



Mayo Alumni

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MAYO CLINIC BIOBANK
RICH INSTITUTIONAL RESEARCH RESOURCE



ABOUT THE COVER

A technician organizes specimens for categorization and storage in a biobank freezer at Mayo Clinic in Rochester. The multisite Mayo Clinic Biobank has added biological specimens from almost 45,000 healthy participants to further medical discovery. Investigators within and outside of Mayo Clinic can request samples for research. In Rochester, samples are stored at Mayo Clinic's newly named David F. and Margaret T. Grohne Building in northwest Rochester.

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Mayo Update

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A Letter from the President

I was excited to learn how Mayo Clinic's new Biobank is speeding up research to improve patients' lives (page 2). The multisite Biobank is a valuable resource for researchers inside and outside Mayo Clinic. Mayo alumni can access this Biobank of samples from 45,000 healthy subjects tied to medical records and health information. For those of us outside, we simply need to enlist the support of a Mayo investigator — a task the Biobank staff assists with. Please refer to the story for information and steps to take if you or your research colleagues are interested in using the Biobank.

This issue of *Mayo Alumni* profiles the four newest Distinguished Alumni Award recipients. When I read these profiles and review the list of recipients since the award was established in 1981, I am humbled. These 100 individuals represent the best of Mayo's best — a group we'd all be proud to be nominated into one day. I encourage you to take a moment to check the profiles of these remarkable individuals (full profiles available at alumniassociation.mayo.edu/) and to consider nominating an individual you think belongs in this cadre. For information about nominations and past recipients, visit alumniassociation.mayo.edu/people/awards/mayo-clinic-distinguished-alumni-award/. The deadline is March 1, 2015.



Juan Sarmiento, M.D.
*Associate Director of Surgery
Emory University School
of Medicine
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Biliary Surgery, Emory
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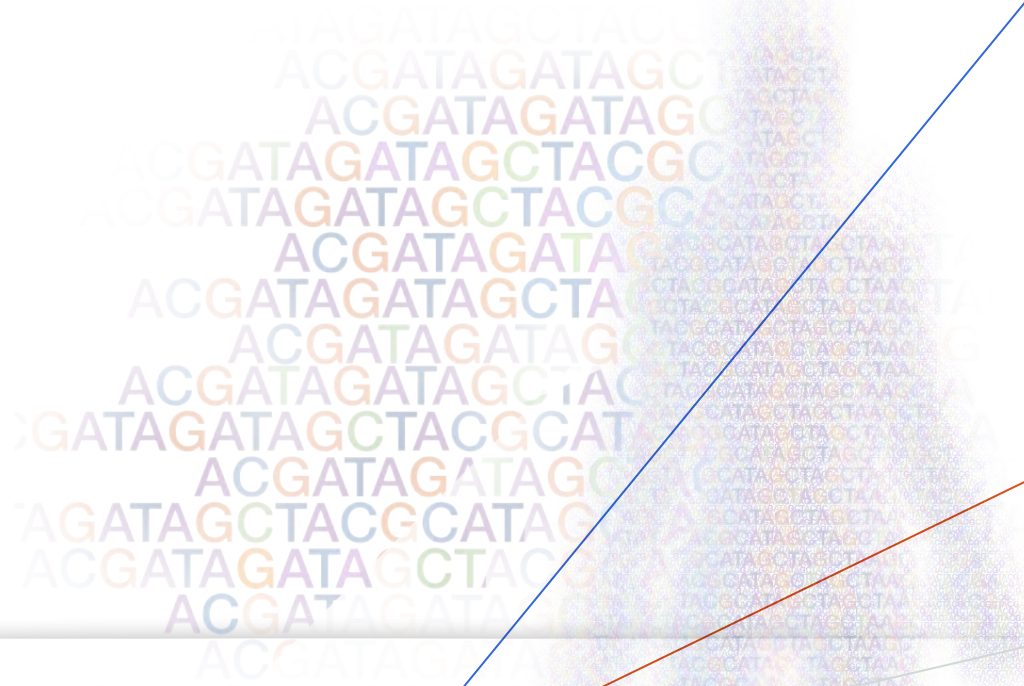
Mayo Clinic Alumni Association 69th Biennial Meeting

October 15–17, 2015 / Mayo Clinic, Phoenix

SAVE
THE
DATE!

The meeting will celebrate the 100th anniversary of the Alumni Association's formal incorporation in 1915. Details to come.





MAYO CLINIC BIOBANK — DNA, SERUM, PLASMA AND MORE

BIOLOGICAL SPECIMENS TIED TO CLINICAL DATA ACCELERATE THE PACE OF RESEARCH

MOVING RESEARCH FROM A MARATHON TO A SPRINT

Alexander Parker, Ph.D. (HSR '00), the Cecilia and Dan Carmichael Family Associate Director for the Center for Individualized Medicine in Florida and vice chair of the Department of Health Sciences Research, eagerly signed for the package that arrived at his office late one afternoon in spring 2014. Inside, he found just what he'd asked for — DNA samples from 1,000 individuals with no history of kidney cancer, already labeled and ready to be analyzed.

Dr. Parker says he could barely contain his excitement, thinking about how he could now compare these DNA samples with similar samples he'd collected for more than a decade from individuals with a diagnosis of kidney cancer. A few days earlier, detailed clinical and other data for the control subjects had been electronically transferred to his team in Florida.

The package was from the Mayo Clinic Biobank — a treasure trove of biological specimens including DNA, serum and plasma — from almost 45,000 healthy participants who provided access to their medical records and detailed information about their health and lifestyle.

"It may sound funny to some people but, for a researcher like me, this was more exciting than when I got a new Schwinn 10-speed bicycle for my 10th birthday," says Dr. Parker. "Without the Biobank as a resource, it would have taken me several years and tens of thousands of dollars to get data and DNA samples of the right control group.

"I can go to the Biobank and get high-quality data and samples on a comparison group of individuals that are matched to my kidney cancer cases on important features like sex, age and state of residence. I get these samples and data relatively quickly and at a fraction of the cost it would



“Every mentor I ever had would remind me over and over that a life in research is a marathon, not a sprint. Having access to the amazing resources available in the Biobank helps me to function more like an Olympic sprinter.” – Alexander Parker, Ph.D.

take for my own study personnel to do it. While I'll always be grateful to my parents for the new 10-speed, the package from the Biobank is a real game-changer.”

Dr. Parker is studying whether specific genetic mutations in the enzymes that metabolize alcohol interact with a person's actual alcohol intake to increase or decrease the risk of developing kidney cancer. He used the data from the Biobank control group to investigate a potential new environmental risk factor for kidney cancer. With immediate access to the data on his control group from the Biobank, he quickly completed the analysis for another project and submitted a paper for publication within about three months.

“Research can take a long time,” he says. “Every mentor I ever had would remind me over and over that a life in research is a marathon, not a sprint. Having access to the amazing resources available in the Biobank helps

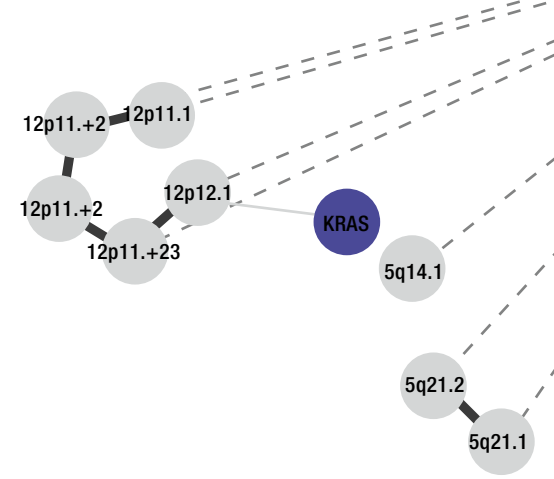


Alexander Parker, Ph.D.

me to function more like an Olympic sprinter. The pace of transformation in medicine has accelerated over the past decade, in large part due to technological advances in genomic sequencing and the management and analysis of large amounts of data. Research needs to keep pace. To do that, we must think of innovative ways of more rapidly generating results that we can bring to the clinic and public health sector to improve people's lives. The Mayo Clinic Biobank is a great example of one of the ways we are doing that.

"In a highly competitive funding environment, the Biobank helps us secure grants because we can indicate that we already have cases recruited through our disease registry and the Biobank and are, therefore, ready to go."

