

UTAHMED

THE ALUMNI MAGAZINE FOR THE SPENCER FOX ECCLES SCHOOL OF MEDICINE
SUMMER 2022



INTRODUCING THE Spencer Fox Eccles School of Medicine.

How five decades of visionary leadership culminated with
a gift to transform the future of health.

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VOL 3 // 2022

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CARLO RICCI

KIM RAFF



“THE NEWLY NAMED SPENCER FOX ECCLES SCHOOL OF MEDICINE WILL CEMENT THE UNIVERSITY OF UTAH’S POSITION AS THE PREMIER LOCATION IN THE REGION FOR MEDICAL EDUCATION, CARE, AND CRITICAL RESEARCH, FORTIFYING THE U’S HEALTH SYSTEM AS ONE OF THE BEST IN THE NATION.”

– TAYLOR R. RANDALL
President, University of Utah

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LETTER FROM THE DEAN OF THE SPENCER FOX ECCLES SCHOOL OF MEDICINE

A Name to Celebrate Our History and Define Our Future

Introducing the Spencer Fox Eccles School of Medicine.

ON JUNE 9 OF LAST YEAR, PRESIDENT Emerita Ruth V. Watkins, Utah Governor Spencer Cox, and I announced a landmark gift of \$110 million for the University of Utah School of Medicine from the George S. and Dolores Doré Eccles Foundation and the Nora Eccles Treadwell Foundation.

This momentous act of generosity is singular for its scope and size, but it is not in isolation. For decades, the Eccles foundations have offered visionary leadership and support that has indisputably transformed our health sciences—and indeed our entire university—into the center of excellence it is today.

In honor of those foundational, multi-generational gifts, we announced that our school will bear a new name: The Spencer Fox Eccles School of Medicine at University of Utah.

The journey to this moment began 50 years ago when we opened the doors to the Spencer S. Eccles Health Sciences Library, made possible by the elder Eccles and family. A decade later, George S. Eccles led the \$10 million campaign to construct University of Utah Hospital. These gifts launched an era of unprecedented investment in the University of Utah. Over the last five decades, hundreds of philanthropic projects have gone to support libraries, hospitals, research centers, professorships, scholarships, and much more. The names George, Dolores, Nora, Emma, Marriner, Spencer, and Cleone are familiar to every person who benefits from the buildings, spaces, and programs that would either not exist or function as they do without their philanthropic support. The Eccles have come to be identified with healing, discovery, compassion, excellence, and gratitude.

Over the decades, medical education has advanced significantly as new discoveries and technologies have emerged. At the same time, there is a growing need for quality health care. The rapid population growth of our state means that we need more physicians and advanced practitioners, particularly in rural areas. We face startling new health challenges, such as the COVID-19 pandemic, which has made the need for trained health care professionals more evident than ever.

The Eccles foundations undertand this, and decided to address these challenges with bold action. When we articulated our plans, Spencer Eccles returned to tell us that he thought we could be bolder. The number of \$110 million was more than what the university had contemplated. It represents Spence's humility and his legacy of leadership at First Security Bank of "Giving 110%."

Their gift includes \$40 million for the medical school endowment, which will enrich student scholarships, recruit highest-caliber faculty, and innovate medical education programs; \$40 million for research, focused on cardiovascular science and heart disease; and \$30 million for our new, state-of-the-art School of Medicine building. These resources will allow the School of Medicine to develop innovations in health care delivery (especially for rural and underserved populations), advance teaching models and timelines, and, eventually, make future increases in the size of the medical school class possible.

You need only to peruse this issue of UtahMed to see a glimpse of our history and our exciting future. Learn how the Spencer S. Eccles Health Sciences Library transformed our education (p. 12) and celebrate five decades of our nationally ranked Physician Assistant Program (p. 30). Discover how our teams are working with COVID patients with lasting symptoms (p. 24). See how you—our distinguished graduates—pursue their passions in medicine and beyond (p. 41). Meet the remarkable students who will transform the future of health (pp. 7, 18).

Then learn about the remarkable man who has helped to unlock our next chapter—Spencer Fox Eccles (p. 34).

This is more than a new name. This moment represents a turning point for the school. We will pursue disease-breaking research that will improve care and educate new generations of health care professionals. In turn, they will extend life expectancy, restore health, and enhance quality of life for Utahns and citizens throughout the Mountain West, nation, and world.

The Spencer Fox Eccles School of Medicine at University of Utah will join the ranks of the nation's pre-eminent named institutions.

We will not just adapt to the future of medicine—we will define it.

MICHAEL L. GOOD, MD
Dean, Spencer Fox Eccles School of Medicine
CEO, University of Utah Health
Senior vice president of health sciences



On December 15, 2020, University of Utah Health distributed the first COVID-19 vaccines in the state of Utah. The shots were coordinated by the U of U Health's Vaccine Planning Committee, an all-star group assembled the month before to plan for receipt, storage, administration, reporting, and follow-up of a vaccine.



“Leaders from all areas of our system came together to put together a safe and effective plan for this day. It was thrilling to see it all come together to give such a sense of relief and hope.”

—RICHARD R. ORLANDI, MD, Professor, Otolaryngology – Head and Neck Surgery, Associate Chief Medical Officer, Ambulatory Health



“I don’t think I slept the night before. I kept checking the tracking number on my phone while holding my 5-month-old, who was also up most of the night. The package went from Kalamazoo, Michigan, to Louisville, Kentucky, by truck, and then flown to Salt Lake City. It seemed like it was in the air for an eternity. When I saw the package arrive in Salt Lake City, I raced to the hospital. We received the package an hour later and I was caught off-guard on how unremarkable and small it was.”

—KAVISH CHOUDHARY, PharmD, MS, Senior Director, Pharmacy

JEN PILGREEN AND CHARLIE EHLENT



“The sense of relief, emotion, and joy by everyone involved (both those giving and receiving the shots) was palpable. It was truly one of the most amazing experiences I have had the opportunity to be part of in my career.”

—KIM PACHECO, Director of Patient Access



The Pulse

○ INITIATIVE

Waiting No More

Medical student Olaoluwa Omotowa is raising awareness of social determinants of health.

OLAOLUWA OMOTOWA ISN'T WAITING UNTIL HE IS A PHYSICIAN to address disparities in health care.

In the summer of 2020, Omotowa and other Spencer Fox Eccles School of Medicine students came together to write a resolution declaring racism as a public health crisis at the University of Utah. The resolution was unanimously passed by both the assembly and senate of the Associated Students of the University of Utah (ASUU).

Since then, public awareness of the issue has accelerated in Utah. In January 2021, the state's four major health care systems—University of Utah Health, Intermountain Healthcare, MountainStar Healthcare, and Stewart Healthcare—issued a joint statement that systemic racism is a public health crisis.

Later in 2021, a bill by Rep. Sandra Hollins declaring racism a “moral and public health crisis” was brought to the floor of the Utah legislature, and racism was declared a public health crisis by the Salt Lake City Council and Mayor Erin Mendenhall.

“I had zero expectations of the direction that things were going to go,” said Omotowa, a second-year medical student. “Everything that has happened since the resolution, and Dr. Good stating that he was going to allocate funds for the Scholarship (for Underrepresented Populations), has been a pleasant surprise.”

Omotowa is originally from Idaho Falls, Idaho, where his father is a chemist and his mother teaches at Idaho State University.

He graduated from the U in 2015 with a Bachelor of Science in health, society, and policy, his interest in public health having been awakened by a medical anthropology class. Following a summer 2015 internship with the US Department of Health and Human Services, he earned his Master of Public Health with a focus on epidemiology and biostatistics from Boston University.

“Social determinants of health are what’s really pulled me in (to this field of study) and kept me there—especially learning how much somebody’s zip code affects them,” Omotowa said. “It’s as much, if not more, than their genetic code.”

Omotowa returned to Utah in 2020 to attend the Spencer Fox Eccles School of Medicine. His education has been supported by scholarships from the Dr. John C. and Bliss L. Hubbard Foundation Scholarship Fund and the Richard K. and Maria A. Obyn Memorial Scholarship.

“A scholarship is financial security,” he said. “When you already have a million things to stress about, not having to worry about finances makes a tangible difference.”

KIM RAFF



O WELLNESS

How Healthy is Your Community?

U partners with Intermountain Healthcare to create population health program.



THERE IS A RISING UNDERSTANDING that the social determinants of health—conditions in the places where people live, learn, work, and play—can have a substantial impact on an individual’s physical and mental well-being.

A new medical education program, made possible by a partnership between University of Utah and Intermountain Healthcare, will train the next generation of physicians in population health—which focuses on keeping people in communities healthy and preemptively addressing the cause of illnesses, rather than just treating people once they are sick. With looming physician shortages—the U.S. Department of Health and Human Services estimates Utah will experience a shortage of 600 primary care physicians by 2025—a holistic approach to healthcare can’t come soon enough.

Intermountain is investing \$50 million over multiple years in the initiative, which will help train and prepare physicians in this emerging discipline.

“I’m proud that these two organizations are leading the nation in developing a cadre of physicians specifically prepared to deliver this innovative approach to communities,” said Marc Harrison, MD, president and CEO of Intermountain Healthcare. “This will help develop the medical providers of the future who are focused on wellness rather than illness.”

The newly renamed U of U Intermountain Healthcare Department of Population Health Sciences will serve as the academic home for the initiative. Intermountain chose to partner with the Spencer Fox Eccles School of Medicine based on its national reputation in population health and strength in developing and applying robust research methods to optimize population health outcomes.

“This program will change the way doctors think about providing medical care,” said Angie Fagerlin, PhD, chair of the Department of Population Health Sciences at the University of Utah. “They will better understand how to identify barriers to good health and how to help patients gain better health.”

Specifically, the investment from Intermountain will:

>> Establish the University of Utah Intermountain Healthcare Population Health Student Scholars Program at the Spencer Fox Eccles School of Medicine.

>> Provide tuition support for medical students accepted into the program. There will be 10 students in the entering class of 2021 and 2022 and 25 students in each entering class thereafter.

>> Provide an opportunity for the university to seek legislative and accreditation approvals to increase the number of medical students in each class.

>> Support development of a population health medical education curriculum that will serve as a model for the nation.

>> Create three endowed professorships—the Intermountain Population Health Sciences Professors, and four Intermountain Population Health Endowed Chairs—in the Spencer Fox Eccles School of Medicine.

Through this innovative model, Utahns will benefit from the expertise of population health-minded physicians. After physician scholars graduate and subsequently complete their residency training—which is often carried out elsewhere in the country—they are committed to returning as a practitioner at Intermountain Healthcare or a partner organization in a population health discipline, including: family medicine, general surgery, internal medicine, obstetrics/gynecology, pediatrics, psychiatry, and others.

[NEWS & NOTES]

TAYLOR R. RANDALL NAMED 17TH PRESIDENT OF UNIVERSITY OF UTAH

In August, Taylor R. Randall was selected as the 17th president of the University of Utah by the Utah Board of Higher Education. Randall, the dean of the David Eccles School of Business from 2009-21, succeeded Michael L. Good, who served as interim president following the departure of Ruth Watkins. Randall graduated from Utah with honors in accounting before earning his MBA and PhD in operations and information management from the Wharton School of Business at the University of Pennsylvania. Randall is the first University of Utah president who is a graduate of the university since Alfred C. Emery (1971-73).



UAIR, A SMALLER ASTHMA INHALER, WINS BENCH TO BEDSIDE

Teryn Holeman and Brian Parker, both students at the Spencer Fox Eccles School of Medicine, were the Grand Prize winners of the 2021 Bench to Bedside Competition. The two students created uAir, an inhaler that is roughly the size of a car fob instead of traditional palm-sized inhalers. uAir is a straight and vertical dispenser, different than the traditional inhaler shape. The uAir team is using the \$25,000 grand prize to further refine the inhaler. This includes developing a custom miniaturized metered dose, valve testing, and patent filing.

U OF U HEALTH RANKED IN THE TOP 10 FOR 12TH STRAIGHT YEAR

For the 12th consecutive year, University of Utah Health ranks in the top 10 nationally of the prestigious 2021 Vizient Bernard A. Birnbaum, MD, Quality Leadership Award. This year, 565 hospitals from across the country participated in the Vizient Quality and Accountability Ranking. The ranking measured performance on the quality of patient care, safety, mortality, effectiveness, efficiency, patient centeredness, and equity. In addition to its placement on the top 10 list, U of U Health also ranked second nationally in Vizient’s Ambulatory Care Quality and Accountability Awards. This is the seventh year in a row U of U Health has ranked in the top five nationally for its ambulatory quality of care.

As interim president, Dr. Good oversaw several significant initiatives involving the University of Utah. Among other responsibilities, he represented the U in the selection of a new Pac-12 Conference commissioner, worked with U athletics director Mark Harlan on Name, Image, and Likeness policies, and regularly interacted with the Utah Board of Higher Education as it finalized and approved a five-year strategic plan.



○ LEADERSHIP

Maintaining Momentum

Michael L. Good, MD, reflects on his experiences as interim university president.

MICHAEL L. GOOD, MD, SERVED as the University of Utah’s interim president in the spring and summer of 2021, between the departure of former president Ruth Watkins and the appointment of new president Taylor R. Randall. UtahMed sat down with Good to talk about that experience:

WHAT WERE SOME SIMILARITIES BETWEEN HEADING A UNIVERSITY AND AN ACADEMIC HEALTH CARE SYSTEM?
The University of Utah and U of U Health are both large, complex, and most importantly, mission-driven

organizations. The University makes our health system stronger, and U of U Health makes our university stronger. There are more synergies and similarities than differences. Both the U and U of U Health pursue excellence in education, research, and service to community. Both of our accomplishments are based on the achievements of our faculty and their teams, and our learners.

WHAT WERE THE BIGGEST DIFFERENCES?
While similarities clearly outnumber, there are differences between the broader University and the academic health care system. For U of U Health, our mission of providing world-class patient care is one example. While serving as interim president, three subject areas were

particularly active during the spring and summer of 2021. First and foremost was safety; we were determined to stay focused on advancing our campus and student safety programs, and now also keeping the campus community safe with respect to the coronavirus pandemic. The second area was athletics. As interim president, I represented the University of Utah in selecting our new PAC-12 commissioner. We have an exceptional athletic director in Mark Harlan, and Mark made sure we were lined up correctly in some very important and complex matters, including the implementation of Name, Image, and Likeness (NIL) policies at our university, the shifting Power Five conference alignments, and ongoing discussions about expansion of the college football playoff system. Finally, it was a busy time with the Utah Board of Higher Education, which finalized and approved

a five-year strategic plan and began to implement performance goals for each of the universities across our state.

WELLNESS AND RESILIENCY HAVE BEEN AREAS OF EMPHASIS DURING THE LAST TWO YEARS AT U OF U HEALTH. HOW DID YOU MANAGE YOUR WELL-BEING DURING YOUR TIME AS INTERIM PRESIDENT?
As I have done throughout my career, I continued the personal programs that I use to keep myself healthy—physically and mentally—while serving as interim president. I’ve given these important strategies clever names, including “vacation prescriptions,” “Noah’s Ark,” “electronic blackouts,” “walk the yellow line,” “managing infinite work,” and several others; perhaps in the future we can explore these in depth. Maintaining wellness and resiliency is both personal and communal.

○ RESEARCH

Benning Chairs Named

Rachel Hess, MD, Louisa Stark, PhD, and Martin Tristani-Firouzi, MD, bring the total of Benning Chairs to 15.

RACHEL HESS IS CHIEF OF THE Division of Health System Innovation and Research and co-principal investigator of the Utah Clinical and Translational Science Institute (CTSI). Her research focuses on increasing efficiency of health care delivery while ensuring it meets the physical, mental, and well-being needs of patients. She has a particular interest in these issues around the menopausal transition. Her work has advanced the science of identifying and measuring factors within the health care setting that impact care in order to understand and address both contributors and detractors of quality of life.

Louisa Stark is a professor of human genetics and has been director of the Genetic Science Learning Center (GSLC) since 2001, growing the center to a world-renowned organization with a multi-million-dollar budget. The GSLC websites, Learn.Genetics and Teach.Genetics, are among the world’s most widely used online science education resources. Stark and her team employ unique and rigorous methodologies, including randomized controlled trials, to develop effective educational modules for middle and high school students and the public. Currently, Stark is principal investigator on a large \$8 million grant from the National Institutes of Health to develop educational resources for the public as part of the national All of Us precision medicine research program.

As a professor of pediatrics and practicing pediatric cardiologist, Martin Tristani-Firouzi aims to understand the genomic determinants of cardiovascular disease in order to improve treatments and patient outcomes. By assembling multi-disciplinary research teams with expertise in cutting-edge bioinformatics, genomics, and population health, his research groups are making headway on tough problems, including congenital heart disease and sudden cardiac death in the young. His research has been cited nearly 10,000 times since 2010. Tristani-Firouzi is also a dedicated mentor to trainees from the Latinx community both in

Hess, Stark, and Tristani-Firouzi were honored during an event in September 2021.

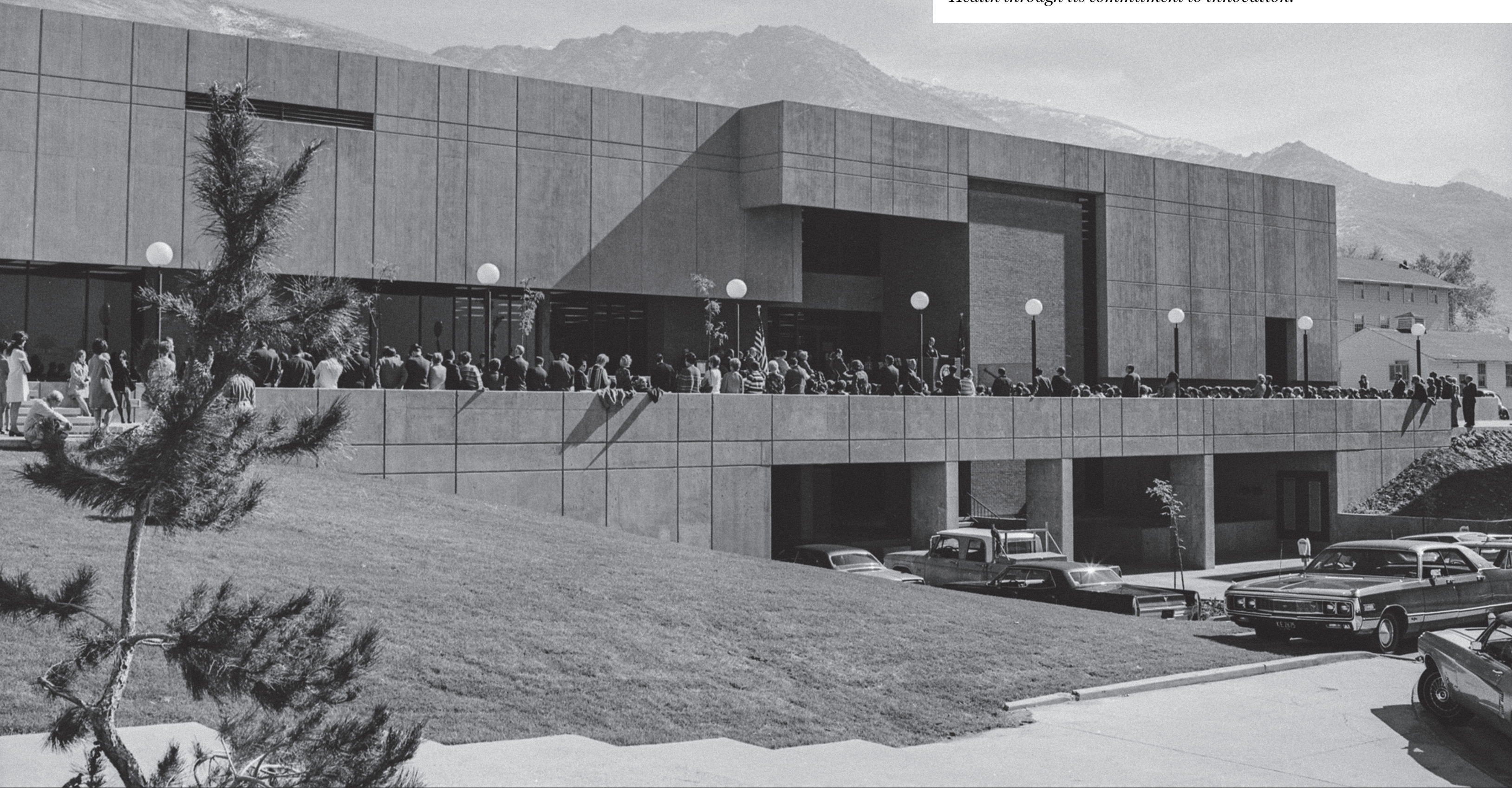


his own lab and in institutional training programs and is a primary provider of pediatric cardiology care to the Latinx community through the Mountain West. The Benning chairs were established in August 2005 with a \$22.5 million bequest from the late Arthur E. Benning, former president and chairman of the board of Amalgamated Sugar, in memory of his parents.

