology at Mayo Clinic in Rochester and the Brooks-Hollern Professor of Medical Physics and Biomedical Engineering.

The Distinguished Mayo Clinic Investigator Award is presented to individuals whose research career demonstrates evidence of great distinction, high distinguished scholarship, creative achievement, and excellence in education and administrative responsibilities.

Dr. Galanis is an internationally recognized expert in the fields of oncolytic virotherapy and brain tumor research. She is chair of the Neuro-Oncology Committee of the Alliance for Clinical Trials in Oncology, co-chair of the National Cancer Institute's Glioblastoma Working Group and the U.S. lead for Rare Brain Tumors as part of the International Rare Cancer Initiative. Her laboratory focuses on developing and optimizing novel virotherapy approaches for cancer treatment.





Evanthia Galanis, M.D.

Cynthia McCollough, Ph.D.

Dr. McCollough is a renowned expert in imaging technology who has led significant advancements in the use of computed tomography to understand, treat and prevent disease. She is chair of the board and past president of the American Association of Physicists in Medicine and the 2019 Distinguished Investigator of the Academy for Radiology & Biomedical Imaging Research.

Seven receive Mayo Clinic Distinguished Educator Award

Seven Mayo Clinic faculty members received the 2020 Distinguished Educator Award from the Mayo Clinic College of Medicine and Science.

The Distinguished Educator Award recognizes Mayo Clinic faculty who have significantly contributed to excellence in education throughout their career; demonstrated leadership and professionalism in education, education research or administration; been recognized or honored by students or faculty; shown a commitment to diversity; created new ways of teaching or applied innovative techniques that foster the educational process; contributed to the body of knowledge and methodology in medical education; and actively mentored junior faculty in education.

MAYO CLINIC IN ARIZONA

Michael Hinni, M.D. (ENT '93), chair, Department of Otolaryngology-Head & Neck Surgery/Audiology

MAYO CLINIC IN FLORIDA J. Mark McKinney, M.D. (RD '93), chair, Department of Radiology

Pamela McLean, Ph.D. (NSCI '12), Department of Neuroscience

MAYO CLINIC IN ROCHESTER

Kenneth Olivier, M.D. (RADO '02), Department of Radiation Oncology

Jay Ryu, M.D. (I '82, THD '85), the Dr. David E. and Bette H. Dines Professor of Pulmonary and Critical Care Medicine

Kris G. Thomas, M.D. (MED '95, I '98, CMR '99), Division of Community Internal Medicine

Colin West, M.D., Ph.D. (I '03, CMR '04), Division of General Internal Medicine

Claudia Lucchinetti, M.D., named dean, Clinical and Translational Science, Mayo Clinic

Claudia Lucchinetti, M.D. (N '94, NIMM '95), chair, Mayo Clinic Department of Neurology, was named dean for Clinical and Translational Science and director of the Mayo Clinic Center for Clinical and Translational Science. Dr. Lucchinetti is the Eugene and Marcia Applebaum Professor of Neurosciences.

In 2006, Mayo Clinic was one of the first 12 institutions to receive awards under the National Institutes of Health Clinical and Translational Science Award program. The award is designed to fund resources and educational programs for advancing clinical research. It is the largest research grant for one of Mayo Clinic's centers, totaling more than \$50 million over five years.





Vijay Shah, M.D., is chair, Department of Medicine, Mayo Clinic in Rochester

Vijay Shah, M.D. (GI '98), is chair, Department of Medicine at Mayo Clinic in Rochester. Dr. Shah has been a member of the Mayo Clinic staff since 2000 in the Division of Gastroenterology and Hepatology. Dr. Shah succeeds **Amy W. Williams, M.D.** (I '87, NEPH '90), who served as chair of the Department of Medicine until her appointment as executive dean for Practice, Mayo Clinic, in 2019.

Dr. Shah is the Carol M. Gatton Professor of Digestive Diseases Research, Honoring Peter Carryer, M.D.

Louis Maher III, Ph.D., receives Mayo Clinic Graduate School of Biomedical Sciences Outstanding Mentor Award

Louis (Jim) Maher III, Ph.D. (BIOC '95), Department of Biochemistry and Molecular Biology at Mayo Clinic in Rochester and the Bernard Pollack Professor, received the inaugural Mayo Clinic Graduate School of Biomedical Sciences Outstanding Mentor Award. The award was established in collaboration with the Graduate Student Association to recognize effective mentors of predoctoral students in STEM.