Case in point — Dr. Parker and William Haley, M.D. (HYT '97), Division of Nephrology and Hypertension, partnered to study clinical questions about why some people develop kidney stones. They applied for and received a National Institutes of Health R21 grant on their first submission. "These days, unfortunately, that's pretty unheard of," says Dr. Parker. "A huge part of successfully competing for that funding was being able to tell the NIH that not only did we have all the data and specimens on our kidney stones cases but also could quickly partner with the Biobank to obtain the same for our controls."



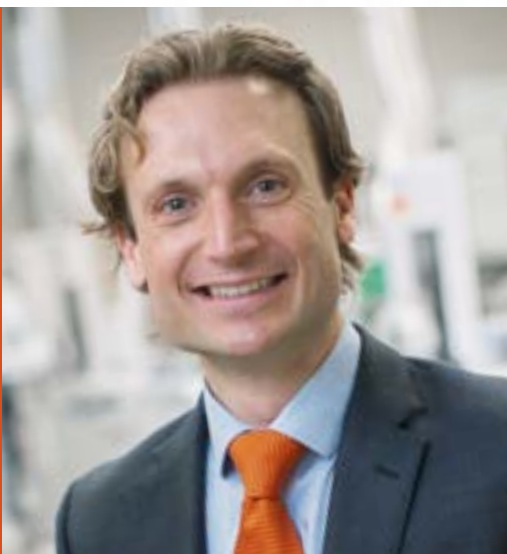
Doing in 'weeks what otherwise might take years'

Like Dr. Parker, Devin Oglesbee, Ph.D. (CLBG '06, CMG '07), Department of Laboratory Medicine and Pathology and Division of Laboratory Genetics at Mayo Clinic in Rochester, used the Biobank for a control group. He requested exome data on 90 subjects to compare to that of people known to have mitochondrial disease.

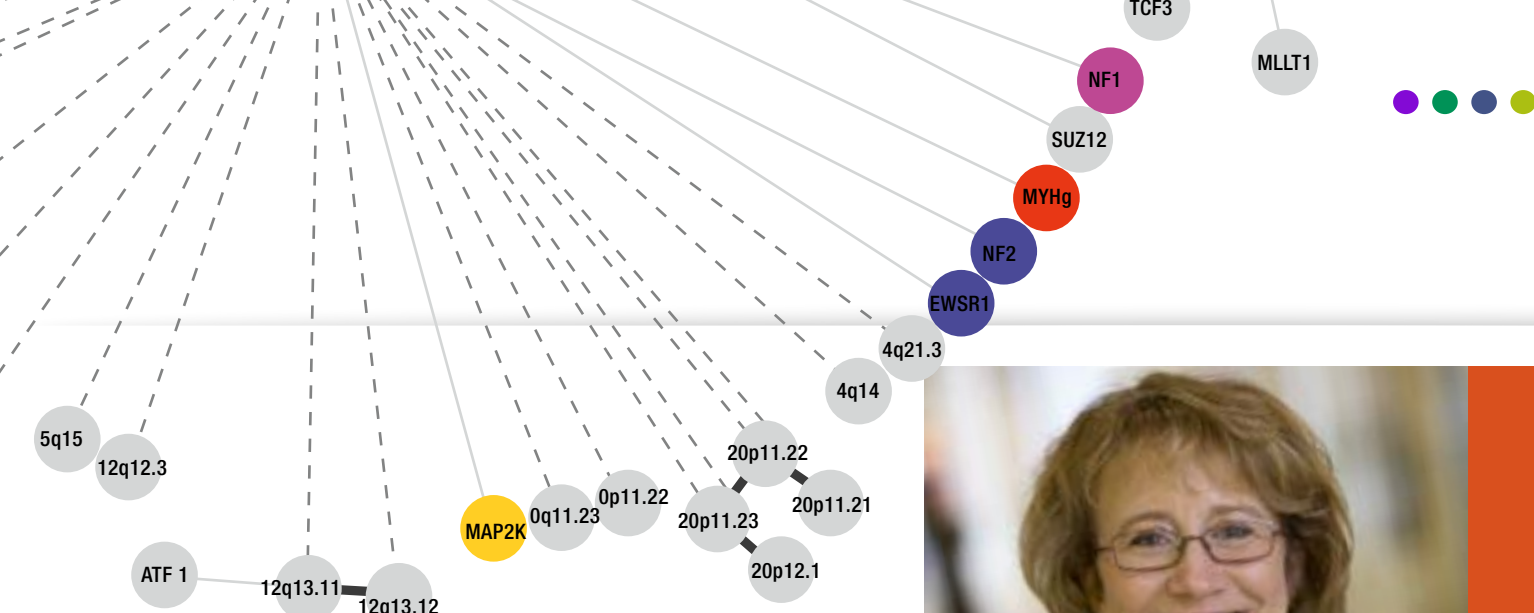
"We wanted to know more about the carrier rate for these rare conditions for a proof-of-principle study," says Dr. Oglesbee, who represents Mayo Clinic in the Marriott Mitochondrial Research Network. "The data helped us confirm that mitochondrial disease is extremely rare and that you can use DNA analysis to characterize it. As we continue to identify new therapies and biomarkers for mitochondrial disease, we can offer this research network — which includes Columbia University and Massachusetts General Hospital — other controls from the Mayo Clinic Biobank."

For another study earlier this year, Dr. Oglesbee requested 300 plasma samples from the Biobank.

Devin Oglesbee, Ph.D.



“Research can move faster because we have existing patient cohorts. You can do in weeks what otherwise might take years and, ultimately, alter patients’ lives in the near future instead of in decades.”



“We already have the samples and data collected. This access has helped our researchers secure grant funding and be more nationally competitive.”



Janet Olson, Ph.D.

“We wanted samples from characterized individuals that we can use as a normal reference as we develop new tests for liver disease and other conditions,” he says. “Having samples and data at our fingertips is an immense resource for investigators. It’s relatively easy to get samples from subjects who have the rare diseases we’re researching. But where do you get control samples? It can be expensive and time consuming to recruit for them. Now, Mayo has a characterized population, and their samples are stored in the Biobank. Research can move faster because we have existing patient cohorts. You can do in weeks what otherwise might take years and, ultimately, alter patients’ lives in the near future instead of in decades.”

Making ‘possible research that otherwise might not be possible’

Every week, investigators like these from inside and outside of Mayo Clinic request samples or clinical data from this rich institutional resource for research projects to further medical discovery. This includes control samples, disease samples, genetic data, new samples from participants and subject recruitment from within the Biobank.

Samples and clinical data are from pre-consented patients, which speeds the research process by providing easy access to high-quality, clinically annotated samples at a low cost.

Janet Olson, Ph.D. (HSR ‘99), project director of the Mayo Clinic Biobank, explains benefits of using the Biobank for research:

- **Reduces costs** — “The Biobank is large, so we can recruit and provide samples at a much lower cost.”
- **Speeds access to samples** — “We have samples and information on hand, eliminating the need to recruit, consent, draw blood, etc.”
- **Offers clinical data** — “We have extensive information from the health and lifestyle questionnaire and medical records.”
- **Offers additional information** — “We can contact participants twice a year. If you need stool samples for a microbiome study, for example, we can recruit for that. If you need subjects with kidney stones, we can query our participants.”

“Researchers can get the specific controls they need, rather than hunt for subjects,” says Dr. Olson. “This makes possible research that otherwise might not be possible. We already have the samples and data collected. This access has helped our researchers secure grant funding and be more nationally competitive.” >>



Biobank nuts and bolts

Formation: The Mayo Clinic Biobank is funded by the Center for Individualized Medicine. Stephen Thibodeau, Ph.D. (CLCH '81), oversees the Biobank's operations as the David F. and Margaret T. Grohne Director of the Biorepositories Program, Center for Individualized Medicine. Dr. Thibodeau is also recognized as the William H. Donner Professor.

- **Rochester's Biobank** was established in 2009; James Cerhan, M.D. Ph.D. (MSEP '98), is principal investigator.
- **Florida's Biobank** was established in 2012; Alexander Parker, Ph.D., is principal investigator.
- **Arizona's Biobank** (page 8) was established in 2013; Lawrence Mandarin, Ph.D. (ENDO '82), is principal investigator. This Biobank is a collaboration among Mayo Clinic, Arizona State University and Mountain Park Health Center in Phoenix. This Biobank is separate from the others because it is intended to represent the research-underserved Latino population.



Stephen Thibodeau, Ph.D.



James Cerhan, M.D. Ph.D.

Local community members provide policy recommendations about the collection and use of DNA samples, and play an active role in community advisory boards (page 9).