○ INNOVATION IN LEARNING

Uncommon Knowledge

Launched 50 years ago with a gift, the Spencer S. Eccles Health Sciences Library remains a vital resource for U of U Health through its commitment to innovation.



AT THE SOUTHWEST CORNER OF the Spencer S. Eccles Health Sciences Library, there stands a plane tree. It's no ordinary piece of campus greenery. It was grown from a cutting of the tree under which Hippocrates legendarily taught his students about 2,400 years ago in ancient Greece.

Trimmed from a gift to the United States from Greece, the tree arrived in 1971, the same year the Spencer S. Eccles Health Sciences Library (EHSL) opened. It is an important symbol for the University of Utah Health community—and a core part of the identity of EHSL, whose logo included a leaf for more than 45 years.

"It means a lot to have this amazing tree on our campus," said Heidi Greenberg, EHSL's associate director of operations and logistics. "The tree is a thread that runs through all of health sciences education, to the old tradition when students take the Hippocratic Oath."

In 2021, EHSL celebrated a major milestone—50 years since its dedication, marking the Eccles family's first major gift to the U of U. The power of that gift cannot be overstated.

"The Eccles family's gift elevated the library," said Catherine Soehner, associate dean for research and director of the Eccles Health Sciences Library. "It demonstrated that the library is a critically important component of health sciences education, research, and clinical work."

Throughout its history, EHSL's commitment to innovation has put it ahead of the technological

curve. Building on the library's position of leadership among medical libraries, Soehner and her colleagues work to realize their ambition for the years ahead: becoming the research and education hub of the health sciences at the University of Utah.

FUTURE-FORWARD FROM DAY ONE

EHSL was dedicated on October 4, 1971, as a permanent home for the U of U's medical collections. Priscilla Mayden was the library's first director.

"Her desire was to have all of the biomedical materials in one place for the convenience of students, faculty, and practicing physicians," Soehner said. "That was a major impact of establishing the library."

Mayden and her staff were committed to leveraging technology to benefit the university community. They embraced emerging advances such as the budding computer revolution by frequently collaborating with faculty.

Early on, EHSL opened a Learning Resource Center where students could use computers to assess their skills and use a simulation to practice patient management. By 1975, the library had moved its catalog of health sciences-related government documents to MEDOC, a computerized index.

Ten Apple IIe computers, early models that preceded the Mac, were installed in the media services department in 1983.

"Getting those computers was a huge deal," Greenberg said. "It was the librarians' job to learn how to use them, and then teach everyone else."

Mayden retired and passed the torch to Wayne Peay in 1984. As EHSL director, Peay continued the momentum for bringing new technologies into medical education, replacing the card catalog with an automated library system that used a novel approach



for 1986: connecting to a centralized computer server via telephone.

USHERING LIBRARY SERVICES INTO THE INTERNET AGE

EHSL pushed the state of the art while many in the field chose to remain fixed in place.

By 1994, EHSL became the first medical library in the nation to have its own website, including access to early electronic journals. Two years later, the library developed an online course in navigating the internet, the first of its kind offered for credit in the state of Utah.

"Our predecessors were always on the crest, right before things happened," Soehner said. "They were on the cutting edge of understanding the internet, even though many people thought they were crazy at the time."

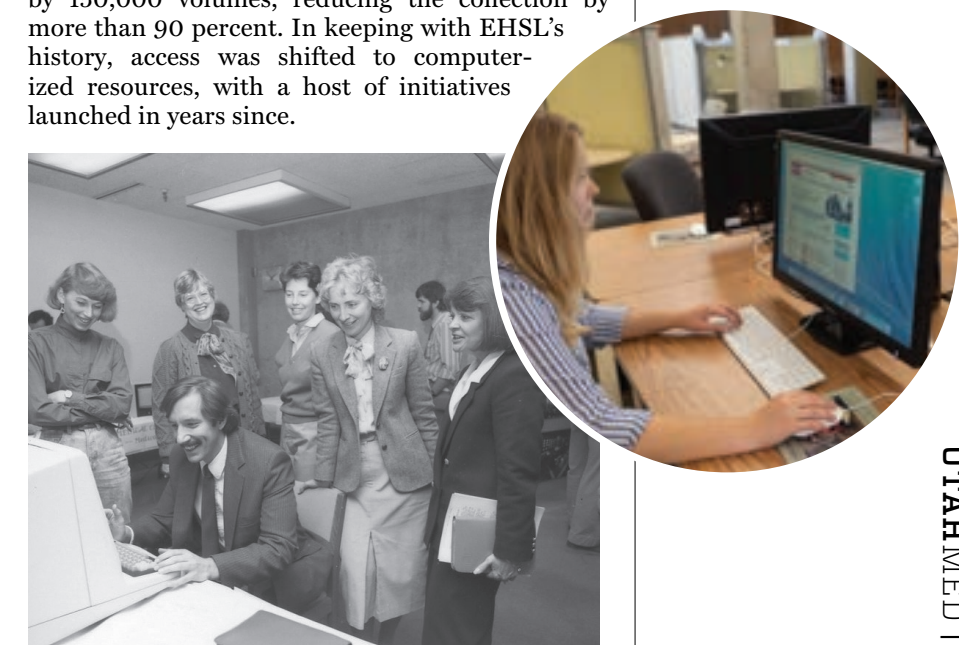
In 2003, a partnership with the North American Neuro-Ophthalmology Society led to the creation of the Neuro-Ophthalmology Virtual Education Library, an online repository of images, videos and other educational media. The accessibility of these materials has enriched curricula in the discipline at U of U Health and beyond. That project continues to this day.

Jean Shipman became EHSL's third director in 2008 and oversaw upgrades to the library building. These included the addition of an information commons with computers.

In response to data showing that usage of print resources had dropped by 75 percent, in 2013 EHSL pared down its collection of print materials

"THEY WERE ON THE CUTTING EDGE OF UNDERSTANDING THE INTERNET, EVEN THOUGH MANY PEOPLE THOUGHT THEY WERE CRAZY AT THE TIME."

by 150,000 volumes, reducing the collection by more than 90 percent. In keeping with EHSL's history, access was shifted to computerized resources, with a host of initiatives launched in years since.



Above, a 1970s-era view of the northeast corner of the library, which housed the U.S. Government documents collection. Bottom left, a demonstration at the 1987 InfoFair, an annual event at the EHSL that showcased the latest computer technology and educated users on computer services, applications, and resources. Bottom right, a student makes use of one of the library's many electronic resources.



Above, Priscilla M. Mayden, Eccles Health Sciences Library director, waters the newly planted Tree of Hippocrates on the southwest corner of the library. At right, Maxwell Wintrobe, MD, talks with students under the tree during the 1970s.



IMAGES COURTESY OF ECCLES HEALTH SCIENCES LIBRARY ARCHIVES

From top to bottom: user experience developer Ben Engel simulates flight with a virtual reality headset, in the XR classroom; with U President James Fletcher looking on, ground is broken for the Spencer S. Eccles Health Sciences Library on November 25, 1969, by his children and widow (from left), Nancy Eccles Hayward, Spencer F. Eccles, and Hope Fox Eccles.



More than a collection of books, EHSL continues to wield technology to meet user needs under the guidance of Soehner, who became director in 2019. Many people think of a library as a place for books, and those still can be found in the library, but she sees the purpose in a broader context.

After all, even the book and the printing press were new technologies once upon a time.

“Libraries today do what libraries have done for centuries, and that is collect the content as well as the platform that it is served up on,” she said. “We buy it once so that everyone can use it. The content has just taken a different shape.”

Today, EHSL manages thousands of subscriptions to ensure the university community has access to the full text of journal articles. U of U School of Dentistry students can practice the procedure for installing implants using virtual reality

goggles at EHSL. Faculty and students can translate certain medical images into physical structures with 3D printing.

EHSL’s excellence has brought it to a place of prominence nationally. Since 2001 it has been a National Library of Medicine–designated regional medical library, facilitating access, education, and funding for medical libraries across nine states.

In 2011, EHSL became the sole national training office for the Network of the National Library of Medicine. With that role, librarians at U of U Health train the trainers, promulgating best practices for information access to medical libraries across the US. Both National Library of Medicine grants were renewed early in 2021 for \$10 million over five years.

“Our librarians are connecting with people across the country,” Soehner said. “We want to be able to

GENEROSITY
COMES
FULL CIRCLE

The June 2021 announcement of a \$110 million gift to establish the Spencer Fox Eccles School of Medicine brought the Eccles Family

full circle in a philanthropic journey at the University of Utah that began with a gift for the medical library in the 1960s.

At the time, Spencer Stoddard Eccles, father of the medical school’s new namesake, was vice chair of the U’s Board of Regents and a key player in the effort to build a medical school and hospital on the U campus. When it opened its doors in 1965, it was state-of-the-art in every way except one: space for a medical library had barely been carved out, and was in a dark, windowless, crowded room

in the basement.

In short order, U representatives that included Regent Reed Brinton and Medical School Dean Ken Castleton approached Spencer S. Eccles to remedy the situation with initial funding for a stand-alone, high-quality health sciences library to match the caliber of the U’s new medical center.

Terminally ill at the time, Spencer S. committed to giving the \$100,000 requested for the library, which the U chose to name in his honor. As construction costs increased, his wife, Hope, and children, Nancy and Spence,

contributed an additional \$150,000 in his memory as he passed away prior to the library’s groundbreaking and its ultimate completion in 1971.

Now—50 years later—the Spencer S. Eccles Health Sciences Library continues to grow, innovate, and lead the way in serving the medical community in Utah and nationally. And the original medical school building nearby is about to make way for the U’s extraordinary new, technologically advanced home for the Spencer Fox Eccles School of Medicine.

“THE LIBRARY IS DOING, AND WILL DO, WHAT IT HAS ALWAYS DONE, WHICH IS TO CURATE MEDICAL INFORMATION USING THE LATEST TECHNOLOGY, IN ORDER TO EDUCATE PROFESSIONALS AND ADVANCE THE HEALTH OF PEOPLE IN OUR REGION.”

transform health care by making sure that folks who otherwise lack access have access to a librarian we’ve educated.”

VISION FOR WHAT LIES AHEAD

The EHSL team refuses to rest on its laurels.

Instead, they have created a plan that expands the library’s impact. With the new building for the recently renamed Spencer Fox Eccles School of Medicine at the U of U, they will have the benefit of additional space opening up for resources and services.

“The library is doing, and will do, what it has always done,” Soehner said, “which is to curate medical information using the latest technology, in order to educate professionals and advance the health of people in our region.”

One of her team’s goals is to employ their resources and information-science acumen, in collaboration with bioinformatics experts, to inform research questions.

“That’s part of how you get major research grants,” she said. “By completing a systematic review, you can say, ‘Here’s what is known, but here are places where research is still needed.’”

The EHSL team also aims to help expand research into the history of medicine. In an early step, they dipped into the library’s extensive collection of materials to create an exhibit about the importance of vaccines, including a vintage iron lung.

“Reminding people of our history is an important aspect of what the library is about,” Soehner said. “We want them to appreciate that the polio vaccine has kept them out of this iron lung.”

The third, longer-term element of EHSL’s future vision is helping to transform rural health care, with a focus on evidence-based medicine.

Today, U of U Health alumni and others who serve small, outlying communities often lack access to the medical literature that could be pivotal to informing their treatment plans. Soehner and her colleagues want to bridge that gap by arranging for broad, regional access to medical publications as well as the library professionals who can quickly find relevant papers.

“You need to have the evidence in order to provide optimal treatment,” she said. “You need to have data to support your decision making and treatment options. That data lives in journal articles and books, making the library a critical cornerstone of care.”

An Emerson Respirator—commonly referred to as an “iron lung”—is currently on display in the library’s portrait gallery.



○ THE FUTURE

Ready to Serve

Six members of the incoming Spencer Fox Eccles School of Medicine class of 2021 received a Scholarship in Support of Underrepresented Populations.

PLEASE TELL OUR READERS ABOUT YOUR EXPERIENCES IN SERVING PATIENTS FROM UNDERREPRESENTED POPULATIONS.

EUNICE BAJOMO: From a very young age, I would regularly volunteer with my church in Lagos to provide medical outreach to marginalized populations that had no access to health care. This experience created a deep desire to pursue a career in the medical field and an interest in helping those that were underrepresented and underserved.

JASMINE BANNER: As a student at BYU, I co-founded the nonprofit HealthLink Cooperative. We partnered with Care For Life in Beira, Mozambique, to identify three main health care challenges: lack of communication between providers and patients, inefficient record keeping, and inadequate education. While piloting our progressive web application in our villages, I watched the field officer deliver a baby and use a rusty knife to cut the umbilical cord. Even with my limited knowledge I knew this could lead to complications for both the mother and baby. Though we worked to provide basic training and resources in rural villages on the other side of the globe, I realized very similar disparities in health care and education already existed in my own community. Eager to learn more and engage in social justice, I joined Teach For America after college to teach secondary science at a Title 1 school in my hometown.

JOSE GUTIERREZ: Volunteering has brought me closer to people who couldn't afford basic necessities such as food, education, or health care. During my first year as an immigrant in the United States, I was in the exact same position. Therefore, promoting care for disadvantaged families is a professional and personal goal for me. This is a community I am part of, and I aspire to find the tools necessary to be part of the solution. One of my professional goals is setting up a free health clinic where underrepresented individuals can obtain



proper care. My hope is to help bridge the gap between underserved families and health care.

NATHAN IMONIGIE: I am interested in serving disadvantaged communities with prevalent underrepresented populations because my current job as a mental health provider with the majority of my patients being refugees has spurred me towards service in that area. A key motivational factor for this endeavor is the time I spent back home in Nigeria when I was young. I experienced the lack of health resources they had and the obviously dire need for more doctors and medical facilities.

MORONI LOPEZ: When we immigrated from Mexico to Salt Lake, our family couldn't afford insurance. Fortunately, when I fell ill, I was able to receive care at the Fourth Street Clinic in Salt Lake City. The vulnerability of that experience and being a part of a marginalized community has driven me to be an advocate for underrepresented communities in health care. I have dedicated myself to hours of service to communities whose voices are often undermined and I hope to continue, as a future physician, to serve those that are underrepresented.

RAQUEL MAYNEZ: As the daughter of Mexican immigrants, I've always sought out positions that enable me to assist others from disadvantaged and immigrant

communities. As a volunteer for the International Rescue Committee, I tutored refugee youth and helped those seeking assistance in applying for residency, citizenship, family reunification, and more. I have also volunteered with the Volunteers of America, helping mentor youth of color in the community who have experienced, or are at risk of experiencing, homelessness.

WHAT DOES THIS SCHOLARSHIP MEAN TO YOU?

BAJOMO: I will be the first person in both my immediate and extended family to attend medical school in the United States. This is a huge privilege that I do not take for granted. Without scholarship patrons willing to support medical education, underrepresented students such as myself would be unable to pursue advanced medical degrees.

BANNER: Ultimately I will have more control of my time and can invest it into my passions, aligning my actions with my values, rather than focusing on paying back student loans. I believe as a physician my voice as an educator will have more reach. I look forward to continued service in underrepresented communities to mentor students, provide equitable health care, and advocate for my patients.

GUTIERREZ: This scholarship is further confirmation of the commitment of the medical school to supporting

communities that are underrepresented in medicine, and this is something that aligns with my own goals.

IMONIGIE: As a minority medical student, being provided a scholarship that rewards you for your academic merit and your commitment to helping communities in need is an honor. I believe having incentives like these scholarships can motivate an individual to hold a standard of excellence for themselves. This scholarship is the foundation of a promising journey that I will utilize to help those around me and especially those in need. By facilitating in alleviating the financial burden of being a medical student, I can fully focus on what's to come and hopefully inspire other underrepresented students like me to pursue their passion in medicine.

LOPEZ: Financial security is a privilege not often reserved for underrepresented communities. This scholarship means more than just financial support for me and my family. It is an investment in me and my community.

MAYNEZ: I plan to dedicate much of my career to humanitarian causes and organizations so I can provide care to the medically underserved, especially those within the Hispanic community. This scholarship will provide me the financial liberty to pursue my goal.

The Scholarship in Support of Underrepresented Populations will provide a total of 12 four-year scholarships for students who have demonstrated a commitment to advancing the interests of underrepresented communities in medicine.

The recipients for the incoming class of 2021 are (left to right): Jose Gutierrez (Trujillo, Peru), Moroni Lopez (South Jordan, Utah), Jasmine Banner (Aina Haina, Hawaii), Nathan Imongie (Boise, Idaho), Eunice Bajomo (Lagos, Nigeria), Raquel Maynez (Mesa, Arizona).

University of Utah Health CEO Michael Good, MD, earmarked \$1 million to create the scholarship, and University Advancement is actively fundraising to generate an additional \$1 million in support.

For information about the Scholarship in Support of Underrepresented Populations, visit ugive.app.utah.edu/designation/4284 or contact Courtney Garay at 801.635.7274 or courtney.garay@hsc.utah.edu.

DAY IN THE LIFE OF...Marina Knysheva MSI



↑ 11 A.M.
I love studying in a group.
I learn best by speaking through
concepts, so group settings are
the best ways to do that.



↑ 11:30 A.M.
As a medical student, I am always
moving from one room to another,
working on assignments in various
groups. This is an amazing way to learn
more about my classmates while also
building stronger connections.



↑ 12:00 P.M.
Lunch time! I use this time to take a
break from studying. I will usually chat
with friends or listen to music while
enjoying some delicious food.



↑ 1:00 P.M.
I love catching up with friends before
class starts. We usually chat about
weekend plans, hobbies, and always check
in with one another to ensure we are
prioritizing our wellness.



↑ 2 P.M.
I am learning how to do the
head, ear, eyes, nose, and throat
exam. Having the opportunity to
learn these clinical skills early on
in medical school is very exciting.