Visit alumniassociation.mayo.edu for more Mayo Clinic news.

Obituaries

Johannes "Hans" Aas. M.D. (I '72), died Aug. 5, 2019.

Charles Allen, M.D. (I '62), died Jan. 19, 2019.

Frederick Behling, M.D. (OR '56), died July 10, 2013.

John Buckley, M.D. (OR '72, MVS '92), died May 17, 2020.

Timothy Burke, Ph.D. (IMM '74), died Nov. 5, 2020.

Walter Byerly, M.D. (ANES '63), died July 18, 2020.

Lynn Christianson, M.D. (ANES '82), died Dec. 7, 2020.

Otis "Ky" Dewan Jr., D.M.D. (OMS '63), died July 4, 2020.

Ivan Fras, M.D. (P'65, CAP'66), died June 26, 2020.

J. Marshall Garrett, M.D. (1'63), died June 5, 2020.

Jack Grabow, M.D. (I '60, N '64), died Feb. 27, 2020.

Jerome Hanson, M.D. (PLS '70), died April 28, 2020.

Fred Havens Jr., M.D. (1'53), died May 1, 2020.

James Henry, M.D. (U '66), died Jan. 9, 2021.

Richard Hill, M.D. (1 '58), died March 24, 2021.

James Hoehn, M.D. (S '69, PLS '71), died Dec. 24, 2020.

Daniel Hurwich, M.D. (GI '93), died Feb. 23, 2016.

Bruce Hyde, M.D. (PD '70), died Nov. 28, 2019.

Robert Inlow, M.D. (S '63), died Feb. 16, 2021.

Debora Kim, M.D. (MED '89, CP '92, TMED '93), died Aug. 23, 2016.

Leonard Levitan, M.D. (RD '63), died Nov. 4, 2020.

Jean Neemeh, M.D. (PATH '70), died Dec. 27, 2019.

Herbert Roedling, M.D. (S '59), died Nov. 6, 2013.

Stephen Schroeder, M.D. (NS '76), died Feb. 21, 2021.

Peter Schwab, M.D. (S '74), died Aug. 26, 2020.

Everette Shocket, M.D. (PHYS '52, S '55), died July 15, 2020.

Manmohan Singh, M.B.B.S., M.D. (ORON '79), died Feb. 13, 2021.

Richard "Dean" Smith, M.D. (I '65), died Jan. 23, 2021.

Diane Sorenson, M.D. (I '85), died June 7, 2016.

Harold Stein, M.D. (OPH '57), died Jan. 31, 2021.

Erich Streib, M.D. (NEMG '74). died March 13, 2015.

Richard Vanasek, M.D. (RD '75), died Jan. 19, 2021.

Lee Vesper, M.D. (DERM '65), died Nov. 28, 2020.

Richard Weeks, M.D. (1'57), died Jan. 24, 2021.

Frisca Yan-Go, M.D. (N '69), died Jan. 10, 2021.

Alumni Center

507-284-2317 mayoalumni@mayo.edu alumniassociation.mayo.edu

Alumni meetings & receptions

alumniassociation.mayo.edu

Alumni philanthropy

Doctors Mayo Society 800-297-1185 | 507-284-9101 doctorsmayosociety@mayo.edu

Physician referral

Arizona 866-629-6362 Florida 800-634-1417 Rochester 800-533-1564 mayoclinic.org/medicalprofs

Education verification

Mayo Clinic College of Medicine college.mayo.edu/academics/residencies-and-fellowships/ contact-and-verifications

Patient transportation

Mayo Clinic MedAir Mayo One 800-237-6822 mayomedicaltransport.com

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If you don't yet have an online profile, email mayoalumni@mayo.edu or call 507-284-2317 to update your contact information.

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Hannah Lodin Scottsdale, Arizona MCASOM representative

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Krishna Vyas, M.D., Ph.D. Rochester, Minnesota MCR-MCSGME representative

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Enrique Wolpert, M.D. Mexico City, Mexico

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

Patricia Yugueros, M.D. Atlanta, Georgia

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ELECTRONIC SERVICE REQUESTED

FIND MAYO CLINIC





2021 Teachers of the Year

The Mayo Fellows' Association announced 2021 Teacher of the Year awards to educators nominated by residents and fellows in Rochester and voted on by all members of the Fellows' Association. Due to the pandemic, awards were presented individually rather than at the always popular event. See who received the awards in specialties ranging from anesthesiology to urology. alumniassociation.mayo.edu