Purpose: The Biobank assists investigators in obtaining normal samples to serve as controls for their patient populations. Biobank staff members help investigators determine whether samples would serve as a methodologically sound source of controls for their studies and assist with logistics. Investigators can request matches for sex, area of residence, age and more. The Biobank also can cost-effectively recruit people for studies.

Contents: Biobank participants are adult (18 and older) patients who reside in the United States and have Mayo Clinic patient numbers. Patients who are scheduled for medical examinations in the Department of Medicine's divisions of Community Internal Medicine, Family Medicine, General Internal Medicine, Obstetrics and Gynecology, and Preventive Medicine are contacted to solicit their participation. This includes Mayo Clinic in Rochester and Florida, and Mayo Clinic Health System in La Crosse and Onalaska, Wis. Volunteers who have Mayo Clinic patient numbers also can participate. The Biobank in Arizona is separate from the others.

To date, almost 45,000 patients are included. The goal is to have 50,000 Biobank participants by 2015. Biological samples available on each patient include:

- DNA
- Serum
- Plasma (including platelet-poor plasma)
- Aliquot of frozen white blood cells



Available data include:

- Elements from the electronic medical record — medications, diagnoses, laboratory tests, administrative billing
- Elements from patient-provided information — current health, family health history and important factors known to confer risk for disease

Expansion: The Biobank evolves as researchers return their results to the Biobank, including information from additional participant questionnaires, which enhances medical records linked to participants' samples.

Use: More than 120 investigators have requested Biobank samples, and more than 80,000 have been dispensed. Most often, samples are used for a control group, but they also can be used for specific conditions.

Use outside of Mayo Clinic: Investigators outside of Mayo Clinic can request samples from the Biobank. This requires having a Mayo collaborator; Biobank staff can assist in identifying a Mayo investigator.

Practical information:

- To discuss the feasibility of a project involving Biobank samples, contact Janet Olson, Ph.D., project director, Biobank, olsonj@mayo.edu.
- Complete an application detailing sample request (mayo.edu/research/documents/biobank-access-application/doc-20086420).

mayoresearch.mayo.edu/biobank | biobank@mayo.edu



Clinical Research Coordinators Lindsay Fogel (left) and Kristin Quinn (right) prepare to talk to patients at Mayo Clinic in Florida about participating in the Biobank.

- Biobank Screening Committee, including a statistician, reviews the request to determine the availability of appropriate samples and determines project cost.
- Biobank Access Committee reviews the request and gives formal approval. To date, only two requests have not been approved.

The process takes one to three months to complete. >>

Sangre por Salud Biobank in Arizona

The Biobank in Arizona, Sangre por Salud (Spanish for Blood for Health), is different from the other Mayo Clinic biobanks. A collaboration among Mayo Clinic, Arizona State University and Mountain Park Health Center, it's focused on broadening the base of genomic research efforts with participants from an underserved Latino population.

"It's important to have representation from a diverse array of genetic information and cultural behaviors if we want to improve practice with tools that have wide applicability and serve all parts of the American population," says Lawrence Mandarin, Ph.D., Division of Endocrinology and Mayo Clinic Biobank director in Arizona.

In the last year, the Sangre por Salud Biobank has recruited 700 participants with Mexican ancestry and has a goal of 2,500. All participants come from Mountain Park Health Center, which operates several Phoenix-area clinics. Because healthy patients are sought, participants cannot have an existing diabetes diagnosis but do receive metabolic lab testing when they enroll in the Biobank.

"This collaboration provides testing and early detection for patients who otherwise couldn't afford this care, and much-needed diversity for the Biobank," says Dr. Mandarin. "Traditionally, access to biomedical research has been restricted in ethnic groups with low socioeconomic status. It's not because they haven't wanted to participate. Rather, it hasn't been available to them. We're making it available.



Miguel del Rio Martinez, a phlebotomist at Mountain Park Health Center, collects blood samples from patients for the Sangre por Salud Biobank.

"Access to biomedical research improves health literacy — what you know about your health improves when you participate in research. The Latino population has rather low health literacy, and we can improve that. In our Biobank project, Latino participants are receiving a tangible benefit — lab tests — and intangible benefit — improved health literacy."

Lawrence Mandarin, Ph.D.



“In our Biobank project, Latino participants are receiving a tangible benefit — lab tests — and intangible benefit — improved health literacy.”

Mayo Clinic Biobank Community Advisory Board

The Biobank Community Advisory Board at Mayo Clinic in Rochester is comprised of 20 community members who meet regularly to make recommendations and provide feedback. The Community Advisory Board is co-chaired by a community member who also is on the Biobank Access Committee and votes on protocols. Mayo Clinic in Arizona and Florida also have Biobank Community Advisory Boards.

“Our Community Advisory Board gathers every other month to provide the perspectives of southeastern Minnesota,” says Richard Sharp, Ph.D. (HSR '13), director, Biomedical Ethics

Program, Mayo Clinic. “The use of stored biological materials can be controversial. Technologies change over time, and samples collected years ago may be usable in ways that weren’t possible at the time of collection. We examine whether those uses are consistent with the community’s values.

“The Community Advisory Board has spent considerable time in the last six years learning about science and research studies — they’re a well-informed group. I’ve been impressed with the rigor and depth of conversations we have with them. They’re an important component of the Biobank.” ■



Karla Kopp (left), supervisor of the Pathology Research Core, shows Community Advisory Board (CAB) members how Biobank samples are processed. Kristin Clift (second from right) is the CAB coordinator.



On the Shoulders of Giants

“If I have seen further it is by standing on the shoulders of giants.” — Sir Isaac Newton

This feature shares vignettes of Mayo Clinic alumni who describe the influence of mentors in that unique Mayo way — active ideal of service, primary and sincere concern for the care of the individual patient, unselfish interest in every member of the group, guidance without pampering, help without mentoring.

Neighbors sharing books — transferring tradition and knowledge

Sigfrid Muller, M.D. (DERM '58), is conferring certain contents of his library to **Mark Pittelkow, M.D.** (MMS '79, DERM '84), chair of the Department of Dermatology at Mayo Clinic in Arizona.

“The books Dr. Muller is entrusting to me are among my most prized possessions,” says Dr. Pittelkow. The books range from the two-volume classic *Dermatopathology* by Hamilton Montgomery, M.D. (DERM '29), to Oliver Ormsby, M.D., and Montgomery's *Diseases of the Skin*, and the volumes on dermatopathology (*Histologie Der Hautkrankheiten*) that Dr. Montgomery received from Professor Oscar Gans, who came to Mayo from



Dr. Sigfrid Muller and Dr. Mark Pittelkow share books and friendship in Dr. Muller's home library.

Heidelberg, Germany, in 1926 to train the staff in the nascent subspecialty of pathology.

"Many of the books were given to Dr. Muller by his mentors, so they represent great history and the Mayo tradition of passing on tradition and knowledge," says Dr. Pittelkow. "I cherish them."

Dr. Pittelkow first met Dr. Muller when he was a child. "In the early '60s, I accompanied my father, Robert (DERM '56), from our home in Milwaukee to O'Leary Society meetings in Rochester," he says. "I met Dr. Muller, Dr. Harold Perry (DERM '52), and Dr. Richard Winkelmann (DERM '52), at those meetings. Later, they all were mentors to me. Dr. Muller is the only one still living."

"Fast forward from childhood to medical school, and Dr. Muller was one of my teachers and has been a teacher throughout my life. He was key to my deciding to pursue

dermatology. As a native of Panama, he impressed upon me the importance of sharing medical knowledge with an international audience. He and his wife, Jane, shared their parenting advice through the years with me and my wife (Gail Gamble, M.D. [MMS '79, PMR '83]). He has been a respected teacher, trusted counselor, lasting friend and father figure."

Dr. Muller retired from Mayo Clinic in 1995 and then practiced in Las Vegas for 18 years before retiring in 2013.

Today, mentor and protégé live only two blocks from each other in Scottsdale.

"He emails me often to discuss developments in dermatology and advances in medicine," says Dr. Pittelkow. "He's retired but continues to remain active in medicine, allowing us to benefit from his wisdom, unique experiences and insights." ■



The new face of dermatology as department marks centennial

Dermatology relies upon observation to diagnose. Proximity of subspecialists to patients is priceless.

In the spring, the Department of Dermatology at Mayo Clinic in Rochester — which begins its centennial in 2015 — moved to new quarters on the 16th floor of the Gonda Building. This represents a consolidation of 220 staff members, including 29 staff dermatologists, 25 residents and five fellows, to 49,000 square feet of the last unfinished space in the building. The department, which moved from space in the Mayo and Eisenberg buildings, is one of the highest-volume departments

on the campus, caring for more than 65,000 patients a year.