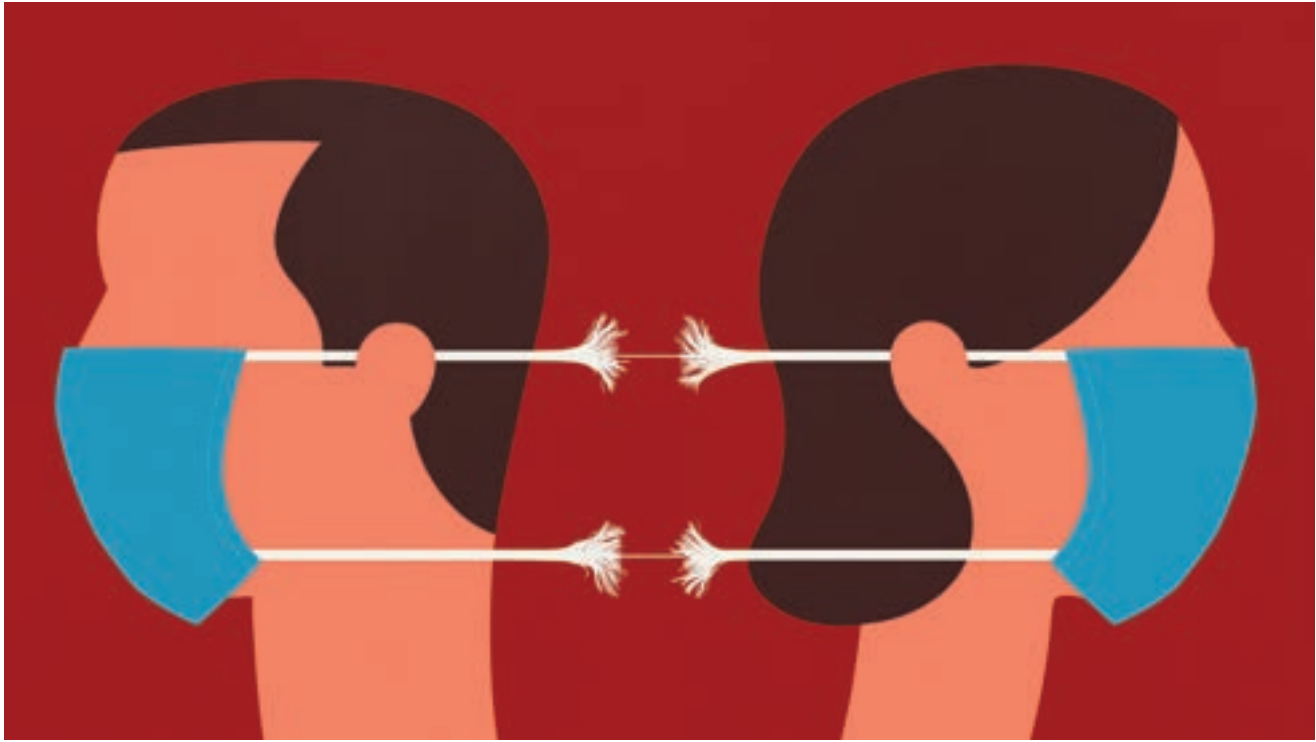
↑ 3:30 P.M.
During my clinical skills class,
I get to practice different exams on
classmates and standardized
patients. Here I am practicing how
to do the head, ear, eyes, nose, and
throat exam on a classmate.



Elde Named
Howard
Hughes
Investigator

Nels Elde, a U of U Health evolutionary geneticist who studies how interactions between viruses and hosts can lead to cellular changes in the host that help prevent infection, has been named a 2021 Howard Hughes Medical Institute (HHMI) investigator. The highly regarded designation is given to a select group of researchers believed to be pushing the bounds of knowledge in biomedical research. An associate professor in the Department of Human Genetics, Elde is among 33 scientists at 21 research institutions nationwide selected as HHMI investigators. The new investigators, selected from among more than 800 applicants, will each receive about \$9 million over the next seven years to delve deeply into unexplored aspects of biology, human health, and disease. The designation is Elde's second prestigious accolade in less than a year. In October 2020, he was awarded a MacArthur Fellowship, popularly known as a "genius grant."

ILLUSTRATION BY SAMUEL KERR



○ INNOVATION IN CARE

Preparing for the Wave

Opening of Huntsman Mental Health Institute comes at a time of a looming national health and substance use crisis related to the COVID-19 pandemic.

IN FEBRUARY 2021, THE KAISER FAMILY FOUNDATION reported that 4 in 10 US adults have reported symptoms of an anxiety or depressive disorder, up from 1 in 10 who reported these symptoms from January to June 2019. Add these troubling statistics to the fact that the state of Utah had a significant existing need for comprehensive mental health care, and the January 2021 dedication of Huntsman Mental Health Institute (HMHI) took on added importance. Utah is among a group of states that has the highest prevalence of mental health disorders in children and adolescents ages 6 to 17 (Kem C. Gardner Policy Institute). The state also has one of the highest prevalences of youth with untreated mental health needs. "Mental health care is one of the leading challenges facing our state and nation, but unfortunately, support for research and care has lagged compared to many other areas of human health," said Mark H. Rapaport, MD, the CEO of HMHI and Chair of the Department of Psychiatry at the Spencer Fox Eccles School of Medicine. "The launching of Huntsman Mental Health Institute, and the extraordinary gift that made it possible, could not have occurred at a more pivotal time." HMHI was established in November 2019, when the university announced a \$150 million commitment from the Huntsman Foundation. The initial focus areas of HMHI include:

>> RESEARCH that expands expertise in translational approaches to better inform brain health,

interdisciplinary collaboration to enhance rapid discovery of underlying causes of mood disorders, suicide, anxiety, and addiction, and developing state-of-the-art diagnostic technology.

>> TRAINING that increases access to care for mental health and substance use disorders by growing the workforce in the state of Utah, and which enhances specialization in women's health, rural and underserved populations, global health, school-based mental health, and neuropsychiatry.

>> CLINICAL SERVICES that grow mental health integration programs with primary care providers, expand the SafeUT Crisis Chat and Tip Line, and expand access to child and teen, young adult, and maternal health programs.

>> COMMUNITY OUTREACH that works to counter discrimination against those with mental health challenges, advocates for mental health policy and expanded care in Utah, and furthers partnerships with community-based organizations.

"Thanks to the incredible generosity of the Huntsman Foundation, the University of Utah is positioned to become a global leader in mental health training, treatment, and care," said Michael Good, CEO of University of Utah Health, Senior Vice President of Health Sciences, and Dean of the Spencer Fox Eccles School of Medicine. "Huntsman Mental Health Institute will dramatically transform how mental health care is perceived, delivered, and studied."

CHARLIE EHLERT

ILLUSTRATIONS BY GREG BETZA

[FACULTY NOTES]



WAYNE SAMUELSON, MD

became Dean of Medical Education. Samuelson was formerly the school's vice dean and previously served as interim dean.



SARA LAMB, MD

became Vice Dean of Education. Lamb was formerly the school's Associate Dean for Curriculum.



CYNTHIA BEST, MBA

became Vice Dean for Finance and Administration. Best was formerly the school's Associate Dean for Finance and Administration.

During the 14 months between the gift announcement and the dedication, HMHI built capacity to advance clinical services, research, training, and community outreach related to mental health. Among the steps HMHI took was hiring Rapaport as its first director. He came to the U from Emory University, where he co-founded the Emory Brain Center. Before Emory, he was professor of psychiatry at both Cedars-Sinai in Los Angeles and the David Geffen School of Medicine at UCLA. "I'm excited about the opportunity afforded to me by the University of Utah and the Huntsman family," Rapaport said. "I see HMHI as a nexus that will bring the campus together, from undergraduate and graduate programs to the health sciences and medical school. We can create a one-of-a-kind model that will help break down the stigma of mental illness."



THERE IN A CRISIS

In May 2021, University of Utah Health and Huntsman Mental Health Institute broke ground on a Mental Health Crisis Care Center on the future site of the HMHI Campus of Hope. The new 24/7 facility will welcome people experiencing a mental health crisis and provide immediate, compassionate care at no cost to individuals. The Mental Health Crisis Care Center will be designed to provide comprehensive crisis care functions.

- > The compassionate evaluation of patients and families in psychiatric distress
- > The capacity to intensively treat and stabilize 30 patients at a time in its 23-hour stabilization center
- > A 24-bed inpatient facility where each patient will have an individual room
- > Personalized case management and individualized recovery plans for all patients receiving any level of care in the facility

The Mental Health Crisis Care Center will be located at 3300 South and 1000 West in South Salt Lake. The center is proposed to open in 2024. —JERILYN STOWE

Photos by
Joe Buglewicz

In it for the Long Haul

By Doug Dollemore

*New University of Utah
Health clinic cares for
COVID-19 patients whose
symptoms refuse to go away.*

Casie Petersen's garden has weeds.

This upsets her. Petersen cares about her garden, and she doesn't want it to have weeds.

It wasn't long ago that her garden was filled with tulips and daffodils. Any intruding plant was quickly uprooted.

But that was before COVID-19, before her body was ravaged by medical conditions and symptoms that spring up like prickly thistles. For Petersen, the aftermath of COVID has been a relentless series of roadblocks.

Life for the 47-year-old Magna resident hasn't been the same since October 3, 2020—the day she first developed COVID symptoms. Since that day Petersen has:

- been hospitalized for a week and had to go to the ER six times in an eight-week span
- been diagnosed with neuralgia, postural orthostatic tachycardia syndrome (POTS), myalgic encephalomyelitis (chronic fatigue syndrome), mast cell activation syndrome, and asthma
- suffered from tinnitus in her right ear
- needed to use supplemental oxygen when sleeping

Petersen continues to have an intermittent cough, body aches, a diminished sense of smell, and difficulty thinking clearly, what she calls "brain fog."

"One of the worst things I deal with is neuropathy," Petersen said. "My hands are so weak now that I can barely grip things from the pain and numbness in them that I get all night."

"I enjoy doing things with my kids and grandkids and I'm unable to do as much now. I hate when my 5-year-old grandson calls asking to come over to play and I can't say yes all of the time like I used to because I'm stuck in bed."

For months, Petersen struggled to get any definitive answers. It wasn't until she was referred to University of Utah Health that Petersen's doctors determined the underlying cause: post-acute sequelae of SARS-CoV-2 infection (PASC), commonly known as "Long Hauler Syndrome."

Petersen was one of the first patients seen at the University of Utah Health COVID-19 Clinic. The comprehensive clinic, which began accepting appointments on July 1, offers medical services to COVID long haulers in the Mountain West—people with one or more symptoms that have persisted for weeks or months after an initial infection. At least 50



percent of people who survive COVID-19 experience a variety of physical and psychological health issues for six months or more after their initial recovery, according to the journal JAMA Network.

"For the first time, I feel as if someone is listening to me and really wants to understand what I'm going through," Petersen said. "I finally feel like there may be hope."

BEYOND THE PHYSICAL SUFFERING, COVID HAS taken an emotional toll on Petersen.

Like so many long haulers, she just wanted someone to listen to her and take her seriously.

Jeanette Brown, MD, PhD, the medical director of the COVID-19 Clinic, said that most long haulers aren't looking for an instant cure; what they really want is a sympathetic ear.

With that in mind, the U of U Health's goal in establishing the clinic was to address the needs of COVID long-haulers "in the best and most effective ways we can in an environment where precise, patient-centered care is paramount," according to Brown, who earned her BS in laboratory science through the Spencer Fox Eccles School of Medicine.

Jeannette Sherman, APRN, with U of U Health's Imaging and Neurosciences Center, referred Petersen to the clinic. Sherman had diagnosed several of Petersen's conditions and was determined to get to the bottom of what was wrong, and pushed for her to get into the COVID-19 Clinic.

During her initial visit, Petersen was evaluated by Brown, a pulmonologist who is an assistant professor of internal medicine at U of U Health.

"She listened and validated what I said instead of just going through the motions like so many of the doctors I had seen outside of the university health care system," Petersen said. "She seemed really concerned and got me appointments with specialists without having me have to do anything."

Brown referred Petersen to two of her U of U Health colleagues, Jeanette E. Voyt, MD, a family practice physician, and Benjamin Steinberg, MD, MHS, an assistant professor of medicine in the Division of Cardiovascular Medicine.

Long haulers experience symptoms ranging from mild to debilitating. They include fatigue, shortness of breath, cough, memory problems, and loss of smell or taste. The COVID-19 Clinic has a deep bench of health-care expertise to address their needs.

Clinic patients are evaluated by an advance practice clinician or a nurse who, in consultation with Brown, coordinate care with physicians and practitioners in more than 10 specialties including dermatology; cardiology; endocrinology; ear, nose, and throat (ENT); infectious disease; nephrology; neurology; psychiatry; pulmonary; physical medicine and rehabilitation; and social work.

"The University of Utah health system has many caring and knowledgeable health professionals in many different areas of specialization," Brown said. "COVID-19 affects several different organ systems and has many symptoms. Under the support of Dr. John Inadomi, department chair of internal medicine, and many others, we have been able to come together to support patient care and research to learn more about COVID-19 effects."

Fear Factor

Strategies to Overcoming COVID-19 Vaccine Hesitancy

Vaccination is the best way to prevent COVID-19 and "Long Hauler Syndrome." Yet, as of December 10, less than 61 percent of the U.S. population was fully vaccinated (according to the CDC).

Many of the holdouts cite a slew of misinformation, including concerns that the vaccines aren't safe or that the potential side effects aren't worth the risk of getting them. Others believe that the risk of getting the disease and its consequences are exaggerated.

Overcoming vaccine hesitancy is critical to dousing the pandemic. Deanna Kepka, PhD, a vaccination expert and director of global and international health in the U of U College of Nursing, recommends evidence-based strategies to bolster vaccine adherence:

OFFER A STRONG RECOMMENDATION: Most patients trust their personal physicians to offer them the best medical advice. So a recommendation from their doctor to get vaccinated will likely carry far more weight than guidance from the government or media.

MAKE IT PART OF THE ROUTINE: Check a patient's vaccination status before seeing them. If they haven't received the COVID-19 vaccine, suggest it as part of an overall health care plan that is a normal part of your practice.

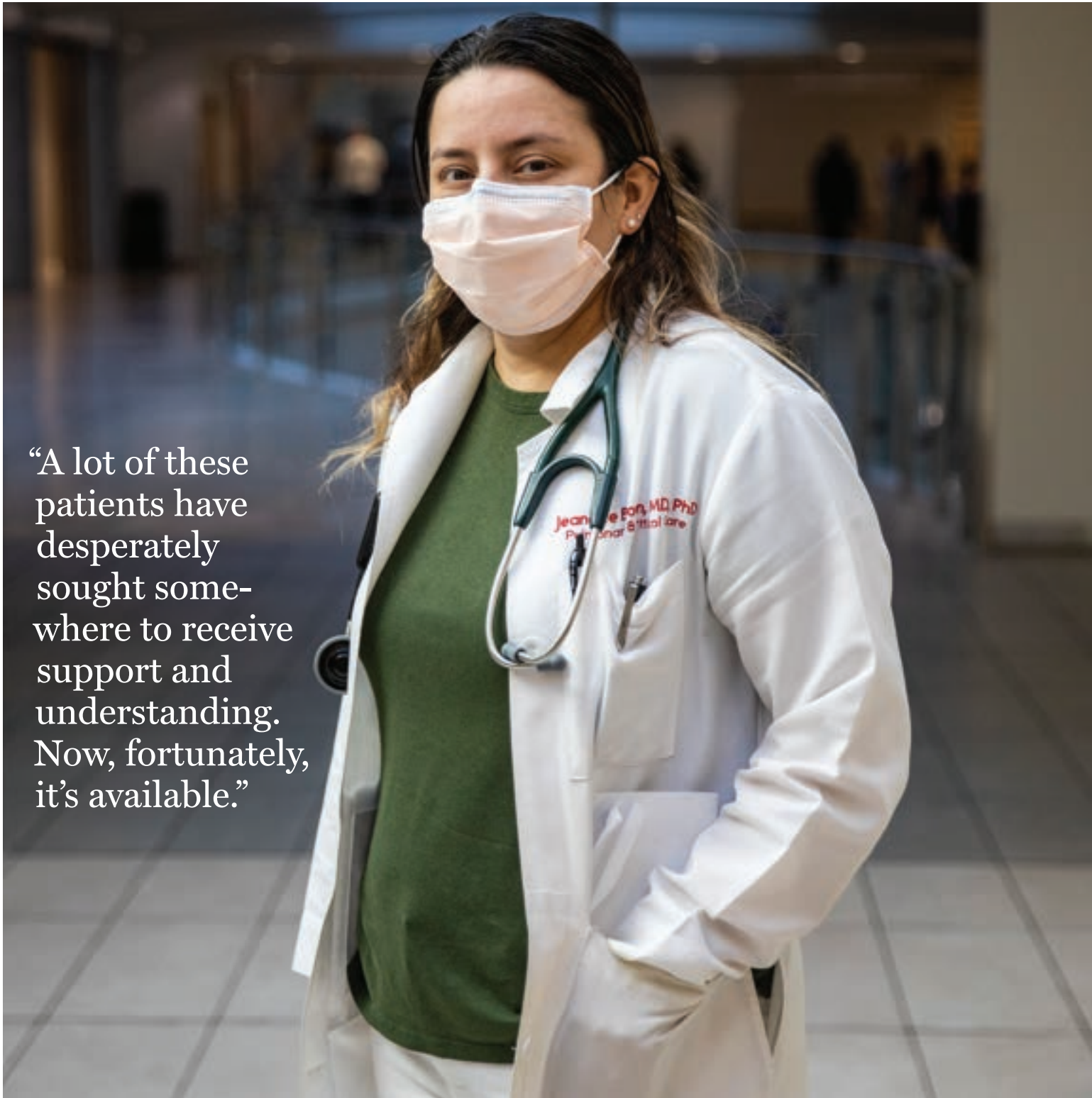
MAKE SURE YOUR STAFF IS ON BOARD: Physicians need to create a pro-vaccine climate for their entire health care practice. Everybody has to have a positive attitude.

Since developing COVID-19 symptoms in October 2020, Petersen has been diagnosed with neuralgia, postural orthostatic tachycardia syndrome (POTS), myalgic encephalomyelitis (chronic fatigue syndrome) mast cell activation syndrome, and asthma.



Exploring the Impact of COVID-19 on Moms and Newborns

Torri D. Metz, MD, MS, a maternal-fetal medicine subspecialist and associate professor at U of U Health, is leading a multi-center effort that seeks answers to questions about the impact of COVID-19 on pregnant women and newborns. Over the next four years, Metz and her colleagues from 12 other medical institutions nationwide involved in the Eunice Kennedy Shriver NICHD Maternal-Fetal Medicine Units (MFMU) Network will track the health of about 1,500 women who had COVID-19 during pregnancy and their children who were born in the following days, weeks, or months. They will also track the health of about 250 women who did not get COVID-19 during pregnancy and their children.



“A lot of these patients have desperately sought somewhere to receive support and understanding. Now, fortunately, it’s available.”

Jeanette Brown, MD, PhD, the medical director of the U of U Health COVID-19 Clinic, said that most long haulers aren't looking for an instant cure; what they really want is a sympathetic ear.

BROWN DESCRIBES THE CLINIC AS A “CARE NAVIGATION center,” designed to ensure that patients receive referrals to subspecialties that directly relate to their lingering symptoms. The goal of the clinic is to add guidance about post-COVID-19 care and not replace primary care providers, which with the patient relationship is important.

At their first appointments, long haulers meet with the clinic team. Each appointment lasts for one hour where many common symptoms of COVID-19 are evaluated. Following these sessions, the team reviews the patient’s symptoms experienced upon initial infection versus what they are experiencing now, identifying what—if anything—can be done to alleviate their long-hauler health problems. The team also aims to sort out what symptoms and conditions might be unrelated to COVID-19.

“Some people, for instance, may have been diagnosed with diabetes or pre-diabetes after COVID,” Brown said. “Whether that was brought on by COVID or if they were already pre-diabetic or diabetic and didn’t know it

is something that we have to seriously consider before referring them for additional long-hauler treatment. The goal is to make sure patients receive the appropriate care for their current issues including diabetes and other conditions that may be related to COVID.”

Coordinating through a single provider helps specialists concentrate on what they can specifically do for a patient as part of an overall care plan.

“I can stay focused on their shortness of breath or other pulmonary issues, knowing that they’re going to get the cardiovascular or neurological care they might need without me having to reach out to my colleagues in those departments,” said Mary Beth Scholand, MD, an associate professor in pulmonary medicine who is part of the clinic. “It’s going to allow us to be really directed and efficient, hopefully leading to better care for these long-term COVID patients.”