“The new space makes a significant difference to patients, with all the specialists in a common area,” says Clark Otley, M.D. (DSURG ‘96), chair of the department. “You can always find the person you need to answer a question or see a patient. We have a long-standing tradition in the department — the hall conference. With the patient’s permission, we announce on a specially installed intercom, ‘Hall conference in room 345.’ Everyone who is available — from five to 25 people — assembles and looks at the patient’s skin. We review the history and ask for

input — ‘How can we help this person?’ It’s a mini-spontaneous grand rounds that is hugely beneficial to patients. It’s both collaborative and humbling — you’re constantly reminded how much your colleagues know.

“In the new space, we provide the most comprehensive multidisciplinary care possible in a modern, calming, healing environment.”

The new Dermatology quarters are home to:

- **Specialty clinics** with world-class expertise for rare disorders including Merkel cell carcinoma, erythromelalgia and skin sarcomas

Dermatology Chair Clark Otley, M.D. (second from right), conducts a hall conference with (from left) Lawrence Gibson, M.D. (I '82, DERM '85, DPATH '86), Resident Michael Chang, M.D. (DERM '15), Resident Oluwakemi Onajin, M.D. (MMS '13, DERM '17), Resident Ram Rohatgi Jr., M.D. (PD '16), and Carilyn Wieland, M.D. (I-1 '06, DERM '09, DPATH '10).

- **Pediatric dermatology** — One of the largest centers in the United States for pediatric dermatology
- **Dermatopathology laboratory** — One of the largest in the country, reading more than 35,000 skin biopsies and 70,000 blood specimens per year; staff dermatopathologists also are dermatologists who provide unique insights into pathology specimens and skin disease
- **Dermatologic surgery** — One of the largest centers in the United States, with 16-room procedure area, more than 7,000 operations per year
- **Training facilities** including patient observation rooms to provide feedback to residents about their patient interactions
- **Unique exam rooms** with desks that face patients and computers angled to enhance the physician-patient interaction
- **Photo studio** — The largest photographic studio on campus; run by Mayo Clinic Media Support Services; used by other departments but housed in Dermatology due to volume of photos taken to document skin condition and biopsy sites

The immunodermatology lab and research dermatology labs remain in the Hilton and Guggenheim buildings. >>

Alumni philanthropy

O'Leary Society Resident Room

A new O'Leary Society Resident Room featuring 18 computer workstations for residents was funded by a \$500,000 gift from members of the O'Leary Society — Mayo dermatology alumni.

"O'Leary Society members around the world are strong Mayo Clinic supporters who want to give back," says Clark Otley, M.D., chair, Department Dermatology at Mayo Clinic in Rochester. "We issued a call to fund the new Resident Room, and they stepped up quickly and generously. We're near our funding goal.

"It's a special thing to be a Mayo physician and Mayo dermatologist. Our alumni are highly valued by their colleagues and patients because they're so well trained, which makes them eager to give back. We're grateful for their philanthropic support, ideas about space design, and the patients and pathology specimens they send to Mayo Clinic."

“Our alumni are highly valued by their colleagues and patients because they're so well trained.”

– Clark Otley, M.D.

See page 28 for information about participating in alumni philanthropy.

Carl W. Soderstrom, M.D., and Crystal D. Soderstrom Seminar Room

Carl Soderstrom, M.D. (I '70, D '72), and his wife, Crystal, provided the funding for the new Carl W. Soderstrom, M.D., and Crystal D. Soderstrom Seminar Room dedicated to education.

"The seminar room provides space for our ongoing trainee and staff education and allows us to easily connect our department with our dermatology colleagues at other Mayo campuses," says Dr. Otley. "We have one of the largest dermatology training programs in the country, so this space will be much used and is greatly appreciated."

Dr. Soderstrom completed residencies in internal medicine and dermatology at Mayo Clinic and was instrumental in paving the way for policies that provided benefits for residents, fellows and their families.

In 1973, he opened a multispecialty dermatology facility in Peoria, Illinois. 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.



Carl Soderstrom, M.D., and Crystal Soderstrom

Mayo Clinic dermatology then and now

THEN — Dermatology moments in history

1925 William Goeckermann, M.D. (DERM '17), developed a method of treating psoriasis with ultraviolet B light and tar. This has been a standard treatment of psoriasis for 80 years.

Mid-20th century Louis Brunsting, M.D. (DERM '30), and Harold Perry, M.D. (DERM '52), were instrumental in characterizing many dermatologic diseases, including a localized form of bullous pemphigoid (Brunsting-Perry pemphigoid) and pyoderma gangrenosum.

1950 Philip S. Hench, M.D. (I '25), and Edward Kendall, Ph.D. (BIOC 1914), along with Tadeus Reichstein, M.D., were awarded the Nobel Peace Prize in Physiology or Medicine for their discoveries related to the hormones of the adrenal complex. Although not dermatologists, their work led to the widespread use of cortisone and its derivatives for various disease processes. Cortisone remains a primary treatment for inflammatory skin diseases.

NOW — Up-and-comers

JENNIFER HAND, M.D. *Unique board-certification combination*

Jennifer Hand, M.D. (MMS '94, I '95, DERM '98, MGEN '00), is the only physician in the United States who is board certified in dermatology and clinical genetics. She's also certified in pediatric dermatology. She's the only dermatologist who is part of the Mayo Clinic Center for Individualized Medicine.

"Suddenly, because of the focus on individualized medicine, genetics is in the forefront of medicine," says Dr. Hand. "Many genetic disorders have skin findings, so dermatologists become involved. I also get involved with patients who need full exome sequencing for genetic disorders but do not have dermatological conditions. I'm a detective of sorts, trying to identify genetic links to disease."

Dr. Hand sees patients, often children, who have rare inherited skin conditions that often increase the risk for skin cancer, such as:

- A child with unexplained severe sun sensitivity, hypotonia and developmental delays — Diagnosed with porphyria
- A child with abnormally dry hair that breaks easily and dystrophic nails — Diagnosed with trichothiodystrophy, a rare genetic disorder that affects only 300 people in the world
- A child born with skin tags, hydrocephalus and crooked shoulders and has had a skin cancer — Diagnosed with basal cell nevus syndrome



Jennifer Hand, M.D.

"Accurate diagnosis of these conditions is important because we want to make sure patients get the right multispecialty care," she says. "We also want to help parents know what to expect, how to protect their children from the sun, the risk of recurrence for future pregnancies and how others in the family might be affected genetically."

Dr. Hand is working with dermatologist Joel Spitz, M.D., as co-author on the next edition of *Genodermatoses: A Clinical Guide to Genetic Skin Disorders*, to be published in 2015.

"I met Dr. Spitz and mentioned that I'd be interested in helping with his well-known textbook if he ever needed help. He contacted me a year later because of my unique background in genetics," says Dr. Hand.

Clark Otley, M.D., chair of the Department of Dermatology at Mayo Clinic, calls Dr. Hand a world treasure. "Many genetic dermatologic conditions are rare, and patients have difficulty finding the right diagnoses and care," he says. "Patients come from around the country and world for her expertise and that of our department. It's quite a remarkable combination of specialties we're fortunate to have."

ALEXANDER MEVES, M.D.
Game-changing molecular melanoma test

Today, most melanoma patients are overtreated with unnecessary sentinel lymph node (SLN) biopsies. Alexander Meves, M.D. (I' 04, DERM '07), Department of Dermatology, Mayo Clinic in Rochester, has developed a molecular test that significantly improves the ability to differentiate aggressive from indolent melanoma and identify patients who truly need additional testing and therapy. This prognostic test is in the research phase and expected to be available within the next year.

"To date, we've treated all melanoma patients as if they have bad disease because we can't tell lesions apart even though only about 10 percent of melanoma is aggressive," says Dr. Meves. "Eighty-five percent of SLN biopsies are negative and without benefit to the patient. This is a costly and unnecessary burden for patients. We can replace this practice with a much less costly, more convenient test."



The new test — currently referred to as an adhesion remodeling test — applies molecular genetics methods to biopsied skin tissue.

Dr. Meves has presented information about the test to dermatology leaders in Australia, which has many melanoma cases, and to Mayo Clinic dermatologists and surgeons. "People are excited about the test and want to see it in the clinic," he says.