THE NEED FOR A DEDICATED LONG-HAULERS CLINIC was identified back in November 2020 during the height of the pre-vaccine pandemic.



Now Open

The opening of the University of Utah Health COVID-19 Clinic has created a bevy of new opportunities for U of U scientists to study the disease’s long-term effects.

“A lot of researchers are interested in this patient population, which I think is great,” said Jeanette Brown, MD, PhD, the medical director of the new clinic. “This is a very altruistic patient population that is embracing the concept of research so that physicians not only can help them, but better understand the long-term effects of the disease process so they can help others as well.”

In its early stages of operation, U of U Health researchers expressed interest in collecting data on various long-hauler conditions including pulmonary and cardiovascular function.

One of the first projects involves research by Kevin Shah, MD, an assistant professor of cardiology who is tracking the development of heart failure, arrhythmia, strokes, transient ischemic attacks, deep vein thrombosis, and pulmonary embolism among clinic patients. He will also monitor patients for non-specific symptoms such as chest pain, shortness of breath, and fatigue.

Projects arising from the clinic are just part of U of U Health’s effort to understand the nature of the novel coronavirus and its impact on society. More than 200 investigators from nearly every discipline have participated in over 400 COVID-19-related projects to study the virus from all angles—from testing and vaccine trials to its impact on vulnerable communities and rates of domestic violence. The effort, supported by \$62 million in external funding and \$1.3 million in university seed grants, has resulted in more than 175 COVID-19 related studies published in peer-reviewed publications. And, their expertise has been cited in more than 500 news stories.

Some intriguing findings making news include the discoveries that COVID-19 causes platelet “hyperactivity,” human amniotic fluid (HAF) can reduce lung inflammation caused by the disease, SARS-CoV2 particles are very sensitive to temperature, and COVID-19 complications are more likely in Black and Native American populations.

“Not only were we seeing a lot of COVID inpatients, but we were also starting to accumulate more and more outpatients whose symptoms were still persisting,” Brown said. “The need for a long haulers clinic was highly evident, and after many months of behind-the-scenes work and the support of institutional leadership, we have finally opened our doors.”

In the 744 days (as of January 6) since the first COVID-19 case was reported in Utah, more than 672,000 incidences of the disease have been confirmed in the state.

In most of those cases, the viral infection ran its course without lingering symptoms. But for some, the effects of the disease persisted. In late August, the American Academy of Physical Medicine and Rehabilitation estimated that approximately 100,000 Utahns had experienced lingering COVID-19 symptoms.

During its first few weeks of operation, the COVID-19 Clinic evaluated about 80 post-acute sequelae of SARS-CoV-2 (PASC) patients a week. The clinic also had about 300 patients on a waiting list in late July, which was lengthening by about 10 to 15 patients a day. The clinic has now seen more than 150 patients, and sees patients four full days a week.

“It’s like Field of Dreams: ‘If you build it, they will come,’ which is good,” Brown said. “A lot of these patients have desperately sought somewhere to receive support and understanding. Now, fortunately, it’s available.”

IN ADDITION TO PATIENT CARE, THE CLINIC IS CONDUCTING research on the long-term effects of COVID-19 in hopes that it will lead to better treatments.

“Right now, treating COVID-19 and its long-term effects is like jumping out of an airplane and trying to make the parachute as you go down,” Brown said. “We still have a lot to learn about it. By gathering evidence and developing clinical pathways that are based on collaborative learning, we can funnel this knowledge into improving all aspects of long hauler care.

“Research studies associated with the clinic will also help us learn more about conditions such as chronic fatigue and other post-viral syndromes. Many patients that are still dealing with COVID-19 symptoms are interested in helping us learn more and helping others that may be suffering.”

The clinic plans to have collaborative educational sessions to help providers learn more about post COVID-19 symptoms. This will provide support for care providers as well, Brown said. These sessions are being planned currently.

She acknowledges, though, that so much about COVID-19 remains a mystery, even for those who work with it every day.

“Like almost every other physician, I’m still trying to figure out what we do and don’t know about COVID-19,” she said. “Unfortunately, my Star Trek tricorder is broken, and my magic wand is on the fritz, so I may not be able to fix everything. But we will do everything we can to provide the best care possible for these patients.”

ASIDE FROM THE CLINIC, PETERSEN IS ALSO PARTICIPATING in a U of U Health post-COVID clinic study that involves working with a health coach. As a result, she is doing strength training and walking about one-half of a mile a day four times a week. While that’s progress, she also knows that she has far to go.

“I just want my life back,” said Petersen, who was a telephone customer service representative prior to COVID-19. “I want to work and do normal, everyday things without having to worry that I might have to spend days in bed afterward. I want to plant flowers in my garden and get rid of all of those weeds.”

The U of U Health COVID-19 Clinic helps coordinate care in 10 specialties, reflecting the wide range of symptoms that affect long haulers.



Understanding Why Some Become Long Haulers

Rachel Hess, MD, co-director of the Utah Clinical and Translational Science Institute (CTSI), is sorting out why some people get “Long Hauler Syndrome.” Hess leads an effort by the Mountain States PASC Consortium, a coalition of five health care systems in Utah, Colorado, and New Mexico. The group will compare COVID-19 patients who have or have had PASC with those who had COVID-19 but did not develop long-term symptoms. The consortium plans to recruit more than 900 adults, 18 and older, for the study, including a diverse set of volunteers from Hispanic, Native American, and rural populations within the Mountain West region.

ILLUSTRATIONS BY
LINCOLN AGNEW

Celebrating **50 YEARS**,
the Utah Physician
Assistant Program
strengthens its mission.

THE GOLD STANDARD

HEALTH EQUITY—THE DESIRE TO extend quality care to people who lack it—is not a new idea. The concept is at the heart of the movement that established the physician assistant as a profession.

Since the field itself was in its infancy, the University of Utah has been at the forefront.

In 2021, the Utah Physician Assistant Program (UPAP) is celebrating its 50th anniversary. The program perennially ranks in the top five nationally among its peers and stands as University of Utah Health's highest-rated graduate program. Its leaders and faculty have helped shape the profession while ensuring that the program provides extraordinary health education and cultivates a growing research enterprise.

"The beauty of it at the very start was, people knew there was a need out there and they wanted to train people to meet that need," said Don Pedersen, PA-C '78, PhD '88, an alumnus and professor emeritus who led the program between 1989 and 2011. "The PA is flexible and adaptable, so it fits hand in glove with what's needed. And I love the way we've developed the program at the U as a real student-centered offering."

Fifty years is a special milestone, a time for celebrating all that's been accomplished—and also for looking ahead at the challenges to come.

"Fifty years is certainly a milestone," said interim division chief Leigh Elrod. "As a student and faculty member you're aware of UPAP's legacy and impact. There is a sense of pride knowing you are now a part of this historic program. It's incumbent upon all of us to ensure UPAP's mission and legacy continue over the next 50 years."

EXTENDING HEALTH CARE ACCESS

The present-day physician assistant position grew from a confluence of factors unique to the 1960s.

In 1959, the US surgeon general publicly warned that there were too few doctors and other medical personnel to meet the nation's health needs.

The mid-'60s saw long-fought struggles for equal treatment finally influence policy in forms such as the Civil Rights Act and the War on Poverty.

Meanwhile, young soldiers returned from Vietnam with skills they acquired as battlefield medics.

At the intersection of widespread unmet medical needs, emerging social consciousness, and an able workforce seeking employment, the first PA program was established at Duke University in 1965—the same year that Medicare and Medicaid were created. The vision was to build on students' experience to train a new brand of health professional able to practice medicine with physician supervision. By 1968, the University of Washington had developed an apprenticeship model called "MEDEX," a combination of "medical" and "extension."

People in Utah, particularly those in rural regions, suffered from lack of access to medical care. With this pressing need, the Utah MEDEX Demonstration Project was launched in 1970 by cardiologist Charles Hilmon Castle, the inaugural chair of what is now the Department of Family and Preventive Medicine. Castle was an Air Force veteran and a protégé of the Duke Physician Assistant Program founder. Castle's co-founder at the U, William Wilson, became the program's first director.

After diligent efforts to garner funding, in 1971 Castle and Wilson welcomed the first class of a dozen students to the Physician Assistant Program's initial iteration, a 15-month certificate program in the Spencer Fox Eccles School of Medicine. A guiding model for the program came from accelerated medical training designed to address a shortage of doctors during World War II.

Former students remember Castle for his pioneering spirit and devotion to patients.

"He was a real groundbreaker," said Dave Keahey, PA-C '83, an adjunct associate professor of physician assistant studies at U of U Health and chief advocacy and research officer for the Physician Assistant Education Association. "Patients loved him, too, because he had an incredible bedside manner and really cared for people."

In the early years of the physician assistant profession in Utah and the Mountain West, word of mouth was a substantial boon to the program. Overworked physicians in far-flung practices took on U of U students as trainees, often hiring them upon graduation.

Finding the physician assistants to be fine partners in delivering health care, they shared the news with their peers. Credit for the success of the program goes, in part, to the early graduates' commitment to serving the underserved.

"The PA was as

much a social movement as a workforce or education movement," said Roderick Hooker, an observer of the field. "It came from the ground up, rather than from the top down, and that was a strength."

A TRAJECTORY OF GROWTH AND EXCELLENCE

Pedersen, the second director of the Utah Physician Assistant Program, was himself a product of the program.

Entering the program with experience serving in the National Guard and Air Force Reserves, as well as a master's degree in health education, he commuted from Idaho to Utah each week as a student and lived in his van on weekdays while pursuing his studies. Pedersen graduated in 1978, then returned to the U the next year as academic coordinator.

In more than 40 years on the faculty, he shaped the program—and the field—in numerous ways.

"He is one of the founding fathers," Virginia Valentin, the program's recently departed chief, said in the fall. "So much of what we still do in the program was developed by Don. He has accomplished a lot, which tells you about his acumen, and yet he is the quietest, kindest, calmest person."

Pedersen has been prolific in his service to the profession as a leader nationally in the Physician Assistant Education Association, the Physician Assistant Foundation, and the Utah Physician Assistant Licensing Board. Founder of the first national peer-reviewed journal concerning PA education, he advanced research in the field, including his own important publications exploring questions related to economics and workforce deployment.

"Don brought scholarship to the profession like no other person has," Hooker said. "A lot of the Utah PA Program's influence is carried by his legacy in research."

Pedersen and his wife, Kathy Pedersen, PA-C '80, MPAS '02, associate professor of physician assistant studies, have increased the global reach of the program and the physician assistant profession. They developed initiatives that have brought U of U Health students to locales including Nepal, Thailand, and Papua New Guinea for rotations. They have also helped export education for physician assistant-like positions to countries around the world, and Don Pedersen has led by example with volunteer international relief work, such as service in Thailand after the 2004 tsunami.

Early in his time as director, Don led an effort that stabilized the Utah Physician Assistant Program's funding. He later successfully advocated that the program grow into a degree-granting graduate offering, with the Master of Physician Assistant Studies degree authorized in 2000 by the Utah State Board of Regents. In 2010, the Division of Physician Assistant Studies was constituted within the Spencer Fox Eccles School of Medicine's Department of Family and Preventive Medicine, with Pedersen as its first chief. Since retiring, he has remained an ardent supporter and trusted adviser.

"Founding division chief, the initial editor of our education journal—Don has been the first at many things," said Jared Spackman, director of the Utah Physician Assistant Program. "A lot of our national stature as a program is related to the fact that Don and Kathy were here for so long."

A CONTINUING COMMITMENT TO SERVING THE UNDERSERVED

Much has changed since the Utah Physician Assistant Program first launched 50 years ago. There are currently more than 125,000 physician assistants working in all states and in every conceivable specialty.



The position encompasses a great deal more specialization and independence compared to its early days. It is also no longer primarily a second career for ex-service members. In the approximately 260 US educational programs, the average age of students has dropped, with women now outnumbering men.

The Utah Physician Assistant Program has likewise grown and adapted. A satellite program, begun in 2018 at Dixie State University, expands the program's reach to southern Utah communities. Graduating classes now approach 70 students across both campuses.

The cumulative impact over the years touches hundreds of thousands of lives today, especially those in underserved communities.

"There are many people—I would say maybe a quarter of all rural geriatric patients, half of all Native Americans and migrant workers in Utah, and one-third of all Utahns—who have never known what it's like to not have a PA in their midst," Hooker said.

Charged with preparing the next generation of compassionate practitioners in a field with surging interest, the leaders of today's Utah Physician Assistant Program still hold the original precepts of the profession as their ideal: the drive to improve quality of health and access to care, with a commitment to the underserved.

To support that goal, there is a focus on placing students in underserved communities during their clinical education, with rotations in rural Utah and the Navajo Nation reservation.

"We want our students to learn about the practice environment, the culture, and the wonderful people on the reservation," Spackman said. "We've had multiple students who ended up working for the Utah Navajo Health System to fulfill those needs."

The program's leaders also take an intentional approach to promoting diversity in the student body, with the goal of matching the diversity in the community.

Back in 2011, Darin Ryujin MPAS '03, associate professor of physician assistant studies, was hired as director of inclusion and diversity, the first appointment of its kind at U of U Health and one of the first among PA programs nationally. The mindset of cultivating diversity permeates the curriculum itself, as well as activities in admission, retention, and the recruitment of preceptors. The program was recently selected for the 2021 Excellence Through Diversity Award, a national award given by the Physician Assistant Education Association.

Uniformly, the educators connected with the Utah Physician Assistant Program identify students as one of its greatest assets.

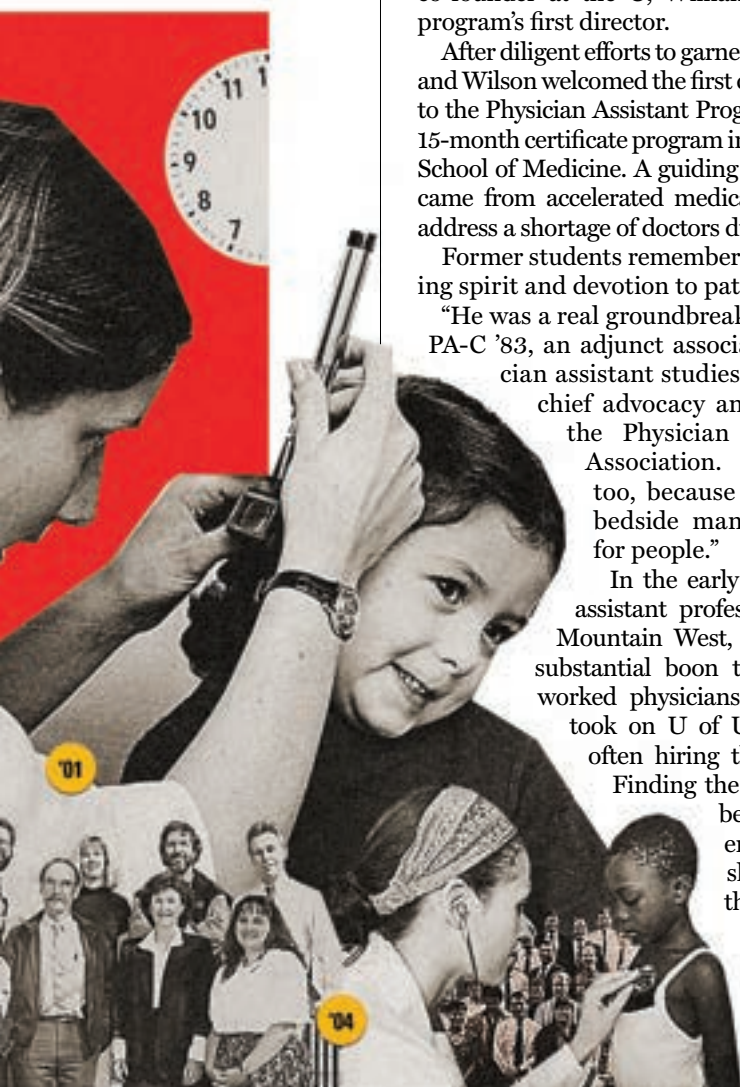
"The secret sauce to our success is being able to enroll folks who identify with our mission," Keahey said. "We want a special group of people that live the mission, vision and values."

Looking ahead, the program's leaders will seek ways to take increasing specialization in the PA profession and funnel it toward areas of need.

"I'm very excited about the future of PAs and PA education," Elrod said. "The COVID pandemic has again highlighted this gap in medical care for rural and underserved communities. I believe PAs are well positioned to answer that call not only on the front lines but in leadership positions to address health policy and inequities."

Spackman added, "I describe the PA as sort of a pluripotent stem cell. We have always been able to flow to areas of need within our health care system, and we have to sustain our ability to be nimble and responsive to future needs." ■

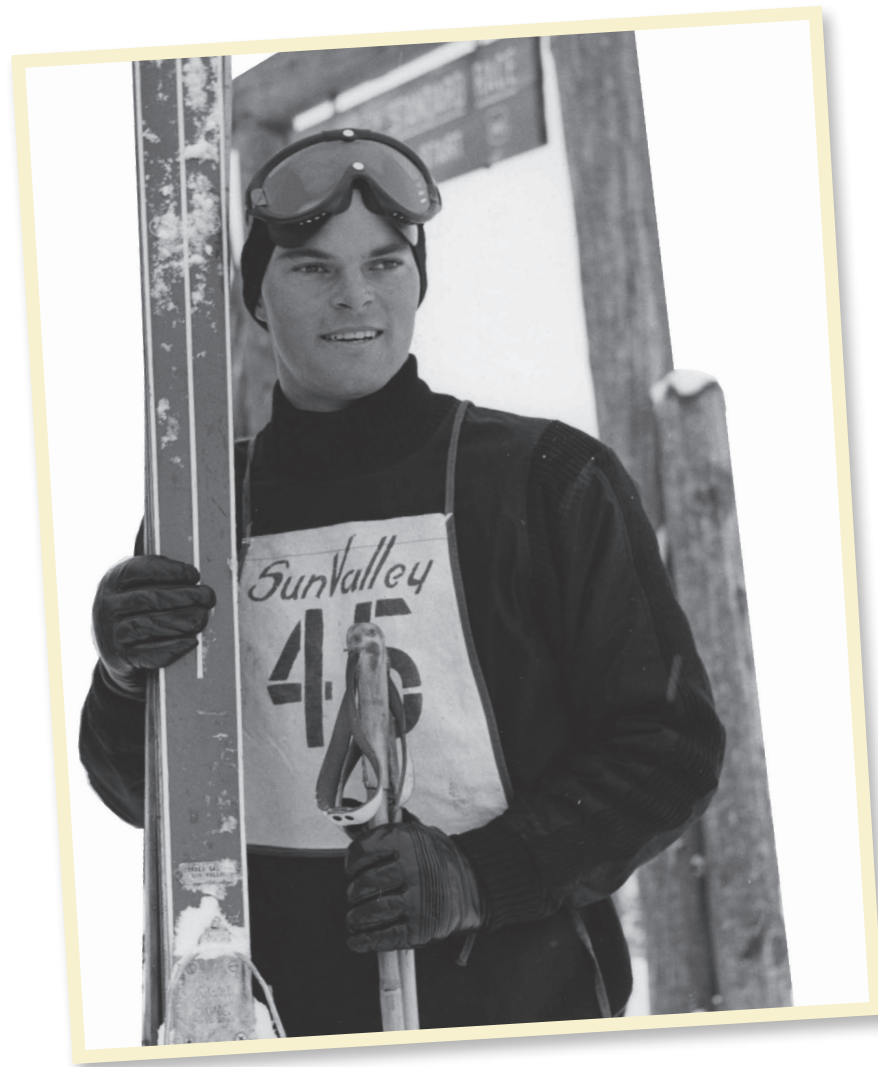
"There are many people—I would say maybe a quarter of all rural geriatric patients, half of all Native Americans and migrant workers in Utah, and ONE-THIRD OF ALL UTAHNS—who have never known what it's like to not have a PA in their midst."





CARVING A PATH

HOW SKIING LED TO THE
SPENCER FOX ECCLES SCHOOL
OF MEDICINE BY LEE BENSON



AN OGDEN BOY WHO WANTED TO SKI FOR THE UTES.

A talent for making money matched only by its propensity to give it away. A university president who knew the first step to achieving your dreams was to ask. A bank's marketing slogan ... The story behind the transformative gift of \$110 million from two Eccles family foundations to the University of Utah School of Medicine is one that involves a series of fortunate events, beginning with a warm day in Salt Lake City in the early fall of 1952.

Spence Eccles had just turned 18 years old when his parents, Spencer and Hope, dropped him off in front of the University Heights student apartments on the corner of 1300 East and 100 South. Beckoning just beyond was the University of Utah campus, where he was about to begin his freshman year.

In choosing to come to the U, Spence was already a trailblazer. Neither his father, nor any of his Eccles uncles and aunts—the four sons and five daughters of “Utah’s Rockefeller,” industrialist David Eccles—had attended the U. As prominent as the surname was in business and financial circles, and as ubiquitous as it was destined to become on the Utah campus, Spence was the first in the family line to enroll in Utah’s flagship university.

His reasons for coming were purely personal. He wanted to ski race with the best. He’d been skiing since he was 9, learning the ropes from no less a luminary than Corey Engen at Snowbasin in the mountains above his hometown of Ogden, and turning gates since he was 11. He starred on the regional junior racing circuit and was part of two state championship ski teams at Ogden High School, all the while taking note that one of the top college programs in the country was just down the road in Salt Lake City.

In 1948, when Spence was an impressionable teenager, the United States Olympic Team was packed with U of U skiers, including Jack Reddish, Darrell “Pinkie” Robinson, and Dev Jennings, not to mention Corey and his brother Alf Engen, the Olympic coach who sometimes helped out with the Ute program.

“That made a big impression on me. Those guys were my idols,” said Spence, who showed up and hoped he’d make the team. There were no athletic scholarships for skiers in those days. The Utes didn’t recruit him. He recruited the Utes.

If there was a downside to college life in the 1950s, time has vanished all memory of it for Spence.

“Oh my gosh, it was wonderful; I just fell in love with the school,” he said. “I boxed in the Tin Gloves, joined the Betas, did a lot of singing and partying, all those things, and generally stayed out of jail.”

As a ski racer he lettered four straight years on Utah teams that finished sixth, sixth, and seventh in the nation (the inaugural NCAA-sanctioned national ski championships were held in 1954, his sophomore year.) He was team captain as a senior, placed top 10 in the alpine events at nationals, and was named a collegiate All-American.

Along the way he earned his degree in business, paving the way for his entrance into the master’s program at Columbia University, and, most importantly, met the love of his life. He was living in the Beta house his junior year when he saw Cleone Peterson, a freshman from Fairview who had rushed Pi Beta Phi, the Beta’s sister sorority, standing across the room at a fraternity-sorority exchange.

“I’m going to marry that girl someday,” Spence told himself, and then he kept the promise. They were married 54 years until cancer took Cleone in 2013. “Way too soon,” he said. “She was the best thing that ever happened to me.” To this day you’ll find a photograph of his wife in the breast pocket of his ever-present Utah red blazer.

That all of the above would not have happened without the University of Utah has never been lost on Spencer Fox Eccles. He entered an Ogden boy. He left a Utah man.

SPENCE’S FATHER, Spencer Stoddard Eccles, the second son of David and Ellen Eccles and a founding board member of the family-run First Security Bank Corporation, had a soft spot for health care causes. In Ogden, he was an advocate and benefactor of St. Benedict’s Hospital and a founder of the Ogden Surgical Society. His support extended south to Salt Lake City when he was asked to join the University of Utah Board of Regents (now the Board of Trustees) in 1951, just as his namesake son was about to enroll as a freshman.

As vice chairman of the Board of Regents and chairman of the finance committee, Spencer S. led the effort that secured a \$15 million appropriation from the state and another \$4 million from an ambitious private sector fundraising campaign to build a medical center on campus.

Prior to then, medical school was an unwieldy situation at best. Classwork for medical students was held in a lecture hall at the university, while research

and training took place at the Salt Lake County Hospital several miles away.

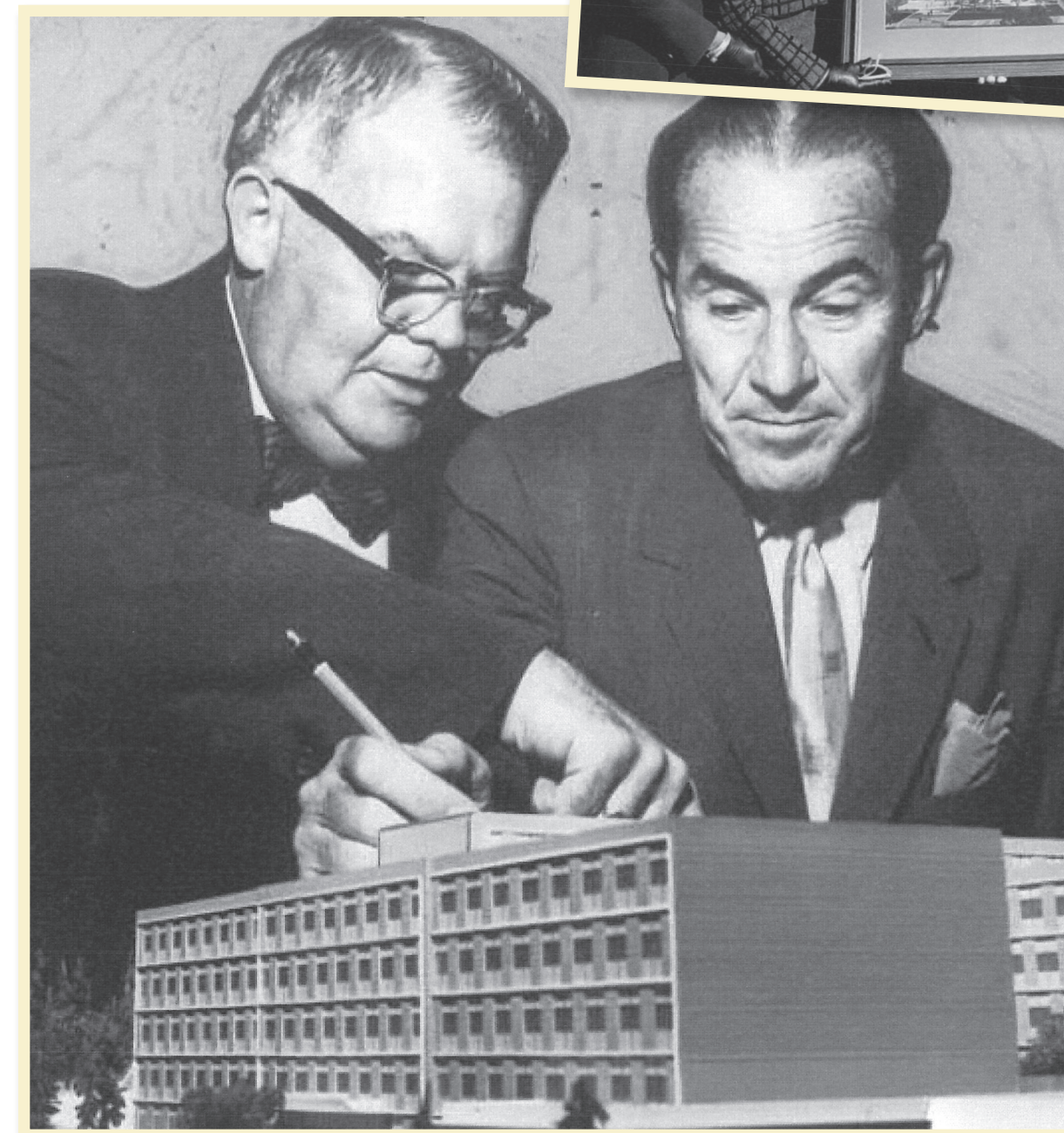
By 1962, funding for the new medical center was secured and construction on the massive 576,000-square-foot project began. Three years later, the sparkling new University of Utah Medical Center, dubbed Building 521 because of its street address, was unveiled on the northeastern edge of campus. With classwork, research facilities, and an operating hospital now all combined in one location, the U of U could begin to take its place among the country’s top schools of medicine.

As Building 521 got up and running, it quickly became evident that the space set aside for the medical library, a windowless room in the basement, was woefully inadequate for the task.

A campaign began to raise money for a separate library building, a challenge made more difficult because of fundraising that had just taken place for the medical center.

Short of their goal by \$100,000, Kenneth Castleton, Dean of the School of Medicine, and Salt Lake City businessman Reed Brinton drove to Ogden to pay a call on their good friend Spencer S. Eccles. Without hesitation, Eccles agreed to provide the \$100,000 needed to move the library project forward.

It was his last act of giving. The respected philanthropist and financier contracted liver cancer in 1965 and died in September of that year at age 71.



ARCHIVAL PHOTOS (3)

After Spencer S.’s death, it was discovered that due to rising costs, yet another \$150,000 was needed to build the library. In Boise, where the 31-year-old Spence was getting started in the family banking business, the phone rang. Knowing how much the library, the University of Utah, and health care meant to his father, he said he’d see what he could do.

He hung up and called his sister, Nancy, in California and his mother, Hope, in Ogden. Each agreed to write a \$50,000 check in Spencer S.’s honor, bringing the combined Eccles contribution to \$250,000, enough to ensure the project’s success.

Built next to Building 521, the medical library was dedicated on October 4, 1971.



Spencer F. Eccles, third from left in top image, at the 1969 groundbreaking for the Spencer S. Eccles Health Sciences Library. With him are (l to r): his sister, Nancy Eccles Hayward; mother, Hope Fox Eccles; U President James F. Fletcher; Utah First Lady Lucybeth Rampton; and School of Medicine Dean Kenneth Castleton.

Below, architect B.E. Brazier and campaign chair George Eccles review a model of the U’s new medical center in 1961. (archival photos)

With
classwork,
research
facilities, and
an operating
hospital now
all combined in
one location,
the U of U
could begin to
take its place
among the
country’s top
schools
of medicine.

Advancing Basic Science

The Spencer Fox Eccles School of Medicine was not the only beneficiary of the Eccles Foundations' generosity. Of the gift, \$40 million was earmarked for research, focused on cardiovascular science and heart disease. At the U, the primary beneficiary of that support will be the Nora Eccles Harrison Cardiovascular Research and Training Institute (CVRTI). The institute delivers cutting-edge cell-to-bedside research and education in cardiovascular disease, with a focus on basic fundamental science—the kind championed by the late Nora Eccles. The Eccles Foundations' support will ensure a new wing for the CVRTI, comprising 12,000 gross square feet of primarily new wet lab space and a freezer farm for specimen collection. Plans call for researchers to move in to the new space in early 2023. Through the Nora Eccles Treadwell Foundation (NETF), the Eccles family has strongly supported the institute during its 52-year existence. UtahMed sat down with institute director Dr. Robin Shaw to talk about the family and the future of the institute.

WHAT HAS THE ECCLES FAMILY'S SUPPORT MEANT TO THE CVRTI?

Nora Eccles Treadwell Foundation support is the lifeblood of the CVRTI. Half of its annual support is directed to operations, which pays the salaries of all of our administrative and technical staff as well as operational costs. The other half is administered as research grants to fund individual CVRTI investigator programs. NETF support allows our investigators to engage in high-risk, high-reward research.

Many investigators at the CVRTI have turned their attention to the growing problem of heart failure, which affects 6 million Americans. Heart failure-related hospitalization is the single biggest charge to Medicare, thus consuming a significant share of our country's healthcare budget. CVRTI investigator Dr. Stavros Drakos is the country's foremost expert on recovering failing heart muscle. My group and others at the CVRTI have identified fundamental mechanisms that explain why heart muscle cells progressively fail after bad events such as infection or heart attacks. This knowledge has now led to a novel gene therapy for heart failure that is showing great promise in preclinical testing. We expect to be approaching the FDA for a clinical trial in the near future.

WHAT IS THE STATE OF HEART HEALTH IN THE UNITED STATES?

The number of patients with failing hearts is beginning to reach epidemic proportions. The drugs that are out there for treating heart failure have been around for many decades. And they actually don't directly benefit the heart by design; they prevent systemic stress responses to heart failure. In cancer and in inflammatory and infectious disease, we do all kinds of molecular diagnostics and targeted therapies. We don't do that in heart failure, because we don't actually have a good enough molecular understanding of the basic



biology of failing heart muscle. CVRTI investigators are working to make up this knowledge gap.

AND IN UTAH?

Overall, in the United States and in Utah, heart disease is the top cause of death. Interestingly, in the United States in general and in Utah, there is a decrease in incidence of coronary artery disease and heart attacks and increased survival of such heart attacks. However, for some of these very same reasons, there is an increase in heart failure in Utah. The lifetime risk of developing heart failure varies by study from one in five to one in two. So for Utah, heart failure is a problem that must be addressed.

HOW DOES THE CVRTI FIT INTO THE BIG PICTURE OF U OF U HEALTH?

In a sense, we are a nerve center supporting and nucleating new cardio-

vascular research and education throughout the campus. Presently, our investigators are drawn from three colleges and five departments, from biomedical engineering on the main campus, to pharmacology and toxicology in the College of Pharmacy, to internal medicine, surgery, and pediatrics in the Spencer Fox Eccles School of Medicine.

Our mission is best achieved when we partner not just with academic departments, but critical research centers as well. Recent recruits have been jointly supported by the Senior Vice President of Health Sciences office, the University of Utah Molecular Medicine Program, and also the Diabetes and Metabolism Research Center. This degree of collaboration across campus enhances our community and makes the University of Utah a highly integrated and really special place to work. —RICH POLIKOFF

PHOTOS COURTESY OF CVRTI



To Spence and his family it will always be “Dad’s Library.” To the world it was unveiled as the Spencer S. Eccles Health Sciences Library.

It marked the first time anything on the Utah campus was connected with the name Eccles. It would not be the last.

In the 1970s, many of the Eccles family foundations began granting gifts to worthy causes. These foundations were set up years earlier by the forward-thinking sons and daughters of David Eccles who wanted to ensure that a portion of the family fortune would help others long after they were gone.

Thanks to the relationship started by Spence and his father, any number of U of U causes began attracting Eccles family support. From the football stadium to the business school to the alumni association to the tennis program to the fine arts to the student life center to the Spence Eccles Ski Team Building—home to the 14-time national champion Utah Ski Team. In these and a veritable multitude of other places and programs, it was hard to find a portion of the campus untouched by Eccles altruism.

This was especially true for the medical school. Significant grants created such important healthcare facilities as the Nora Eccles Harrison Cardiovascular Research and Training Institute, the George and Dolores Eccles Institute of Human Genetics, the George and Dolores Eccles Critical Care Pavilion, the expanded Moran Eye Center, and many more.

All the while, the family of Spencer Stoddard Eccles never lost sight of the expanding needs of “Dad’s Library.” In 1983, the Hope Fox Eccles Clinical Library was added to the Spencer S. Eccles Health Sciences Library, and in 2005, the five-story Spencer F. and Cleone P. Eccles Health Sciences Education Building was completed next door. They are connected by the Eccles Family Generations Bridge that symbolically links three generations of Eccles: from Spencer S. and Hope to Spencer F. and Cleone to their four children: Hope, Lisa, Katie, and Spencer.

IN 2018, when Dr. Ruth Watkins became the 16th President of the University of Utah and Dr. Michael Good was appointed Senior Vice President of Health Sciences and Dean of the School of Medicine, the two leaders inherited the challenge of what to do about the aging medical center. For more than a half-century, Building 521 had served its purpose well, but it had “outlived its useful life,” as the president put it, “and could no longer optimally support innovative medical education, research, and clinical care functions.”

ARCHIVAL PHOTOS (2)

It's hard to find a part of the University of Utah that has not benefited from the generosity of the Eccles. The family's involvement ranges from athletics to genetics, among many other areas.

Below, Spencer F. Eccles, Dolores Doré Eccles, and U of U President Chase Peterson at the dedication of the George and Dolores Eccles Institute of Human Genetics in 1990. (archival photos)



Thanks to the relationship started by Spence and his father, any number of U of U causes began attracting Eccles family support.

Building on plans that had begun under their predecessors, Watkins and Good brainstormed about how to proceed. They knew the legislature had committed financial support for a new medical education facility, but that those funds were bare bones and would cover only the basics. To effect a truly transformative makeover, they would need substantial help from the private sector.

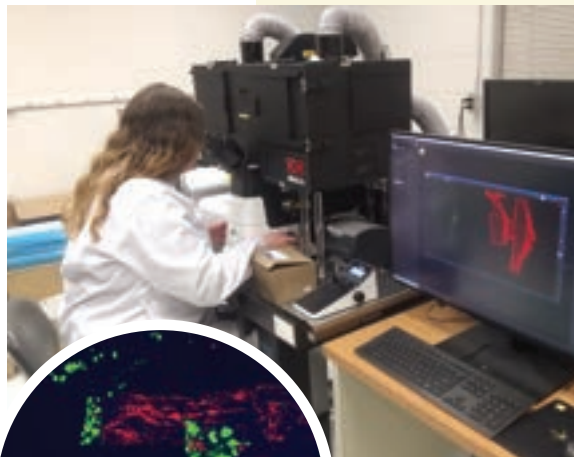
The School of Medicine had a strong reputation. Watkins and Good believed it was possible for it to take its place among the nation's leading medical schools.

They consulted with thought-leaders across the university and health sciences. What they heard was unequivocal: The opportunity to make a dramatic leap forward was there—but it would require a significant investment. It would require a state-of-the-art facility to succeed the outdated Building 521, expanded support for cutting-edge research, and an “endowment for excellence” that would include scholarship funds.

Watkins and Good made an appointment to talk to Spence Eccles. They were well-versed in the Eccles history with the university; all it took was a stroll around campus to recognize the enormous giving relationship.

“This is a person and a family who are unwavering in their commitment not only to this university, but also to the entire state of Utah. They're truly visionary, and always looking for ways to enrich excellence and make a meaningful difference,” Good said.