"Molecular research has been underway for 40 to 50 years, and we have amazing tools and can sequence genomes, but there's been hardly anything molecular in melanoma to help patients," says Dr. Meves. "I received a postdoctoral Mayo Foundation Scholarship to study molecular techniques and cell adhesion at the Max Planck Institute of Biochemistry in Munich in the lab of Dr. Reinhard Fässler. It became obvious to me that what I'd learned could be an important addition to melanoma diagnosis.

"Developing the adhesion remodeling test was possible because of Mayo Clinic's support — the scholarship, the infrastructure with people to retrieve melanoma tissue samples from the archives, the

“The test may be a game changer for early melanoma prognosis and our ability to predict if a tumor will be aggressive.”

– Mark Pittelkow, M.D.

department chair who believed in the possibility and the funding from a benefactor. The level of support for a junior consultant like me is unique and unheard of anywhere else in the world.”

Mark Pittelkow, M.D. (MMS '79, DERM '84), chair of the Department of Dermatology at Mayo Clinic in Arizona (formerly at Mayo Clinic in Rochester), says the test has the potential to transform how primary melanomas are characterized. "The test may be a game changer for early melanoma prognosis and our ability to predict if a tumor will be aggressive," he says. "By documenting a patient's risk molecularly, we can apply more directed therapies. This is a considerable advance in the field by an exceptional, highly talented physician-researcher." >>

“The level of support for a junior consultant like me is unique and unheard of anywhere else in the world.”

– Alexander Meves, M.D.

ALEKSANDAR SEKULIC, M.D., PH.D.
First-in-class drug for basal cell carcinoma

Aleksandar Sekulic, M.D., Ph.D. (IMM '99, DERM '00, I-1 '01, CI '03), a dermatologist at Mayo Clinic in Arizona, led the first large-scale human study of vismodegib to treat basal cell carcinoma. Vismodegib — a first-in-class smoothened inhibitor — is now an approved targeted therapy and the first drug approved for systemic treatment of basal cell carcinoma.

The phase 2 study, involving 31 sites around the world, found that vismodegib effectively shrank advanced basal cell carcinoma tumors in 43 percent of patients with locally advanced disease and in 30 percent of patients whose disease had metastasized to other organs.

Vismodegib shrinks tumors by targeting them and shutting down a molecular signaling pathway that fuels the cancer cell growth.

“These findings are exciting because we haven’t had any therapies



before that worked to this degree for patients with advanced basal cell carcinoma,” says Dr. Sekulic. “More research is needed to determine if the drug has potential to improve treatment for patients with earlier stages of the disease, patients with multiple basal cell carcinomas and patients with a genetic predisposition to the disease.”

If the drug is demonstrated to be effective with earlier stage disease, it could become a neoadjuvant agent for skin cancer — shrinking the tumor before surgery to reduce the area for removal.

“It’s significant that a phase 2 clinical trial results in FDA approval for a drug,” says Clark Otley, M.D., chair, Department of Dermatology at Mayo Clinic in Rochester. “Dr. Sekulic worked closely with the pharmaceutical company and FDA to develop the trial in a way that could fast-track approval if the data was positive. And the data was strong. We can only imagine the future impact of this work and subsequent developments on how we treat the most common type of skin cancer.”

Dr. Sekulic says he went into medicine, in part, because he wants to make an impact beyond the patients he sees face to face. “Without

CELEBRATING
100
YEARS
of
Enhancing
Dermatologic
Care

Biennial gathering marks department’s centennial

Biennial Mayo Clinic Department of Dermatology Symposium: The O’Leary Meeting Sept. 25–26, 2015

Traditional conference, all-dermatology staff past and present social event

Visit mayo.edu/cme/dermatology for information.

a commitment to academics and learning how to better take care of patients at every level — basic, clinical and translational research — we are just providers,” he says. “By pursuing academic research, we enhance the quality of what we do and bring it to the rest of the world. A large part of what makes Mayo Clinic unique is that commitment to excellence — not just doing what we know, but innovating. Our mission is not possible without continued innovation. Without innovating, we will stagnate.” ■

“These findings are exciting because we haven’t had any therapies before that worked to this degree for patients with advanced basal cell carcinoma.”

– Aleksandar Sekulic, M.D., Ph.D.

Mayo Clinic Distinguished Alumni Award 2014 Recipients

HONORING EXCELLENCE IN PATIENT CARE, RESEARCH AND EDUCATION



E. Rolland Dickson, M.D.

Brian G.M. Durie, M.D.

K. Krishnan Unni, M.B.B.S.

Richard Weinsilboum, M.D.

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

the field of medicine, including medical practice, research, education and administration. Individuals receiving this award are recognized worldwide by their peers and have demonstrated

integrity throughout their professional careers.

The 2014 Mayo Clinic Distinguished Alumni Awards were presented on Oct. 20, 2014.



E. Rolland Dickson, M.D.

*Emeritus Director for Development
Professor of Medicine*

*Clinician Investigator, Department of Internal Medicine
Consultant, Division of Gastroenterology and Hepatology,
Department of Internal Medicine
Mayo Clinic, Rochester*

E. Rolland Dickson, M.D. (I '64), is nationally and internationally renowned for his contributions to the research of liver transplantation and hepatic disorders. His work has been instrumental in defining key outcomes and the selection process for patients with complex liver disease, leading to liver transplantation. By establishing interest and clinical trials in relatively rare diseases such as primary biliary cirrhosis and primary sclerosis cholangitis, Dr. Dickson launched the clinical and research activities that led to Mayo's position as the leading transplant center in the country. The data acquired through his research was the basis and forerunner for the Model for Endstage Liver Disease (MELD) score that is used throughout the world for assigning priority to patients awaiting liver transplantation.

Mayo Clinic, Consultant, Division of Gastroenterology and Hepatology, Department of Internal Medicine, 1964–present; Professor of Medicine, 1980–present

Fellowship: Internal Medicine, Mayo School of Graduate Medical Education

Internship: Ohio State University Hospitals

Medical School: Ohio State University College of Medicine

Undergraduate: Ohio Wesleyan University, Delaware, Ohio

Native of: Hackensack, New Jersey



Brian G.M. Durie, M.D.

*Professor of Hematology/Oncology
Cedars-Sinai Medical Center in Los Angeles
Cedars-Sinai Outpatient Cancer Center at the Samuel Oschin
Comprehensive Cancer Institute
Chairman of the Board and the International Myeloma Working
Group, International Myeloma Foundation
Director of Hematologic Research and Myeloma Programs,
Aptium Oncology, Inc. and AMyC Myeloma Consortium*

Brian G.M. Durie, M.D. (I '70, HEM '72), has had an almost 40-year career in fostering and transforming the results of clinical studies into clinical practice that has profoundly affected the lives of patients diagnosed with multiple myeloma. Early in his career, he described the first staging system (Durie-Salmon) for multiple myeloma, and he was instrumental in contributions to developing the more recent International Staging System. Dr. Durie has been a major contributor to new therapeutics for the care of patients with myeloma, advancements in imaging techniques, and the impact of bisphosphonate therapy and complication rates in multiple myeloma. He has fostered global collaborations with investigators around the world and cultivated a revolution in the treatment of myeloma and dissemination of knowledge to practice. He has helped to standardize aspects of the diagnosis, prognosis and management of myeloma through published reports and guidelines, and his studies have led to prolonged survival and improved outcomes for countless patients worldwide.

Fellowship: Hematology, Hematologic Oncology, Mayo School of Graduate Medical Education

Residency: Internal Medicine, Wayne State University Medical School, Detroit; Mayo School of Graduate Medical Education

Medical School: University of Edinburgh Medical School, Edinburgh, Scotland

Native of: Gullane, Scotland



K. Krishnan Unni, M.B.B.S.

*Department of Pathology
Medical College of Wisconsin
Emeritus Professor of Pathology
Emeritus Professor of Orthopedics
Mayo Clinic, Rochester*

K. Krishnan Unni, M.B. B.S. (PATH '70, SGPA '74), is an internationally recognized icon in benign and malignant bone and soft tissue tumors. He is the editor (with Mayo Clinic's Carrie Inwards, M.D.) of *Dahlin's Bone Tumors*, the bible for working pathologists around the world for osseous neoplasms. He has recognized new entities such as clear cell chondrosarcoma and small cell osteosarcoma, and has helped to establish current treatment guidelines for cartilage tumors. He has improved the understanding of clinical pathological correlation, which has affected treatment and improved patient outcomes. He has been a teacher to generations of fellows in Rochester who have come to Mayo Clinic from all over the world to learn surgical pathology and bone pathology. His work has enhanced the academic reputation of the musculoskeletal oncology division at Mayo and contributed to bringing the orthopedics department to the national forefront.