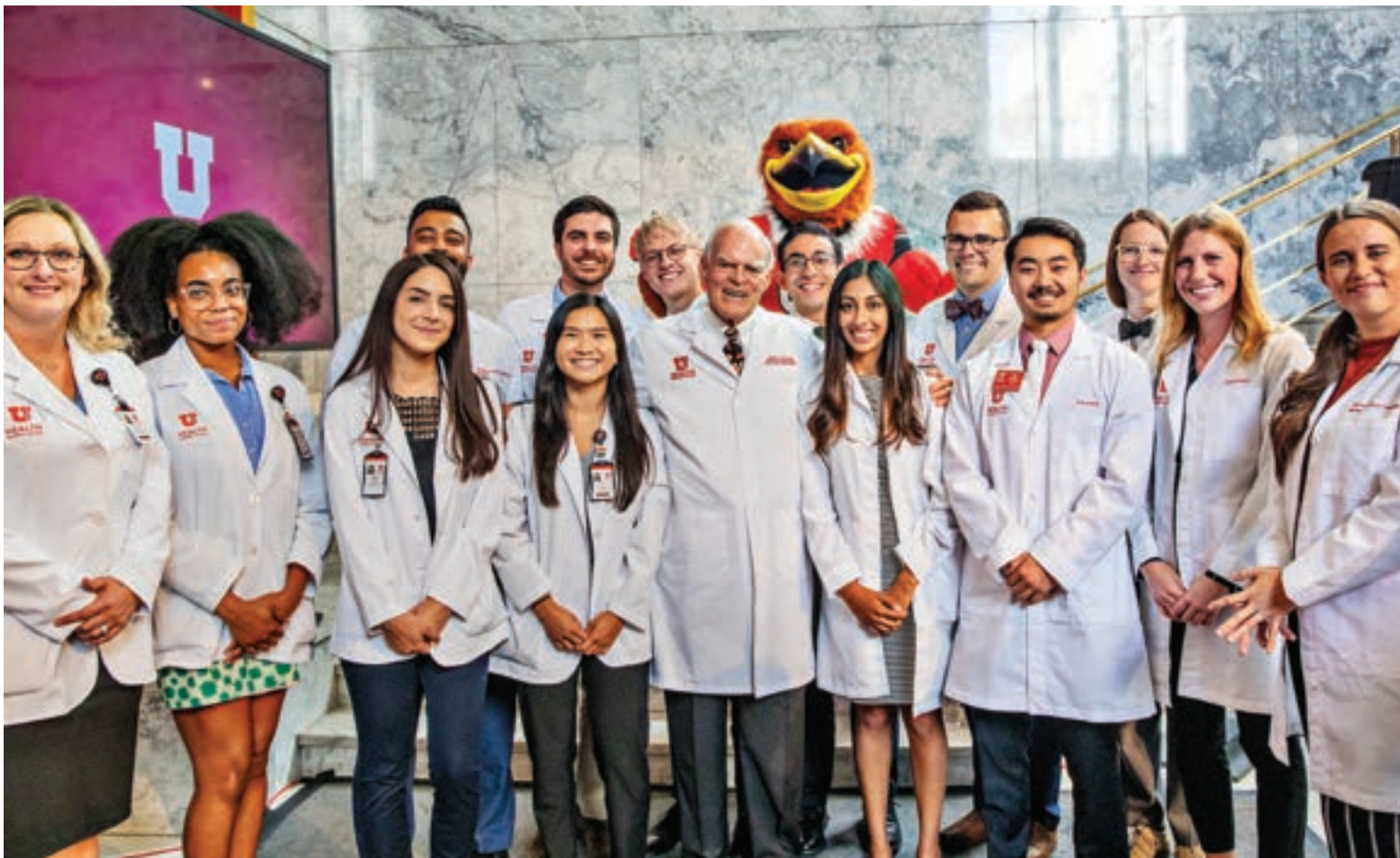
The current CVRTI facility, which is 30,000 gross square feet and houses 14 investigator laboratories, is the largest freestanding collection of cardiac muscle biology, metabolism, and electrophysiology researchers in the country. The latest Eccles gift will allow the CVRTI to grow in physical space, in the number of investigators at the CVRTI, and in the research programs it is developing (photos courtesy of CVRTI).



WHAT KIND OF INVESTIGATORS IS THE CVRTI LOOKING TO BRING ONBOARD?

Right now we're going for the best athletes, so to speak. The power of basic research is that, when successful, it provides benefits in unexpected areas. We therefore prioritize investigator quality over a particular research direction.

WHAT EXCITING RESEARCH IS TAKING PLACE AT THE CVRTI TODAY?



On June 8, 2021, members of the Spencer Fox Eccles School of Medicine celebrated the renaming of the medical school.

Conversations began in early 2020, when Watkins and Good welcomed Spence and daughters Lisa and Katie to the Eccles House on Penrose Drive, the former home of George and Dolores Eccles that was donated to the U and now serves as the residence of the university president. In broad strokes, they laid out a vision and a big, bold ask to move the medical school forward dramatically: \$90 million.

The parties met regularly and, together, refined their vision over the next year, while the two Eccles foundations—the George S. and Dolores Doré Eccles Foundation and the Nora Eccles Treadwell Foundation, both of which Spence serves as CEO—did their due diligence.

“We started with our outstanding medical school, and then said, ‘How can we make it even better?’” Good recalled.

Lisa Eccles, President and COO of the George S. and Dolores Doré Eccles Foundation, and Katie Eccles, vice chair of the Nora Eccles Treadwell Foundation, met often with Watkins and Good over a series of afternoons and evenings. They explored and defined the purpose and transformative possibilities of such an investment and how it could make the most impact for medical education in Utah and the nation. They made sure such goals as increasing scholarships and the size of incoming medical classes—particular concerns of Spence’s—were included.

In spring 2021, the U presented its formal plan to the Eccles for the \$90 million it had requested.

Two months later, the Eccles were back at Eccles House once again, where they told Watkins and Good they didn’t want to fund the \$90 million that was requested. Instead, they wanted to increase it to \$110 million.

When his Uncle George died in 1982 and Spence took over as CEO of the Eccles’ First Security Bank empire, one of his first hires was a marketing director who came up with a new ad campaign featuring the slogan, “Currently giving 110%.” The message was that First Security was committed to delivering

“We decided the gift we wanted to give should represent the 110 percent that is needed for this to be a truly transformative effort, a reminder to everyone involved with the medical school to always do more, to push more, to be more.”

more than was expected. Through the years, “110%” became synonymous with First Security, carrying the bank to its historic acquisition by Wells Fargo in 2000 for \$2.9 billion.

Ever since, Spence Eccles has worn a “110%” pin on his lapel, incorporating the philosophy into not only his company but also his personal and family ethos. He was wearing one the day he informed Ruth Watkins the two foundations he oversees wished to give the university more than they requested: \$30 million for construction of the new medical center, \$40 million for endowment, and \$40 million for cardiovascular research. It added up to \$110 million.

“We decided the gift we wanted to give should represent the 110% that is needed for this to be a truly transformative effort,” explained Spence. “A reminder to everyone involved with the medical school to always do more, to reach more, to be more.”

Getting more than it asked for, the University of Utah gave the Eccles something they never asked for: announcing that the name of the medical school will now be the Spencer Fox Eccles School of Medicine.

When the new building that will replace 521 is completed, the Spencer Fox Eccles School of Medicine will look directly across the way at the Spencer Stoddard Eccles Health Sciences Library—symbolically connecting father and son, and the Eccles legacy of giving and the University of Utah commitment to health care, in perpetuity.

All because an Ogden boy wanted to ski for the Utes. ■

FollowUp

ALUMNI NEWS



AARON CONWAY

ALUMNI PROFILE

Sculpting Warmer Care

After an unpleasant patient experience, Jorgen Madsen, MD '19 helped start the U's free HIV prevention clinic.

JORGEN MADSEN WASN'T WILLING to accept what he was hearing from his doctor.

As a second-year student at the Spencer Fox Eccles School of Medicine, Madsen went to have his arm x-rayed. He had recently come out, and it was the first time he had ever told a doctor he was gay.

"It wasn't a great experience," Madsen said. "Essentially they told me I needed to be on PrEP (medicine taken to prevent getting HIV). But without insurance PrEP cost \$1,200 a month, and I couldn't afford to be on it."

"It seemed ridiculous that those who are at highest risk for HIV are least likely to have insurance. It was anti-intuitive to get these recommendations if we can't afford it."

Madsen approached Adam Spivak, MD, an HIV specialist who taught in the medical school, about what could be done to help the LGBT community in Salt Lake City. Madsen and Spivak—along with

Susana Keeshin, MD, other students, and members of the Utah AIDS Foundation—came up with the idea to create a free HIV prevention clinic: the University of Utah PrEP Clinic.

Since 2018, the clinic has provided testing and treatment for sexually transmitted infections, lab services, medication for people who may be at risk of contracting HIV, and HIV risk reduction education. All services are free of charge.

"A bunch of us had been thinking about doing this in various forms, but it came together because of Jorgen—because of his energy and his positivity and his enthusiasm," Spivak said. "There's something else...and it's absolutely critical to succeed in this profession and in life, and it's that he is stubborn. He believes in himself, he doesn't take no for an answer, and he gets the job done."

"The way he does that is with grace; he doesn't barge down doors or make people angry. You want things to succeed when you partner with Jorgen because you're part of an inclusive team. Jorgen is a really fantastic person and a fantastic caregiver."

PHOTO BY AARON CONWAY



“When you partner with Jorgen, you’re part of an inclusive team.”

After graduating magna cum laude from Utah State University in 2015, Madsen was accepted into the Spencer Fox Eccles School of Medicine. Madsen thrived at the medical school, serving as president of the Pediatric Medicine Interest Group in 2016-17 and president of LGBT Allies in Medicine in 2017-19.

He also developed an interest in sculpting 3D artwork out of old books that he found in recycling bins. His work was featured at the Eccles Health Sciences Library and on the KSL-TV news, and several of his pieces sold.

"It was cathartic," said Madsen, who earned his MD in 2019. "I had seen a Pinterest post about (that kind of sculpting) and thought, 'I think I could do that.' They increased in complexity as I got more into it. That's actually how I paid for my residency interviews, selling a bunch of book sculptures to pay for the plane tickets."

Madsen is currently in his third year of a four-year residency at Cincinnati Children's Hospital. His focus is on LGBT health, specifically transgender and gender-affirming care.

Since starting his residency, there has been a wave of state bills focusing on gender-affirming care and minors. This has caused him to take up a new role: lobbying for the defeat of these bills in the three states that are in the immediate Cincinnati area (Ohio, Indiana, and Kentucky).

"All of my classmates are very politically active, which has been helpful for me to learn what is the best approach," Madsen said. "It's been a steep learning curve on how to approach subjects concerning the need for gender-affirming care in adolescents to reduce suicide risk. I can't say I'm like great at it yet, but I'm learning. It's definitely been good to push some of my limits of comfort."



JORGEN MADSEN

A New High

University of Utah research funding continues to grow, totaling \$641 million in fiscal year 2021 (FY21), which ended June 30. The total is a new record high for the U, which achieved milestones of \$600 million in funding last year and \$500 million three years ago.

— PAUL GABRIELSEN

ECONOMIC IMPACTS

Research grants were awarded to more than

1,000

principal investigators in diverse disciplines

In FY20, U research grants contributed

\$228 Million

to salaries and wages, which contributed

\$31 Million

in state and local sales taxes

Since 2000, the U has launched

300

companies and more than

750

products and

37,000

life science jobs

Funding supports nearly

8,000

employees and more than

4,000

trainees, including postdoctoral researchers, students, and research assistants

KEY NUMBERS

\$641 Million

University of Utah research funding in FY21, a record high for the U

67%

Percentage of the U's research funding that comes from U of U Health

9

Consecutive years U of U Health has increased research funding, starting in FY13

Total research funding reached

\$428 Million

in FY21

Located outside of the UPAP building, the Combat Medic Sculpture is a tribute to those whose service as battlefield medics played an important role in the founding of the physician assistant profession.



GIVING

A New Chapter in a Living Legacy

Historic gift establishes Utah's first endowed chair in physician assistant studies.

BY WAYNE LEWIS

AS THE UTAH PHYSICIAN ASSISTANT Program celebrates its 50th anniversary, two longtime faculty leaders have made a significant commitment to the program's future.

A gift from Don and Kathy Pedersen has created the Don Pedersen Endowed Chair in the Division of Physician Assistant Studies—Utah's first endowed chair in PA studies and one of the first in the nation.

The Pedersens have been closely connected with the Utah PA Program for a combined 80-plus years. Don, a professor emeritus, was the program's director for decades as well as founding chief of the Division of Physician Assistant Studies. Kathy, an associate professor, has been a major influence on the program's academic and international activities.

"The Pedersens' legacy as leaders, mentors, and innovators has been intertwined with that of our Physician Assistant Program for most of its existence," said Kola Okuyemi, MD, PhD, chair of family and preventive medicine at the School of Medicine. "We are grateful they chose to deepen that connection with this generous gift."

The endowed chair will offer holders flexible resources to advance important initiatives within the Division of Physician Assistant Studies.

Don, an alumnus of the U's PA Program, became its academic coordinator in 1979. As program director from 1989 to 2010, he led the transition from a federally funded certificate program to a master's degree-granting graduate program.

He has made an indelible mark on the profession itself that goes far beyond the campus. Among other accomplishments, he launched the first research grant program as president of the national organization now

"Throughout his long and successful career, Don has exhibited a visionary spirit, and has been dedicated to the core belief that everyone should have access to quality medical care."

known as the Physician Assistant Education Association (PAEA). The author of more than 75 articles and book chapters about clinical practice and education, he also founded the first scholarly publication in the field, the Journal of Physician Assistant Education, in 1998.

"As a PA, I owe everything to Don in regards to my career—not just because I am a graduate of UPAP Class No. 38, but because I am a PA," said interim division chief Leigh Elrod. "Don is one of the founding fathers of the PA profession, and he continues to vigorously advocate for the PA profession on a local, national, and international level. Through his long and successful career, Don has exhibited a visionary spirit, and has been dedicated to the core belief that everyone should have access to quality medical care. Without Don's contribution to the profession, I would not be a PA and certainly would not be in the position I am today."

Don has been president of the Physician Assistant Foundation and chair of the Utah Physician Assistant Licensing Board. Among a host of recognitions, he has received the President's Award from the Association of Physician Assistant Programs, the Utah Medical Association's Distinguished Service Award, the University of Utah's Global Health Excellence and Leadership Award, the Spencer Fox Eccles School of Medicine Alumni Association Distinguished Service Award, and

the Lifetime Achievement Award from PAEA.

"Don Pedersen is the master storyteller of the physician assistant movement in Utah," said Roderick Hooker, a historian of the field. "With his importance to the profession, it's appropriate that this first endowed chair in a PA program should bear his name."

The Pedersens' impact reaches overseas. They helped initiate the PA Program's clinical activities in Papua New Guinea and Thailand, where Don volunteered following the 2004 tsunami. In Kathy's more than 30 years with the PA Program, she has worked to bring student rotations to several countries. Such rotations nurture global health curricula more broadly within the profession and provide students a global perspective on health and disease. Kathy has worked to raise the visibility of the PA profession globally and improve access to health care.

Past president of the Utah Academy of Physician Assistants, Kathy also served on the first American Academy of Physician Assistants' Committee on International Affairs and chaired a white paper on international activities of PA programs as a member of the first International Affairs Committee for PAEA. She was on the board of the Consortium of Universities for Global Health. In 2011, the Pedersens founded Global Partners, a project that directs expertise from U of U Health to help train providers in areas like the Thailand-Myanmar border and Morocco.

The Pedersen Chair is the latest expression of the couple's prolific giving. They have endowed numerous scholarships and grants with the PA Program and at national professional organizations. They also raised funds for the combat medic sculpture outside the PA Program's main building, a tribute to the PA profession's founders.

"In a lot of ways, you're judged by the company you keep," said Jared Spackman, director of the Utah PA Program. "We have had the unique good fortune of keeping company with the Pedersens and benefiting from their passion, their innovation, and their philanthropy."

In 2021, Don Pedersen authored "UPAP—50 Years of Physician Assistant Education in Utah and the Intermountain West—From the Utah MEDEX Demonstration Project to a Nationally Ranked Graduate Program in the University of Utah School of Medicine." Contact the Utah Physician Assistant Program for access to this important archival book.

ONE OF THE BEST

Forbes has named University of Utah Health as one of the best employers for diversity in 2021. Forbes partnered with market research company Statista to survey 50,000 Americans working for businesses with at least 1,000 employees and pinpoint the com-

panies they identified as being most dedicated to diversity, equity, and inclusion.

"We are incredibly honored to be recognized for this distinction," said Sarah Sherer, Chief Human Resources Officer for University of Utah Health Hospitals & Clinics. "We understand the value of a staff with diverse backgrounds and lived experiences and how this contributes to the most comprehensive and highest quality care

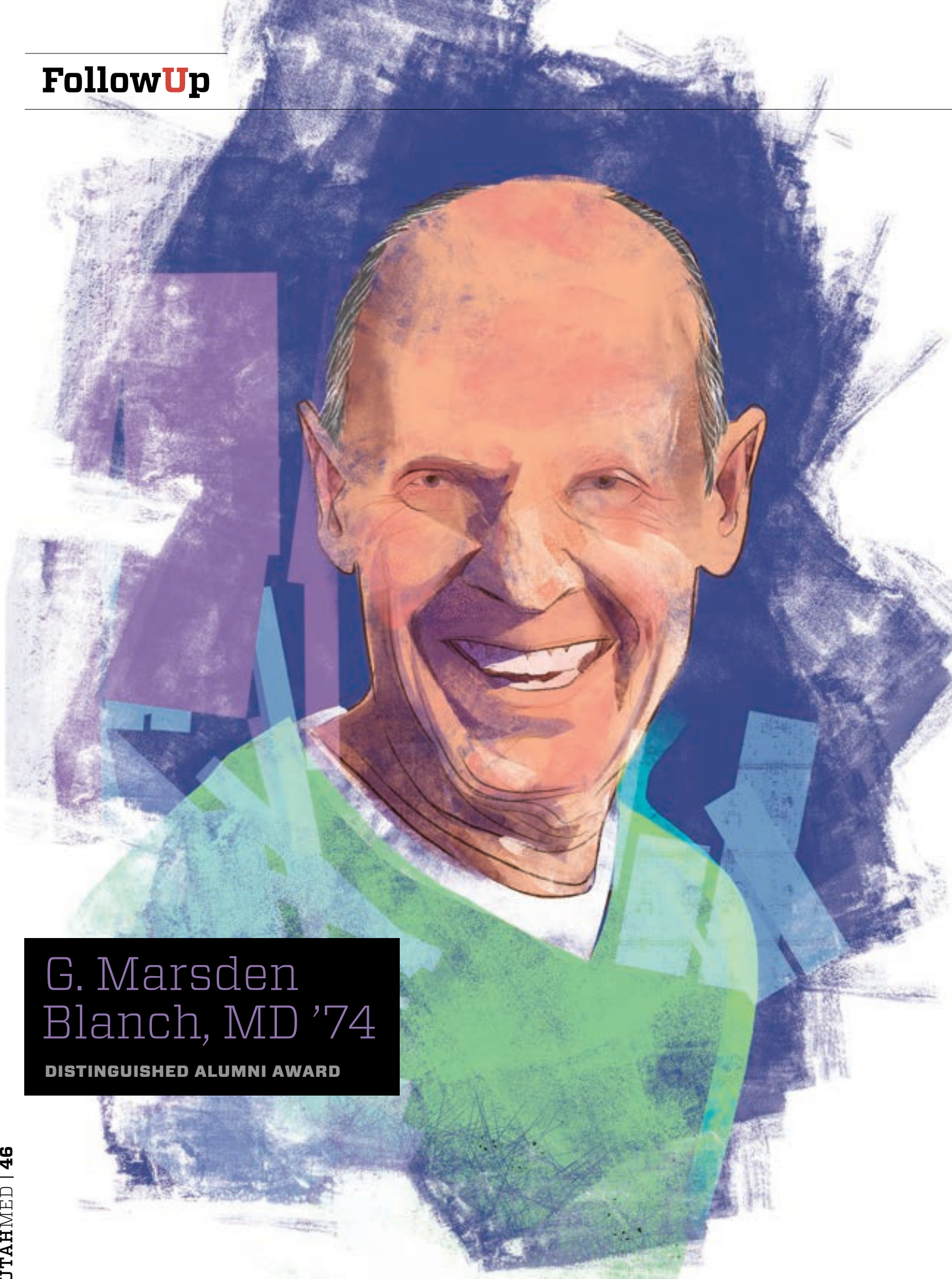
for our patients."

Employees who took the survey gave their opinion on a series of statements surrounding topics of age, gender equality, ethnicity, disability, LGBTQ+, and general diversity concerning their employer. Diversity among top executives, evaluations from employees at other companies, positions responsible for diversity, and communication of diverse company culture were also taken into consideration.

University of Utah Health ranks 98 out of 500 recognized organizations in the nation—and was the only health care provider from the state of Utah to receive the designation.