Mayo Clinic, Consultant, Division of Anatomic Pathology and Surgical Pathology, Department of Laboratory Medicine and Pathology, 1974–2006; Consultant, Department of Orthopedic Surgery, 1991–2006; Consultant, Division of Orthopedic Oncology, 1991–2006; Professor of Pathology, 1987–present; Professor of Orthopedics, 1992–present

Fellowship: Anatomic and Clinical Pathology, Surgical Pathology, Mayo School of Graduate Medical Education

Residency: All India Institute of Medical Sciences, New Dehli

Medical School: All India Institute of Medical Sciences

Graduate School: University of Minnesota, Minneapolis

Undergraduate: St. Thomas College; Sree Kerala Varma College, Thrissur, Kerala, India

Native of: Kolathur, India



Richard Weinschilboun, M.D.

*Chair, Division of Clinical Pharmacology
Professor of Molecular Pharmacology & Experimental
Therapeutics and Medicine
Mary Lou and John H. Dasburg Professor of Cancer Genomics
Mayo Clinic, Rochester*

Richard Weinschilboun, M.D. (PHARM '72), has had a worldwide impact on research and was a pioneer in the field of pharmacogenetics. His continuing translational work is making a seminal impact on present-day individualized medicine. From an initial focus on phase 2 drug metabolizing enzymes to understanding the actions of antidepressants to novel findings related to the development of breast cancer, he has concentrated on using genetic variation to make mechanistic discoveries that reveal fundamental biology and can be harnessed to predict drug responses. In his role as director of the pharmacogenomics Translational Program in the Center for Individualized Medicine at Mayo Clinic, he has been fundamental in introducing drug gene rules into the electronic medical record and in initiating three major clinical trials — in cardiology, breast cancer and prostate cancer. He has been a force in education and administration at Mayo Clinic, having taught pharmacology to virtually every medical student who has attended Mayo Medical School. ■

Mayo Clinic, Consultant, Departments of Molecular Pharmacology & Experimental Therapeutics and Internal Medicine, 1972–present (Chair, Department of Pharmacology, 1989–1993); Professor of Molecular Pharmacology & Experimental Therapeutics and Internal Medicine, 1979–present

Fellowship: Tübingen University, Tübingen, Germany

Residency: Internal Medicine, Massachusetts General Hospital, Boston

Medical School: University of Kansas Medical School, Kansas City

Undergraduate: University of Kansas, Lawrence

Native of: Eldorado, Kansas

WHERE ARE THEY NOW?



Shigeaki Kobayashi, M.D., Ph.D.

Director, Medical Research and Education Center
Senior Consultant, Stroke and Brain Center
Aizawa Hospital, Matsumoto City, Japan



Shigeaki Kobayashi, M.D., Ph.D. (NS '71), is recognized around the world as a master of neurosurgery, with special expertise in vascular microneurosurgery.

His accomplishments are legendary:

- Developed the concept of carotid-cave aneurysms.
- Maintained and enhanced international recognition for Shinshu University Hospital in Nagano, Japan, where he served as the chair of neurological surgery from 1988 to 2003.
- Played a key role in educating the next generation of Japanese neurosurgeons, including helping to train more than 100 neurosurgery residents who now practice in Nagano Prefecture and other areas.
- Has been a visiting professor to more than 30 universities around the world.
- Authored more than 800 scientific papers.
- Worked with Hitachi to develop robotic neurosurgery.
- Helped to develop the intraoperative CT scanner with Toshiba, which was installed in Shinshu University's

neurosurgical operating room in the early 1980s — a first in Japan and one of the first in the world.

- Served as chief medical officer of the 1998 Winter Olympic Games in Nagano, Japan, overseeing the medical service and 9,000 staff members including physicians, nurses, emergency personnel and the doping control system.
- Was a founding committee member of the Japanese Congress of Neurological Surgeons and was the group's eighth president.

From Japan to Rochester

Dr. Kobayashi arrived at Mayo Clinic in Rochester in 1964 after completing an internship at the U.S. Naval Hospital in Yokosuka, Japan.

"I was accepted as a resident of neurosurgery on the condition that they observe me working as a fellow in general surgery for one year," says Dr. Kobayashi.



Shigeaki Kobayashi, M.D., Ph.D.

He worked alongside Mayo Clinic surgical legends John Kirklin, M.D. (S '50), Dwight McGoon, M.D. (S '57), and Robert Wallace, M.D. (CS '64).

"Every day was stimulating and challenging," he says. "I had great difficulty continuing in my residency in neurosurgery because of my insufficient English language capability and relative lack of knowledge of neuroscience."

Initiation into research

Dr. Kobayashi was assigned to the Basic Sciences Building during his first year of neurosurgery residency to help him become more familiar with basic neuroscience. "This turned out to be a good thing because I started research in neuropathology and cerebrovascular physiology and anatomy, which I continued throughout my career," he says.

Introduction to microneurosurgery

"During my residency, microsurgery was introduced in neurosurgery and began to be used more frequently in routine procedures," says Dr. Kobayashi.

He became first assistant to Thoralf Sundt, M.D. (N '64, NS '65), a leader in cerebrovascular surgery. Dr. Sundt employed routine use of the operating microscope for cerebrovascular disease and clipping of intracranial aneurysms. He was developing a new line of stronger clips (the Sundt-Kees Aneurysm Clips) for larger and more difficult aneurysms.

In 1968, along with microsurgical anatomy pioneer Albert Rhoton Jr., M.D. (NS '66), Dr. Kobayashi published one of the first papers about microneurosurgical anatomy. "This paper about the nervus intermedius of the seventh cranial nerve was my initiation into acoustic tumor surgery, which became a focus area during my career," he says.

From Rochester back to Japan

In 1971, Dr. Kobayashi returned home to Shinshu University School of Medicine in Matsumoto City to fill an urgent need for a neurosurgeon to practice and train residents. Within a short time, he had 10 residents studying with him.

"I tried to teach them like I was taught at Mayo Clinic," he says. "We covered the entire Nagano Prefecture of 2 million people — a heavy clinical load consisting mainly of head traumas and some aneurysms and tumors."

Shinshu's Department of Neurosurgery was formally established in 1978, with Kenichiro Sugita, M.D., as its head. He'd recently developed a variety of smaller, more elegant clips (Sugita Aneurysm Clips), which became one of the most-used brain aneurysm surgical clips worldwide.

As associate to Professor Sugita, Dr. Kobayashi assisted in innovating neurosurgical instruments including aneurysm clips, a head frame, brain retractors and smaller surgical instruments for microneurosurgery, and collaborated to improve approaches to deep lesions of the brain and skull base.

"As the department grew, I had more time for research and got my Ph.D.," says Dr. Kobayashi. "We began to publish clinical papers in English and receive recognition. We were visited by many domestic and foreign neurosurgeons, including 80 from other countries in the first 10 years. I felt it was important for our neurosurgery trainees to master English, so I conducted weekly language classes. I encouraged them to go abroad to obtain further knowledge

“ I tried to teach them like I was taught at Mayo Clinic.”

– Shigeaki Kobayashi, M.D., Ph.D.



A proponent of lifelong learning, Dr. Kobayashi has studied calligraphy in recent years and takes classes to improve his skill.

and techniques, to make friends and broaden their views. I learned the importance of this at Mayo Clinic.”

When Dr. Sugita left the department in 1988, Dr. Kobayashi assumed the chair position. During his tenure in the department, he helped to train 40 neurosurgeons from Asia, Egypt, Europe and the United States.

In 2005, Dr. Kobayashi received the Mayo Clinic Alumni Association Professional Achievement Award. He is a recognized expert in surgery of cerebral aneurysms and benign brain tumors such as acoustic tumors and skull base meningiomas.

“I was a junior resident working with Dr. Kobayashi during his time at Mayo Clinic,” says David Piepgras, M.D. (NS ’74), Department of Neurologic Surgery and emeritus professor of neurosurgery at Mayo Clinic in Rochester. “He was already distinguishing himself for his knowledge, skill in the OR and personal rigor. It was a delight to see him rise to positions of leadership in Japanese neurosurgery and acknowledged as one of the world’s master microneurosurgeons. I am honored to count him as a careerlong friend and colleague in Mayo neurosurgical residency.”

Q&A with Dr. Kobayashi

What have you done since you retired from Shinshu University in 2003?

I served as director of the Komoro Kosei General Hospital in Komoro City for three years, focusing mainly on administration and partly on neurosurgical practice.