U of U Health was also recognized by Forbes in 2019 as a "Best Employer" and most recently recognized by the Human Rights Campaign Foundation as a best place to work for LGBTQ+ people.

— KATHY WILETS



G. Marsden
Blanch, MD '74

DISTINGUISHED ALUMNI AWARD

2020-21

Distinguished Awards

The Spencer Fox Eccles School of Medicine Alumni Association awards are presented to caregivers whose careers are marked by exceptional accomplishments in care, education, and service. The awards were first presented in 1991.

As a young otolaryngologist, **Marsden Blanch** was frustrated by the stainless-steel electrosurgical knives that came standard in every operating room. Char always accumulated on the blade during surgery, and the scrub nurse would have to clean it off while everyone waited.

This struck Blanch as a big waste of time. One day in 1986, inspired by the sight of his wife frying an egg on a nonstick pan, he wondered if Teflon coating could provide a solution. Working with a local manufacturer, Blanch came up with a knife that became a best seller. One knife became an entire product line, and the company he founded—Megadyne—is now the third-largest electrosurgical device company in the U.S.

Blanch, a Salt Lake City native, decided to go into medicine during his mission with the Church of Jesus Christ of Latter-day Saints in the late 1960s. He graduated from the Spencer Fox Eccles School of Medicine in 1974, then completed an internship and residency with U of U Health.

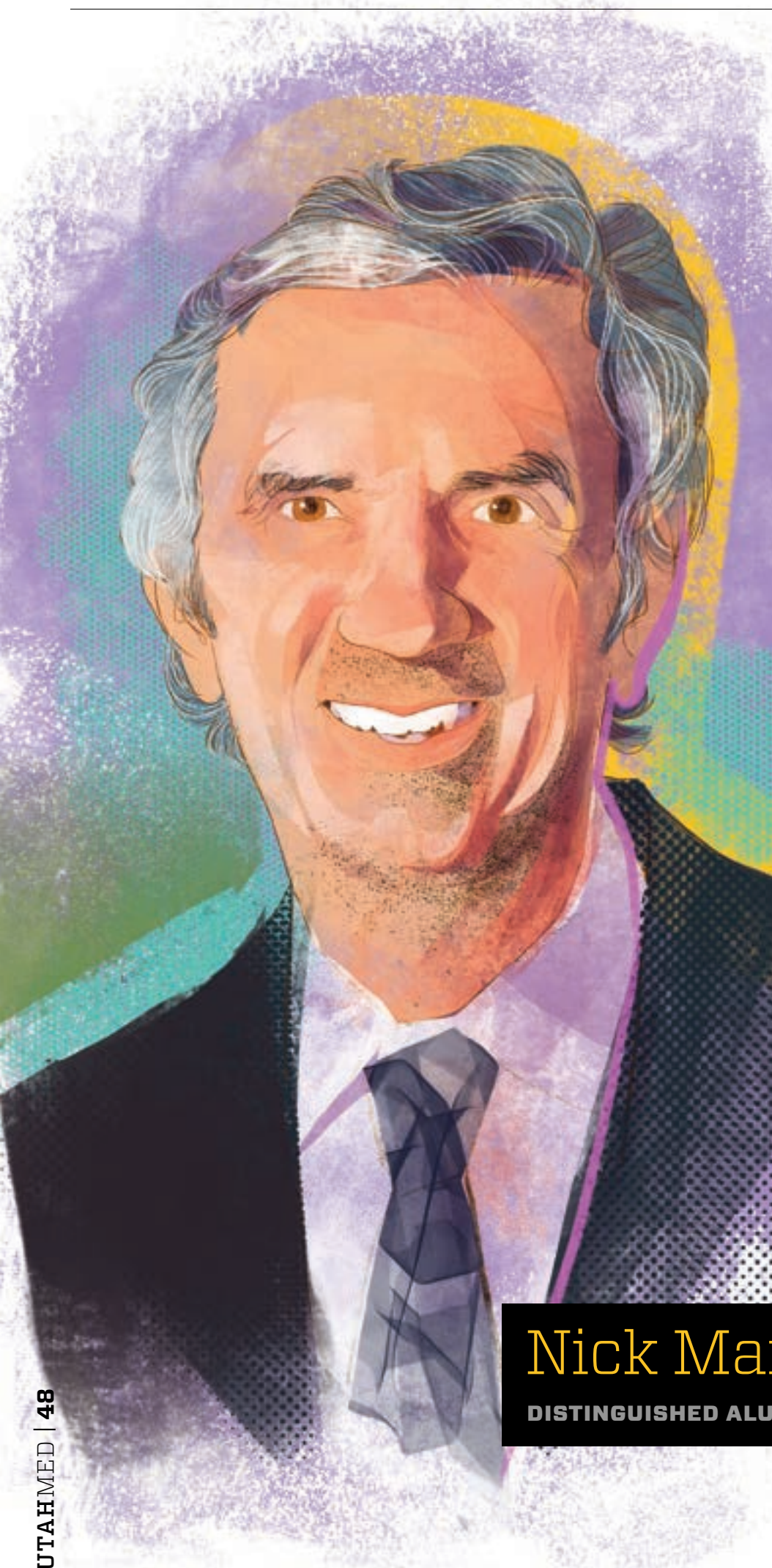
“Everything I do and have done, every accomplishment began at the School of Medicine,” Blanch said.

“I will always feel a huge debt of gratitude and obligation to do what I can to help the school. I love the people, attitude, the way the college is going—every aspect of it.”

After completing his training, Blanch ran a solo otolaryngology practice for 15 years in Sandy, Utah, while growing the electrosurgical device business with two partners. In 1995, he left all that behind for a three-year assignment with the LDS Church as president of the San Bernardino Mission. When Blanch returned to Salt Lake City, he decided not to continue his otolaryngology practice. Instead, he would focus on spending time with his family and leading Megadyne, which he and his partners sold to Ethicon Endo-Surgery, a Johnson & Johnson company, in 2017.

Blanch and his wife, Lynette, have six children, 25 grandchildren, and three great-grandchildren. In 2019, the Blanches endowed a Presidential Chair in the Division of Otolaryngology in honor of his mentor, James Parkin, MD '66, a fellow otolaryngologist and former chairman of the Spencer Fox Eccles School of Medicine Department of Surgery.

The alumni awards were not presented in 2020 due to the cancellation of Alumni Weekend. They will be presented in May 2022 at the Distinguished Awards Banquet.



Nick Mamalis, MD '82

DISTINGUISHED ALUMNI AWARD

Nick Mamalis's story began in the windswept mining town of Rock Springs, Wyoming. An early interest in science led him to consider medicine as a career, and summers working in a soda ash mine strengthened his resolve to attend college. He applied to Harvard University and received a scholarship, arriving on campus sight unseen in 1974. Mamalis began his studies at the Spencer Fox Eccles School of Medicine in 1978, where an ophthalmology rotation set the course for Mamalis's career. "When I saw my first cataract surgery, I remember thinking, these guys can restore people's vision by simply removing a cloudy lens," he said. "It was quite incredible."

Mamalis did an ophthalmic pathology fellowship at the U, and an internal medicine internship and ophthalmology residency at Loyola University Medical Center near Chicago.

After his training, Mamalis returned to the U, where he is a professor of ophthalmology at the John A. Moran Eye Center, director of ophthalmic pathology, and co-director of the Intermountain Ocular Research Center. His professional accomplishments—captured in an 86-page curriculum vitae—have earned him many accolades, including the Life Achievement Honor Award from the American Academy of Ophthalmology in 2015.

Mamalis established the Intermountain Ocular Research Center at the U in 1988 and is now co-director with ophthalmologist Lillian Werner, MD, PhD. The center focuses on evaluating the design, biocompatibility, and materials used in intraocular lenses. Between 80-90 percent of intraocular lenses that are evaluated in Food & Drug Administration trials go through the lab first.

"Dad operates on cataract patients on Mondays, and we talk on the phone almost every Tuesday afternoon after he's seen them in the clinic," said his daughter Tina, MD '16. "He is so excited about how his patients respond to being able to see clearly; it's like he's never done a cataract surgery before in his life. You would think the magic would wear off after all this time, but it hasn't!"



Kirtly Parker Jones, MD

DISTINGUISHED SERVICE AWARD

The daughter of an exploration geologist, **Kirtly Parker Jones** lived on four continents before she was old enough to drive. Awed by the beauty of the natural world, she decided to pursue medicine when she was a junior in college.

Jones is professor emerita in the Department of Obstetrics and Gynecology at the University of Utah, where she has had an academic appointment for 37 years.

She and her husband, neurologist Chris Jones, MD, came to the U in 1983. Her career took off quickly as she built her clinical practice focusing on menopause and infertility, performed surgeries, delivered babies, conducted medical research, helped establish an in-vitro fertilization program at the U of U Medical Center, and trained medical students, residents, and fellows.

Jones served in many leadership roles at the U, including medical director of the Fertility Center (1988-94), chief of the Division of Reproductive Endocrinology (1990-94), and vice-chair for educational affairs for the Department of Obstetrics and

Gynecology (1997-2015). She also served as medical director for Planned Parenthood of Utah for 17 years and was on Planned Parenthood's National Medical Committee for 12 years.

When asked which aspect of her career gave her the most joy, she is quick to answer: her students. "I trained several hundred medical students, residents, and fellows, some for a few weeks and others for a few years," she explained. "They learned how to take better care of women because we shared our path."

Jones retired from academic medicine six years ago. Today she hosts a podcast, "The 7 Domains of Women's Health," which is produced by U of U Health. Each program is about 30 minutes long and looks in-depth at the interconnectedness of physical, emotional, social, intellectual, financial, environmental, and spiritual health in a woman's life.

Jones serves on the board for Utah Physicians for a Healthy Environment and is board chair for a small literary press that publishes books related to conservation. She and Chris became grandparents for the first time in the fall.

READ MORE ABOUT THE RECIPIENTS AT UTAHMEDICINE.ORG/AWARDS

SPENCER FOX ECCLES SCHOOL OF MEDICINE



Elizabeth Keating, MD, MSPH '20

**GOLDEN ANNIVERSARY ALUMNI PRIZE FOR
DISTINGUISHED CLINICAL INVESTIGATION**

Liz Keating knew from a young age that she wanted to follow in her mother's footsteps and become a pediatrician.

As a junior at the University of Notre Dame, she visited her sister, who was studying in the Dominican Republic. Keating was struck by the lack of access to medical care.

The experience sparked Keating's interest in global health. Since then she has provided clinical care in six countries and published 30 academic studies on topics ranging from thiamine deficiency in Cambodian infants to blood transfusions for children with severe anemia in Malawi. Her current clinical research in Tanzania is funded by a prestigious National Institutes of Health Fogarty Global Health Fellowship.

Keating spent three years at the University of Utah, completing a fellowship in pediatric emergency medicine and global health, and a Master of Science in Public Health. In 2020, she earned the Fogarty Fel-

lowship from the NIH, which funds her current work at Kilimanjaro Christian Medical Centre in Tanzania.

Keating and her colleagues, who include local healthcare providers, researchers, and two research assistants, are studying pediatric injuries. They are using qualitative and quantitative methods to assess the epidemiology of injured children and barriers to care, and identify potential interventions to improve care.

Keating returned to Salt Lake City in January 2022 to work as an attending at the Primary Children's Hospital emergency department and direct the pediatric emergency medicine global health fellowship track at the U.

Keating is the winner of the 2021 Golden Anniversary Alumni Prize for Distinguished Clinical Investigation. The prize will support Keating's research in Tanzania in between grants.

Keating and her husband, Bryan, recently welcomed their first child, Maeve.

Joe Miner's heart for service and love for preventive medicine and public health were the hallmarks of his 43-year career, which included five years as Utah's top health official.

"Joe is an amazing combination of innovative leader and caring country doctor," said Bill Hulterstrom, executive director for United Way of Utah County. "He was instrumental in helping establish some of our community's most effective public health programs. But at the same time, Joe was always happy to jump in when we needed physician volunteers for a clinic. He's the kind of person who would do anything for anybody."

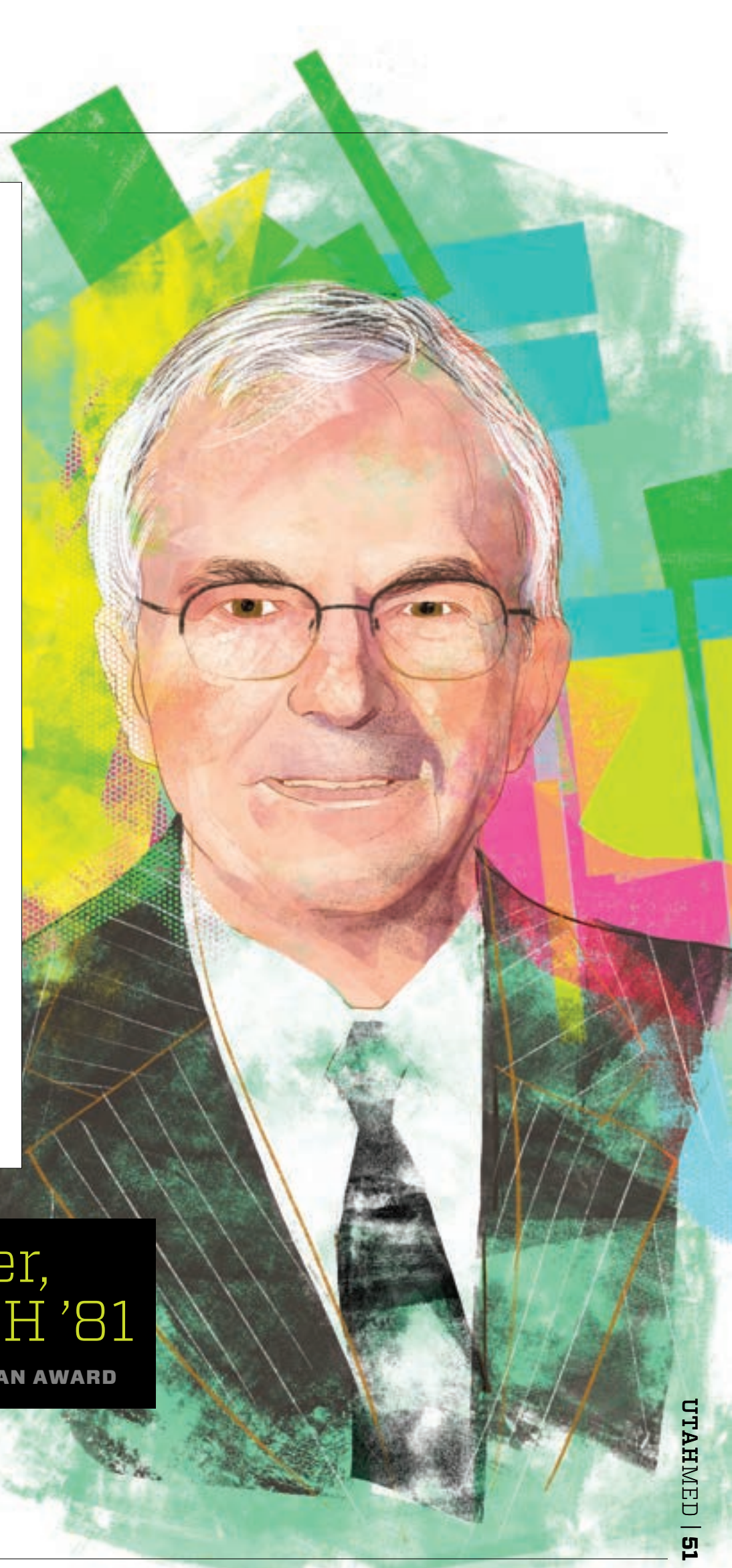
Miner grew up on a dairy farm in Sandy, Utah, the seventh of eight children. He attended the Spencer Fox Eccles School of Medicine with help from an Air Force scholarship.

After fulfilling his active-duty commitment working as a flight surgeon, Miner returned to the medical school in 1977. He completed a preventive medicine and public health residency, and returned to the U to earn his master's in public health in 1981.

In 1983, Miner was named executive director of the Utah County Health Department, a position he would hold for the next 32-plus years. Opening new public health clinics became a central element of Miner's work for Utah County. He kept his clinical skills sharp while volunteering in the clinics throughout most of his career.

As executive director of the Utah Department of Health from 2015-21, Miner and his team worked with coalitions and organizations statewide to tackle significant issues from opiate addiction and suicide to mental health and Medicaid expansion. The last six months of his career prior to retirement were marked by the greatest public health crisis of his career: COVID-19.

Miner and his wife, Gwen, recently celebrated their 50th wedding anniversary. The couple enjoys traveling to national parks and spending time with their four children and 11 grandchildren.



Joseph Miner, MD '74, MSPH '81

DISTINGUISHED HUMANITARIAN AWARD

ClassNotes

1964

Dr. Carlos Murdock, MD '64, enjoyed more than 30 years of a general family practice in Pleasant Grove, Utah, and at American Fork Hospital. He loved the practice of medicine and the associations with patients and colleagues. In retirement, he and his wife of 67 years enjoy traveling with each other and family. They have five children, 17 grandchildren, and 31 great-grandchildren. His other interests have included hunting, horses, trail riding, and woodworking.

1968

Glenn D. Warden, MD, MBA '68, spent his career as a general surgeon, specializing in trauma and burn research and treatment.

After his residency and military service in the Surgical Research Burn Unit at Brooke Army Medical Center, he was appointed faculty in surgery at the Spencer Fox Eccles School of Medicine, rising to full professor in 1985. He then went to the University of Cincinnati College of Medicine as director of the Burn Division and chief of staff and director of research at the Shriners Hospital for Children. He retired as chief of staff of the Shriners Burn Hospital and vice-chairman of the Department of Surgery in 2004. He still works as a professor of surgery in the trauma section at the Charleston campus of West Virginia University, where he travels from Salt Lake City to work two weeks of each month. He and Norma just celebrated their 50th wedding

anniversary and have four children and 10 grandchildren.

1970

Russell B. Shields, MD '70, practiced internal medicine in Bountiful, Utah, for 45 years. He loved his work. He also was a team physician for the Utah Jazz for 36 years and was awarded the NBA Trainers Association's Team Physician of the Year award in 2015. He has been married to Valva for 55 years and has three grown children. He gave up golf and replaced it with a Harley-Davidson. He likes most outdoor and wilderness activities. He is looking forward to reuniting with his classmates to celebrate their belated 50-year reunion.

Dolores Orfanakis, MD '70, lives in Lake

Oswego, Oregon, with her husband, Nick, who is also a 1970 graduate of the Spencer Fox Eccles School of Medicine. While living in Portland, she participated in developing a full-service pediatric hospital and worked as a pediatrician with a special interest in developmental pediatrics. She has two children and three grandchildren. She enjoys hiking, biking, and yoga, and is a Master Gardener. She has served on the local hospital board, school board, and science museum board.

Steven R. Austin, MD, FACR '70, worked as a radiologist in Idaho Falls, Idaho. Upon his retirement he and wife, Claire, moved to St. George, Utah, where he enjoys taking classes at Dixie State University and skiing, hiking, and cycling. He has four children and 12 grandchildren, many of whom are in the medical profession. During his career he served on the board of trustees at the Eastern Idaho Regional Medical Center, as president of the medical staff, as president of the Idaho Chapter of the American College of Radiology, and on the Idaho Medical Association board. He enjoys creating sculptures, throwing pottery, and making simple furniture.

Charles Everts, MD '70, spent most of his career in Wyoming,

serving as a radiologist at five small hospitals there. He and his wife, Patty, have been married 55 years and enjoy traveling, having visited Australia, New Zealand, Fiji, the Baltics and South Slavic States, and many other countries in Western Europe. He has two daughters and four grandchildren. In his retirement he enjoys golfing, fishing, and shooting. He has fond memories of Dr. Edward I. Hashimoto and grimaces remembering the bad jokes made in gross anatomy class.