In 2006, I moved to Aizawa Hospital in Matsumoto City. As director of the Medical Research and Education Center and Stroke and Brain Center, my time is spent on residency education, organizing and planning training and curriculum, and recruiting residents. I also serve as surveyor for the Japan Council for Evaluation of Postgraduate Clinical Training, a nonprofit organization to evaluate hospitals throughout Japan.

In 2007, I started a fellowship program at Aizawa Hospital for foreign physicians, which provides scholarships for physicians from developing countries to study various specialties for up to two years. So far, we’ve accepted 19 foreign doctors.

What effect did your time at Mayo Clinic have on your career?

The wide experience I obtained at Mayo — daily postoperative conferences, grand rounds, publishing papers, a strong foundation in neurosurgery and related basic sciences — helped me a great deal when I returned to Japan. I organized the residency program after Mayo’s system. Many young residents chose neurosurgery with me.

I contributed to their training, stressing the importance of awareness of the international mind, getting the latest information firsthand, and spreading new ideas and knowledge to the world.

I tried to increase the number of neurosurgeons in my region. To put this in perspective, I was the 355th neurosurgeon registered in Japan for a population of about 120 million. Today, we have 7,000 board-certified neurosurgeons. This shows that neurosurgeons have increased in number very rapidly in Japan during the last half century.

Japan a century ago

William Worrall Mayo, M.D., visited Japan for several weeks in 1907 as the guest of his friend James J. Hill, a railroad executive. According to *I Started All This: The Life of Dr. William Worrall Mayo* (Judith Hartzell, 2004), Dr. Mayo was entertained by Baron Kanehiro Takaki, surgeon general of the Japanese army and a charter member of the International Surgeon's Club. Dr. Takaki, who had visited Mayo Clinic the previous summer, organized Dr. Mayo's trip.



At Mayo Clinic, I learned the importance of research based on clinical problems, not for the sake of pure research. I met so many researchers, staff doctors and residents from different countries. Acquaintance and friendship with some of them has been an important asset throughout my life and career. Many of my friends and colleagues have become distinguished clinicians and researchers in important positions in the United States and all over the world. Continuing communication with them has prompted me to be active in Japan and international arenas.

I am thankful for my Mayo training, which initiated my professional career in Japan and the world.

How do you continue involvement with Mayo Clinic?

I've returned to Mayo Clinic through the years for various reasons, and I've invited Mayo physicians to Japan to speak, furthering international awareness and training and spreading ideas and knowledge.

In 2006, then Mayo Clinic Chief Administrative Officer Robert Smoldt presented at Aizawa Hospital about the importance of improving patient outcomes and cost per patient. The following year, I organized a visit to Mayo Clinic with Takao Aizawa, M.D., CEO of Aizawa Hospital, and two other hospital officials. We had developed a strong desire to learn about improvement from the top U.S. hospital. We met key persons and toured facilities.

I have maintained communication with Mr. Smoldt and Denis Cortese, M.D. (I '71, THD '76), former CEO of Mayo Clinic and a resident at Mayo when I was there. They are leading the Arizona State University (ASU) Healthcare Delivery and Policy Program (healthcare.asu.edu) to promote high-value health care throughout the world. One of their projects involves studying patient outcomes and costs for total joint replacement in Japan. The data are being used to propose a new payment system for providers to encourage better value. It is a pleasure to connect and be of assistance when Mayo's efforts involve Japan. ■

Know your Board

Recent issues of Mayo Alumni magazine have featured profiles of members of the Mayo Clinic Alumni Association Board of Directors, and this issue includes more.

Mayo Clinic Alumni Association Board of Directors

- Provides leadership
- Makes policy decisions
- Decides strategic direction and vision



Peter Amadio, M.D. (OR '83)
Secretary-Treasurer, Board Member

- Dean for Research Academic Affairs, Mayo Clinic
- Lloyd A. and Barbara A. Amundson Professor of Orthopedics
- Professor of Biomechanical Engineering, Mayo Clinic College of Medicine
- Fellowship: Orthopedics Research, Children's Hospital Medical Center, Boston; Hand Surgery, Thomas Jefferson University
- Residency: General Surgery, Medical College of Virginia; Orthopedics, Massachusetts General Hospital, Harvard Medical School
- Medical School: Jefferson Medical College, Thomas Jefferson University
- Undergraduate: The Pennsylvania State University
- Native of: Philadelphia

Why did you decide to pursue medicine?

You could say I was born to it. When I was 6, my father was a medical student at Jefferson Medical College and filled out a preliminary application for me.

What was your initial impression of Mayo Clinic?

I grew up on the East Coast, mostly in or around big cities. Before visiting

Mayo Clinic, my impression was that I would be trading big-city culture for a smaller town environment. Then Larry Miller, M.D. (I '76, GI '79), a college and medical school classmate and current Mayo consultant, encouraged me to read *The Doctors Mayo* by Helen Clapesattle. The book opened my eyes about Mayo's values and culture. It became clear to me then that by leaving city life behind I would be gaining far more than I might lose. Ever since, Mayo has been home to me.

What valuable lesson have you learned at Mayo Clinic?

A fulfilling job is a blessing.

What do you do in your spare time?

My wife and I still enjoy a dose of big-city life, theater and the arts, and we travel often. But now Rochester is getting more of that cultural vibe we enjoy, thanks to the new Destination Medical Center project.

What would people be surprised to know about you?

I am fascinated by horse racing. My wife and I have attended the Kentucky Derby every year since 1989, and we are partners with another Mayo surgeon in owning four thoroughbred racehorses. We have not had a Derby horse (yet!), but it is still a lot of fun.

“A fulfilling job is a blessing.”

– Peter Amadio, M.D.

“The value of listening intently to the patient’s story.”

– Ann Colbourne, M.D.



Dawn Davis, M.D.
(PD '03, DERM '06)

Board member, Executive Committee



Ann Colbourne, M.D.
(I '93, ADGM '94)

Board member

- Senior Medical Director; Lead, Culture, Transformation and Innovation, Alberta Health Services, Edmonton, Alberta, Canada
- Clinical Professor of Medicine, University of Alberta, Edmonton, Alberta, Canada
- Fellowship: Advanced General Internal Medicine, Mayo School of Graduate Medical Education
- Residency: Internal Medicine, Mayo School of Graduate Medical Education
- Medical School: Memorial University of Newfoundland, Canada
- Graduate: University of Oxford, United Kingdom
- Undergraduate: Memorial University of Newfoundland; University of Oxford
- Native of: Newfoundland and Labrador, Canada

What was your initial impression of Mayo Clinic?

Superlative patient and family focus, extraordinary staff, inspired leaders — a well-oiled machine.

How does Mayo Clinic influence your practice?

Mayo became my professional home. When I think of extraordinary care, I try to emulate the service and care of Mayo colleagues.

What valuable lesson did you learn at Mayo Clinic?

The value of listening intently to the patient’s story.

How do you contribute to the Mayo Clinic Alumni Association?

I bring a Canadian perspective on patient- and family-centered care and health system transformation.

What do you do in your spare time?

I enjoy photography, nature watching, walking, gardening and spending time in the kitchen creating tasty treats.

What would people be surprised to know about you?

I have an obsession for West Highland white terriers.

- Associate Professor of Dermatology and Pediatrics, Mayo Clinic College of Medicine
- Fellowship: Pediatric Dermatology, Mayo Foundation Scholar, Mayo School of Graduate Medical Education
- Residency: Pediatric and Adolescent Medicine, Dermatology, Mayo School of Graduate Medical Education
- Medical School: University of Missouri, Columbia
- Undergraduate: University of Missouri, Columbia
- Native of: Kansas City, Missouri

Why did you decide to pursue medicine?

I became interested in health care in high school. Physicians have the privilege of assisting others in times of need while learning from them. I am a people person and wanted to be intellectually challenged in my career. Medicine is a natural fit. I love seeing my patients in the clinic and getting to know them as individuals. They teach me something every day.

How does Mayo Clinic influence your practice?

Working at Mayo makes me a better person and a better physician. My colleagues are very bright and help me diagnose previously unrecognized

diseases and provide cutting-edge treatment options for my patients.

What valuable lesson have you learned at Mayo Clinic?

Teamwork is the key to success in any endeavor. Even in the most challenging of circumstances, a solution is possible when people work together toward a common goal.

How do you contribute to the Mayo Clinic Alumni Association?

Mayo alumni are our extended work family. My goal is to ensure our alumni have avenues to connect with Mayo whenever necessary — for patients, professional development and their own medical care.

What do you do in your spare time?

Besides spending time with family and friends, I enjoy dancing, playing musical instruments, craftwork and design, baking desserts, watching sports and reading a good book.

“ Mayo has influenced not only our medical practice in our country but also our families.”

– Guillermo Ruiz-Argüelles, M.D.



Guillermo Ruiz-Argüelles, M.D. (HEM '83)

Board Member

- Director General, Centro de Hematología y Medicina Interna, Clínica Ruiz, Puebla, Mexico
- Mayo Clinic Distinguished Alumni Award, 2011
- Fellowship: Postdoctoral Research Fellow in Hematology, Mayo School of Graduate Medical Education
- Residency: Internal Medicine, Hematology, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City
- Medical School: Universidad Autónoma de San Luis Potosí, Mexico
- Undergraduate: Instituto Militarizado Oriente, Puebla, Mexico
- Native of: Puebla, Mexico

Why did you decide to pursue medicine?

I was exposed to medicine since I was a kid. At age 8, I decided to become a physician — a hematologist, just like my father.

Why did you train at Mayo Clinic?

After medical school, I spent time doing medical research and met a mentor who became my friend — Donato Alarcón-Segovia, M.D. (I '64, RHEU '65), who received the Mayo Clinic Distinguished Alumni Award in 1999. He convinced me to come to Mayo as a postdoctoral research fellow.

How does Mayo Clinic influence your practice?

When I was at Mayo, my family was

building a clinic in Puebla, Mexico. We reproduced the Mayo physicians' offices in our clinic. We are heavily involved in patient care, teaching and research, following the Mayo system — excellence in private practice health care.

One of my main goals at Mayo was to get acquainted with bone marrow transplantation (BMT). I quickly learned that I was not going to be able to reproduce the Mayo BMT system and elected to start a BMT program according to the reality of my country and other developing countries, but with the main objectives of the Mayo program. With our “Mexican method” of BMT, we have grafted more than 500 patients who never would have afforded conventional BMT.

What valuable lesson did you learn at Mayo Clinic?

Learn the best and adapt it to your reality.

What do you do in your spare time?

I enjoy traveling. I read nonmedical literature and have engaged in vintage car restoration.

What would people be surprised to know about you?

I belong to a four-generation family of physicians — my grandfather, father, uncle, brother, son and nephew. Members of two generations have been trained at Mayo Clinic in Rochester — my brother, Alejandro; my son, Guillermo, and me. Mayo has influenced not only our medical practice in our country but also our families. My father, my son and I are hematologists working together in our family institution, Clínica Ruiz. ■

Mayo Update

Board of Trustees News

At its quarterly meeting in August, the Mayo Clinic Board of Trustees named a new Mayo Clinic vice president and chief executive officer of Mayo Clinic's campus in Jacksonville, Florida, and recognized newly named professors.

New CEO for Mayo Clinic Florida

Gianrico Farrugia, M.D. (I '91, GI '94), Carlson and Nelson Endowed Director, Center for Individualized Medicine, will assume the role of vice president and chief executive officer of Mayo Clinic in Florida on Jan. 1, 2015, succeeding William Rupp, M.D. (ONC '08), who is retiring.

Dr. Farrugia has been with Mayo Clinic for more than 26 years as a physician in the Division of Gastroenterology and Hepatology and Division of Physiology and Biomedical Engineering at Mayo Clinic in Rochester. He is a professor of medicine, physiology and biomedical engineering.

"Dr. Farrugia is a physician-leader who brings to this important role a deep commitment to Mayo's values, mission and strategic vision, along with a passion to lead and equip teams to reach more patients and strengthen Mayo Clinic's position as a global health care leader," says John Noseworthy, M.D. (N '90), Mayo Clinic president and chief executive officer. "He also has a strong commitment to continuing Dr. Rupp's legacy of involvement and leadership in the Jacksonville community."

Named professors

Michael Brodsky, M.D. (OPH '07)
Department of Neurology
Department of Ophthalmology
Mayo Clinic Rochester
Knights Templar Eye Foundation, Inc.
Professorship in Ophthalmology Research

Douglas Husmann, Ph.D. (U '91)
Department of Urology
Mayo Clinic Rochester
Dr. Anson L. Clark Professor of Urology

Kerry Olsen, M.D. (MMS '76, ENT '81)
Chair, Division of Head and Neck Surgery
Department of Otolaryngology
Mayo Clinic Rochester
Joseph I. and Barbara Ashkins Professor of Surgery

Ulrich Specks, M.D. (I '87, THD '90)
Chair, Division of Pulmonary and Critical Care Medicine
Department of Internal Medicine
Connor Group Professor of Thoracic Diseases Honoring Claude Deschamps, M.D. and Eric S. Edell, M.D.



Michael Brodsky, M.D.



Douglas Husmann, Ph.D.



Kerry Olsen, M.D.



Ulrich Specks, M.D.

A TRANSFORMATIVE GIFT Join the legacy of alumni philanthropy

Dr. William Worrall Mayo's vision for a medical practice 150 years ago came to fruition through his work and the dedication of his sons. In 1919, Dr. William J. Mayo and Dr. Charles H. Mayo gave the assets of Mayo's private medical practice and a significant amount of their personal savings to create a not-for-profit medical organization. This transformative philanthropic gift sparked the ability for Mayo Clinic to serve as a leader in patient care, education and research. Today's medical advances are built on that legacy and fueled by the expertise of Mayo staff and generosity of benefactors. Mayo alumni are invited to spearhead these efforts by investing a portion of their estates in the ongoing work of Mayo Clinic. Contact the Department of Development, 800-297-1185, to help advance this shared legacy of putting patients' needs at the center of everything we do.

See page 13 for stories about alumni philanthropy.

Obituaries

Former Alumni Association president dies

T. Paul O'Donovan, M.D. (I '66, CV '67), president of the Mayo Clinic Alumni Association from 2003 to 2005, died Sept. 26, 2014, at his home in Chicago, surrounded by his children.

Dr. O'Donovan graduated from medical school at University College Cork in Cork, Ireland, and completed a residency at Mayo Clinic in Rochester. He was a staff member at Mayo Clinic from 1967 to 1976. He then joined the staff at Little Company of Mary Hospital near Chicago and formed a private practice. He served on the medical and teaching staff of Northwestern Memorial Hospital and Rush Presbyterian St. Luke's Hospital.



T. Paul O'Donovan, M.D.

Eugene Ackerman, Ph.D. (BPHY '60), died Sept. 25, 2014.

Gordon Backer, M.D. (OPH '63), died Oct. 2, 2014.

James Walker Butin, M.D. (I '52), died Aug. 7, 2014.

Thomas Byrne Jr., M.D. (OBG '64), died Aug. 26, 2014.

Allan Gould Jr., M.D. (ANES '58), died Oct. 14, 2014.

Mavis Kelsey, M.D. (I '47), died Nov. 12, 2013.

Raoul Kunert, M.D. (PATH '72), died Oct. 24, 2014.

Germán Peña-Quiñones, M.D. (NS '73), died June 16, 2014.

Masood Rehmani, M.D. (P '81, CAP '82), died Aug. 21, 2014.

L. Emmerson Ward, M.D. (I '50), died Oct. 17, 2014.

Complete obituaries and the Update section, with alumni and staff news, are available on the Mayo Clinic Alumni Association website, alumniassociation.mayo.edu/people/obituaries/.



Mayo Alumni German Speaking Chapter annual scientific meeting

June 26–28, 2015 | Mülheim an der Ruhr | North Rhine-Westfalia, Germany

For information about the meeting and the annual Rudolf-Juchems-Wissenschaftspreis science award for young scientists and clinicians, contact Juergen Kiwit, M.D., Ph.D. (NS '91), secretary, Mayo Alumni German Speaking Chapter: juergen.kiwit@helios-kliniken.de.

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Mayowood Chrysanthemum Show harks back to 1920s

Mayowood, the historic home of Charles H. Mayo, M.D., reopened for public tours in October during Heritage Days after an extensive renovation. The occasion was marked with a return to a beloved tradition — the Mayowood Chrysanthemum Show. This tradition began in 1922, with Dr. Charlie and his wife, Edith Graham Mayo, hosting the show in the former Mayowood Greenhouses. In 1923, the show featured 60,000 chrysanthemums and attracted 14,000 guests.

In honor of the 150th anniversary of Mayo Clinic, the 2014 Mayowood Chrysanthemum Show featured 1,450 plants throughout the mansion and gardens.