Gordon R. Kimball, MD '70, is an orthopedic physician who still works full-time in Sandy, Utah, having done more than 35,000 operations and 10,000 total joints. He comments on all the changes his class has seen since graduating in 1970: home computers, the internet, smartphones, telehealth, artificial joints, arthroscopy, CAT, MRI, 3D scans, EHR, digital rays, AI, and instant billing (but still delayed payments!). He loves being a physician and feels the healing art is a lovely, sacred, and beautiful act. He completed all of his training while serving in the US Army for nine years of active duty, ending as a lieutenant colonel. His first wife, Margaret, died of lupus. He has been married to Judy Dyches Beck for seven years, and together they have nine children, 33 grandchildren, and 12 great-grandchildren.

Cecil O. Samuelson, MD '70, retired from his rheumatology practice in 1994 as his administrative responsibilities, which he says he lacked the ability and judgment to decline, took more of his

time. Along with being a professor of internal medicine at the Spencer Fox Eccles School of Medicine, he served as dean of the medical school and Vice President of Health Sciences, and starting in 1990, as a Senior Vice President at Inter-mountain Healthcare. After he totally retired from active practice, he served as a General Authority of the Quorum of the Seventy in the Church of Jesus Christ of Latter-day Saints, as President of Brigham Young University, and as President of the Salt Lake Temple, finally stepping into real retirement in 2017. He is married to Sharon, and they have five children and 13 grandchildren. He feels his class was very lucky to be at the School of Medicine when they were, and in retrospect says there is very little he would change about those experiences.

Colin K. Kelly, MD '70 served in the US Army Medical Corps after completing medical school and then was chief resident in the Department of Pediatrics at the University of Oregon Health Science Center. He ran a private practice in pediatrics from 1975-2014 in Salt Lake City. Since 2017 he has done health-risk evaluations for disabled adults and Medicare patients. He's been married to Mary McMillan for 52 years, and they have six children and 20 grandchildren. They enjoy traveling and have visited England, France, Germany, Italy, Switzerland, China, South Korea, and Brazil. His funniest memory of medical school was receiving the "Coleman Body Beautiful Award" for his willingness to be

the patient for a physical diagnosis lecture.

David F. Coppin, MD '70, completed his OB-GYN residency at Madigan Army Medical Center followed by five and a half years at Fort Huachuca, Arizona, as payback for the army's paying for his medical education. In 1979 he returned to Logan, Utah, and went into practice. Between the army and his civilian practice, he delivered a total of 8,300 babies before retiring in 2006. He and Kathy have been married for 54 years and have four children, 23 grandchildren, and two great-grandchildren. All their children and all but one of their grandchildren live in Logan, so they enjoy spending time with family. They also enjoy supporting Utah State University, where he chaired the Dean's Advancement Council, and for 30 years they have maintained season tickets to both the Utah Opera and the San Francisco Opera.

1971

Kent W. Farnsworth, MD '71 completed his residency in OB/GYN at the University of Utah after a rotating medicine internship at LDS Hospital. He was an adjunct and then an assistant professor at the Department of Obstetrics and Gynecology at the U from 1977-2014, receiving the residents' Outstanding Clinical Professor Teaching Award twice. He completed two preceptorships in pelvic reconstructive surgery, and from 1994-2012, along with his regular practice, he taught pelvic reconstructive surgery following birth trauma and neonatal

resuscitation in China, Cambodia, and Africa, which he found very rewarding. He is married to Ann Wirthlin, and they have four children and 13 grandchildren. They completed an LDS Church mission in Central Florida from 2004-'07. In his spare time, he enjoys watercolor painting, photography, backcountry hiking, and bicycle touring.

1977

James J. Naramore, MD '77, was named by the Wyoming Medical Society as the recipient of the 2020 Wyoming Physician of the Year. The society gives the award annually "to Wyoming's top physician in recognition of their contributions to Wyoming communities, honoring the physician for time and personal sacrifice for the benefit of Wyoming and its communities." Naramore has been in practice in Gillette, Wyoming, since 1978. He has been involved with numerous civic and health organizations, and has traveled to El Salvador, Ukraine, and Ecuador on medical mission trips. Naramore and his wife Karen have four children and six grandchildren.

1991

Gregory E. Biddulph, MD '91, is a retired orthopedic surgeon who pioneered the planning, construction, and growth of Mountain View Hospital in Idaho Falls, Idaho. At the end of his career, he was called to serve a mission in Brazil as an area medical director. He is so thankful for the cherished friendships with his class of 1991

classmates. He has stayed in contact with just a few but remembers all of them. He said it was a privilege to work in his career, and he wouldn't change anything about his educational experience.

2000

Thomas H. Hammond, MD '00

is an otolaryngologist in Salt Lake City. He is a frequent volunteer on behalf of the Spencer Fox Eccles School of Medicine whose participation includes Dinner With a Doc, as an admission process interview volunteer, and as a guest speaker on his career and specialty. His hobbies include photography and tennis.

In Memoriam

We mourn the loss of the following members of our Spencer Fox Eccles School of Medicine alumni family.

- L. George Veasy, MD 1946, RES 1949, RES 1954
- Allan McCall, MD 1948, RES 1951
- Thomas Higgs, MD 1954
- Hal Bourne, MD 1957
- Richard Kendrick, MD 1957
- Rodger Farr, MD 1958
- E. Arnold Isaacson, MD 1959
- Lynn Staheli, MD 1959, RES 1962
- Fred Greer, MD 1961
- Paul Perlstein, MD 1962
- J. Richard Rees, MD 1962
- E. Ronn Heiner, MD 1963
- John Hidley, MD 1966
- John Nichols, MD 1966, RES 1969
- Frederick Swensen, MD 1966
- John Marsh, RES 1967
- Robert Miller, MD 1967, RES 1970
- Brian Rasmussen, RES 1967
- Floyd Johnson, RES 1968
- Richard Wallin, MD 1968, RES 1972
- Craig Davis, MD 1969, RES 1974
- Alan Pratt, MD 1969, RES 1973
- John Bowers, MD 1970, RES 1973
- Richard Brown, RES 1970
- David Henrie, MD 1970
- Craig Booth, MD 1971
- John Carlson, PhD 1971, biochemistry
- R. Alan Maurer, MD 1971
- Hugh Voorhees, MD 1972, RES 1977
- Stephen Prescott, RES 1974, RES 1975, RES 1978, RES 1979
- Robert Neumayr, MD 1975, RES 1978
- Brent Payne, MD 1975, RES 1978
- Lee Burnham, BS 1980, medical technology
- Paul Swensen, MD 1980, RES 1983
- Kathryn Ballard, RES 1982
- Teresa Baker, MD 1985
- Stephen Craig, MD 1991
- Alan Herr, PhD 2000, human genetics
- Benjamin Brennan, MD 2011



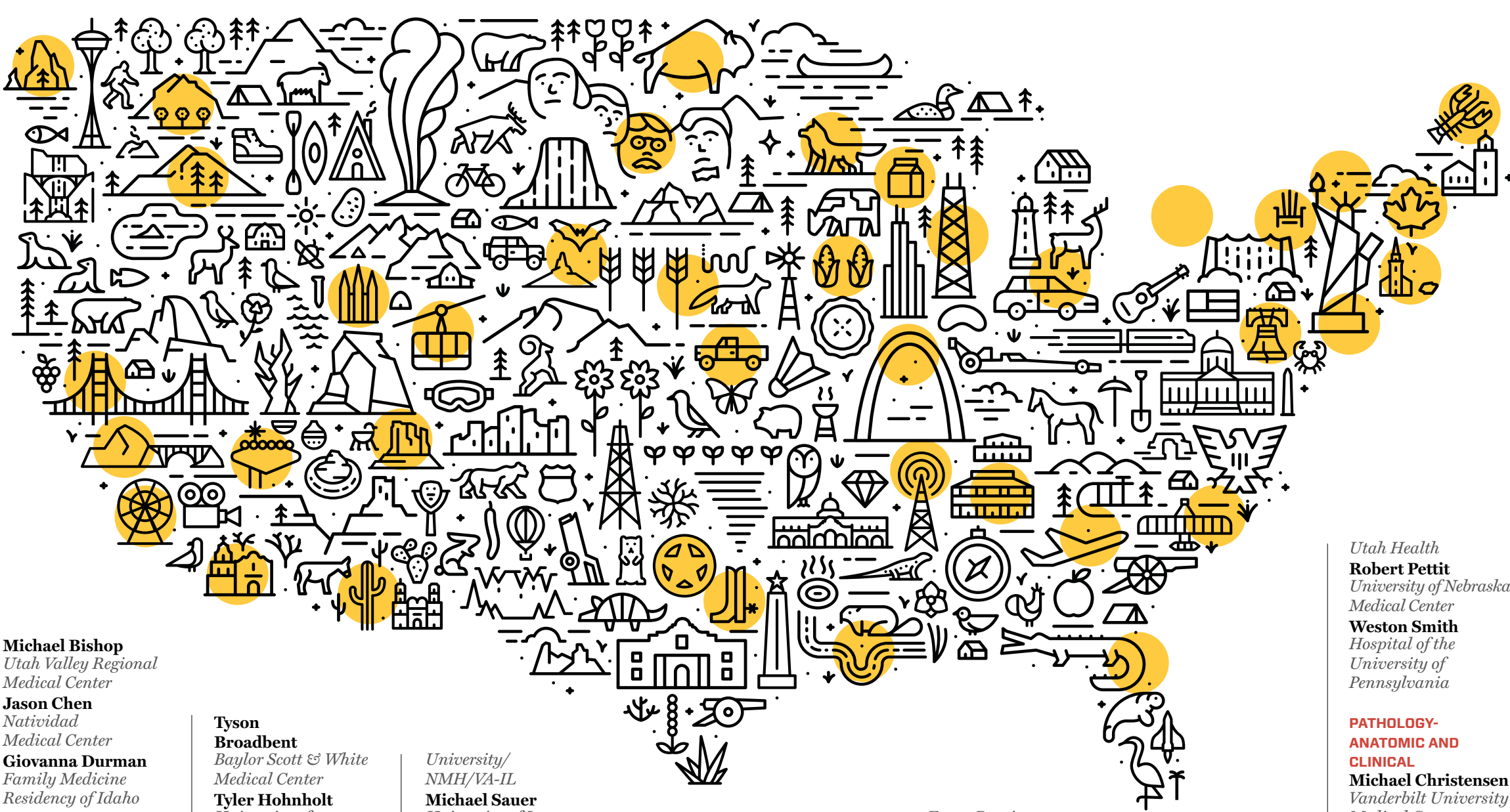
Buy Appointed Distinguished Professor

Saundra Buys, MD, former president of the Spencer Fox Eccles School of Medicine Alumni Association, was appointed as a distinguished professor of internal medicine by the University of Utah, effective July 1. Buys is chief of the Division of Oncology and a professor in the Spencer Fox Eccles School of Medicine. After completing an internship and residency at the medical school, she joined the U of U faculty in 1984.

ANESTHESIOLOGY
Douglas Brown
Loyola University Medical Center
Ryan Gole
University of Southern California
Dominique Ferranti
University of Washington
Affiliated Hospitals
Andrew Ferris
Yale New Haven Hospital
Claire Lu
University of Utah Health
Endi Moric
University of Utah Health
Tanner Wood
University of Florida College of Medicine Shands Hospital
Brooke Zhao
Sunrise Health GME Consortium

EMERGENCY MEDICINE
Ty Anderson
University of Nebraska Medical Center
Chris Badger
Vanderbilt University Medical Center
Phoebe Draper
New York University Grossman School of Medicine
Zachary Fica
University of California San Diego Medical Center
Ellen Gilbertson
University of Utah Health
Richard Knecht
UCLA Medical Center
Skylar Larsen
University of Wisconsin Hospitals and Clinics
Christopher Sciarretta
University of Tennessee College of Medicine - Chattanooga
Rachel Tsolinas
University of California San Francisco
Kelsey Tolbert
Yale New Haven Hospital

FAMILY MEDICINE
Richard Albrechtsen
Atrium Health Cabarrus



Michael Bishop
Utah Valley Regional Medical Center
Jason Chen
Natividad Medical Center
Giovanna Durman
Family Medicine Residency of Idaho
Serena Fang
Valley Medical Center
Ajay Giri
Family Medicine Residency of Idaho
Nicholas Henrie
Idaho State University
Spencer Lindsay
Utah Valley Regional Medical Center
Jared Madsen
Allina Health-Minnesota

INTERNAL MEDICINE
Nijat Aliyev
Duke University Medical Center
Ben Berger
Duke University Medical Center
Luke Brandenberger
University of Washington Affiliated Hospitals

Tyson Broadbent
Baylor Scott & White Medical Center
Tyler Hohnholt
University of California San Diego Medical Center
Patrick Mallea
University of Iowa Hospitals and Clinics
Colin McNamara
University of California Davis Medical Center
Alexandrea Montoya
University of Utah Health
Emily Murnin
University of Wisconsin Hospital and Clinics
Andrea Myers
University of Iowa Hospitals and Clinics
Samuel Roberts
Baylor Scott & White Medical Center
Pamela Ropski
McGaw Medical Center of Northwestern

University/ NMH/VA-IL
Michael Sauer
University of Iowa Hospitals and Clinics
Jennifer Strunck
Providence Health, Oregon Health & Science University
Benjamin Tasevac
Thomas Jefferson University
Rhett Thomson
Baylor Scott & White Medical Center
William West
George Washington University
Trey Winter
University of Alabama School of Medicine
Samual Zenger
Billings Clinic; University of Vermont Medical Center
Jessica Zhu
University of Colorado School of Medicine

INTERNAL MEDICINE/ PEDIATRICS
Anna Cassell
Brigham & Women's Hospital
Lauren Fay
University of Missouri-Kansas City Programs

NEUROLOGICAL SURGERY
Sarah Nguyen
University of Utah Health

NEUROLOGY
Joshua Blotter
University of North Dakota School of Medicine
Abigail Bossart
University of Utah Health
Michael Chamberlain
Atrium Health Wake

Forest Baptist Medical Center
Karl Heward
University of Vermont Medical Center
Linda Villani
McMaster University
Zoe Wolcott
Mayo Clinic School of Graduate Medical Education

OBSTETRICS AND GYNECOLOGY
Adelheid Brandenberger
University of Washington Affiliated Hospitals
Madison Doutre
Maine Medical Center
Roselyn Neville
Kaiser Permanente-Santa Clara, California
Katherine Panushka
Montefiore Medical Center;

Einstein Campus
Jessica Smith
University of Utah Health
Elaine Taylor
University of California San Francisco Fresno

ORTHOPAEDIC SURGERY
Garrett Christensen
University of Iowa Hospitals and Clinics
Taylor King
Summa Health/NEOMED
Matthew Miller
University of Arizona College of Medicine
Alexander Mortensen
University of

Utah Health
Robert Pettit
University of Nebraska Medical Center
Weston Smith
Hospital of the University of Pennsylvania

PATHOLOGY-ANATOMIC AND CLINICAL
Michael Christensen
Vanderbilt University Medical Center
Edwin Lin
Mayo Clinic School of Graduate Medical Education
Miekan Stonhill
Massachusetts General Hospital

PEDIATRICS
Paul Bluth
University of Utah Health
Michael Crawford
University of California Irvine Medical Center
Leslie Denson
Eastern Virginia Medical School
Rebecca Kimball
Virginia Commonwealth University Health System
Isaac Marshall
Medical College of Wisconsin

MATCH | 2021

Affiliated Hospitals
Michael Naegle
University of South Dakota Sanford School of Medicine
Mitchell Peterson
Maine Medical Center

PHYSICAL MEDICINE AND REHABILITATION
Dalton Brady
University of Utah Health
Sierra McLean
University of North Carolina Hospitals
Kristen Saad
University of Utah Health
Andrew Stephens
University of Rochester/Strong Memorial Hospital
James Tran
University of Utah Health

PLASTIC SURGERY (INTEGRATED)
Jared Hilton
Missouri University School of Medicine

PSYCHIATRY
Bridger Battaglia
University of Utah Health
Steven Brady
University of Texas at Austin Dell Medical School
Sarah Eckstein
Duke University Medical Center
Jake Erickson
University of Iowa Hospitals and Clinics
Emily Kauwe
Duke University Medical Center
Patrick O'Connell
Emory University School of Medicine
Jordan Peacock
University of Utah Health
Herschel Wilde
University of Utah Health
Whitney Worsham
Dartmouth-Hitchcock Medical Center

UROLOGY
Andrew Carey
University of Wisconsin Clinical Science Center
Alexandra Jacobs
University of Washington Urology - research track

University of California San Diego Medical Center
Emery Boudreau
Dartmouth-Hitchcock Medical Center
Alyssa Brown
Tufts Medical Center
Ashleigh Bull
University of Iowa Hospitals and Clinics
Chloe Cross
Ichan School of Medicine Mount Sinai Hospital; Ichan School of Medicine Mount Sinai Hospital
Jason Garry
University of Arizona - College of Medicine-Phoenix
Daniel Jones
NewYork Presbyterian Hospital/Weill Cornell Medical Center
Veronica Urbik
Vidant Medical Center/East Carolina University

TRANSITIONAL YEAR
Spencer Baker
Riverside Community Hospital; University of Utah Health
Caitlynn Cooper
Hennepin County Medical Center; University of Minnesota Twin Cities
Timothy Evans
Scripps Mercy Hospital San Diego; University of California San Diego Medical Center
Bianca Rich
Intermountain Medical Center; University of Utah Health



Inside: Nutrition Care Services

Let's Eat

NO MATTER THE DAY'S COVID CASE COUNTS, THERE ARE thousands of people on the University of Utah Health campus—and they are going to get hungry. Figuring out how to offer them food that is nutritious, tastes good, and is delivered safely is the job of a team led by Carissa Christensen, MS, MPH, RD. Christensen has been director of Nutrition Care Services since May 2019 and has been with U of U Health since 2007.

What are the challenges your team has faced during the COVID-19 pandemic?

At the start of the pandemic, we had to close our retail seating areas, package everything we sold in single-serve disposable containers, and ensure our customers were not coming in contact with any self-serve options. We faced alarming supply shortages and had to look at ways to stockpile supplies because of this concern. Currently, our biggest challenge is dealing with the national staffing shortage.

What are the trends in hospital dining?

Folks want more locally and sustainably sourced items, more plant-based options, and compostable food packaging. As an industry, we are trying to be more proactive in the area of food waste. A few years ago, we implemented a Leanpath food waste tracking system, which has really helped us reduce the amount of food that we overproduce, as well as provide us with an idea of how much food is being wasted and why.

What might surprise people to learn about your team?

In one month, we will produce 63,000 patient meals at University of Utah Hospital, conduct more than 90,000 transactions in the cafeteria, and serve over 30,000 Starbucks customers. We have over 100 types of patient diet orders that we must be able to prepare food for, and our NCS teams across the system are often recognized by patients for being able to prepare such high-quality food to meet their complex dietary needs.

What do you like best about your job?

I love the culture of this organization and the people with whom I work. I learn something new every day and am very grateful for the opportunity to lead such a diverse, respectful, and dedicated team. It's an amazing feeling to know that you are not alone. Our executive director says it best: "One team, one mission."

Who's in charge?



Carissa Christensen, MS, MPH, RD
Director of Nutrition Care Services

Quality and Quantity:

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CHECK OUT VIDEOS, EXTENDED FEATURES, AND EXTRA CONTENT OF OUR SUMMER 2022 ISSUE AT utahmedicine.org.



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ON TOPIC

BRAIN STORM

As part of Layers of Medicine, a longitudinal required course delivered throughout our four-year curriculum at the Spencer Fox Eccles School of Medicine, we create a piece of artwork responding to the themes and topics discussed in the course. I used neuroimaging software to construct a to-scale 3D model of my brain. — JUSTIN CAMPBELL '23

