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LETTER FROM THE SENIOR VICE PRESIDENT

University of Utah Health is uniquely poised to change health care, science, and education in profound and meaningful ways.

Here in Utah, we share a deep belief in our core missions of patient care, research, education, and service to our communities. Our position as one university—with a university campus co-located with the health system—is the preferred means to achieve national distinction in our missions. Being invited to join the prestigious Association of American Universities in 2019 is a tribute to the world-class faculty, research funding, and exceptional student outcomes at the University of Utah.

U of U Health is one of the strongest and most collegial academic health science centers in the nation. As one of only a few public academic medical centers in which the tripartite missions of clinical care, research, and education all report to a single office, U of U Health is more nimble than many of our peers. This gives us a tremendous opportunity to serve our communities and region by working across our health system, innovating care that is accountable for outcomes, producing groundbreaking research, and developing novel educational models.

U of U Health is full of remarkable teams and individuals who continuously ensure patients conquer health challenges and learners master their educational programs—including the research and discoveries that lead to improvements in both.

I believe that when each of us works to help others achieve success, a unique and powerful energy is unleashed that drives us forward in amazing ways. It is my privilege to work for the impressive faculty and staff at U of U Health—to be a part of an energized community on an impressive trajectory to improve health and quality of life in the state, region, nation, and world.

Michael L. Good, MD  
President (Interim), University of Utah  
Chief Executive Officer, University of Utah Health  
Executive Dean, University of Utah School of Medicine  
A. Lorris Betz Senior Vice President for Health Sciences
MISSION

University of Utah Health serves the people of Utah and beyond by continually improving individual and community health and quality of life. This is achieved through excellence in patient care, education, and research. Each is vital to our mission, and each makes the others stronger.

» We provide compassionate care without compromise.

» We educate scientists and health care professionals for the future.

» We engage in research to advance knowledge and well-being.

VISION

A patient-centered health care organization distinguished by collaboration, excellence, leadership, and respect.

VALUES

» Compassion  » Innovation  » Diversity  » Quality

» Collaboration  » Responsibility  » Integrity  » Trust

ORG CHART

Michael Good
President (Interim), University of Utah
Chief Executive Officer, University of Utah Health
Executive Dean, University of Utah School of Medicine
A. Lorris Betz Senior Vice President for Health Sciences

Pilar Varela
Manager, Administration

Jo Rudd
Executive Assistant

Wendy Hobson-Rohrer
AVP, Education

Will Dere
AVP, Research

Grant Lasson
AVP, Strategy/Chief Strategy Officer

Dan Lundergan
CEO, Hospitals and Clinics (Interim)

Sam Finlayson
AVP, Clinical Affairs

Robyn Reynolds
Chief Marketing Communications Officer

Brian Shiozawa
AVP, Health Policy

José Rodríguez
AVP, Health Equity, Diversity, & Inclusion

Amy Locke
Chief Wellness Officer

Marika Jones
AVP, Advancement/Chief Philanthropy Officer

Sherrie Perkins
CEO, ARUP

Chad Westover
CEO, Health Plans

Wyatt Hume
AVP, Academic Affairs

Maia Hightower
Chief Medical Information Officer

David Perrin
Dean, College of Health

Randall Peterson
Dean, College of Pharmacy

Marla De Jong
Dean, College of Nursing

Wyatt Hume
Dean, School of Dentistry

Wayne Samuelson
Dean, Medical Education

Catherine Soehner
Director, EHSL

Steve Panish
Asst VP, Capital Programs & Space Mgmt

Catalina Ochoa
Director, Budget/Controller

Greg Johns
Director, Accounting and Finance

Cynthia Best
Vice Dean for Finance & Administration

Rick Smith
Senior Director, Human Resource Management

Juan Carlos Negrette
Director, Global Health
"Better solutions come from diverse research teams, and stronger education occurs among peers from diverse backgrounds. The University of Utah celebrates the rich diversity of people, as well as creative and intellectual traditions, by being inclusive in every respect. We are committed to attracting and retaining talented students, faculty, and staff from diverse backgrounds and promoting a culture of inclusion."

— Michael L. Good, MD

LEADERSHIP»

SENIOR VICE PRESIDENT

Michael L. Good, MD
President (Interim), University of Utah
Chief Executive Officer, University of Utah Health
Executive Dean, University of Utah School of Medicine
A. Lorris Betz Senior Vice President for Health Sciences

Michael Good joined the University of Utah as CEO, Executive Dean, and Senior Vice President of the health system in 2018. In 2021, he began serving as interim president of University of Utah.

In his roles leading the health system, Good works to assure the professional and educational success of more than 20,000 talented faculty, staff, and students who make University of Utah Health (U of U Health) one of the nation’s premier centers of academic health sciences. His leadership has enhanced U of U Health’s reputation as an academic health system that provides world-class health care, research, education, and service to the state, region, and nation. He leads the organization through a period of remarkable growth, evidenced by the construction of a half-dozen major new facilities on the health campus and in the community, the implementation of transformational educational and research initiatives, and the recruitment of dozens of new leaders and faculty.

Prior to joining U of U Health, Good held many leadership positions at the University of Florida (UF) and its clinical affiliates, including dean of the medical school, senior associate dean for clinical affairs, chief of staff for UF Health Shands Hospital, chief of staff for the Malcom Randall VA Medical Center, and system medical director for the North Florida/South Georgia Veterans Health System. Early in his academic career, he led a team of UF physicians and engineers to create the Human Patient Simulator, a sophisticated computerized teaching tool that is now used in health care education programs throughout the world.

Good graduated with distinction from the University of Michigan with a bachelor’s degree in computer and communication sciences. He also earned his medical degree from Michigan, then completed residency training and a research fellowship in anesthesiology at UF, joining the UF College of Medicine faculty in 1988. Currently, he is chair-elect of the Board of Directors for the Association of Academic Health Centers and a member of the American and Utah Medical Associations and the American and Utah Society of Anesthesiologists.
Mary Beckerle, PhD
Chief Executive Officer
Huntsman Cancer Institute

Mary Beckerle is CEO of Huntsman Cancer Institute, a comprehensive cancer research and clinical care facility at the University of Utah. Under Beckerle’s leadership, HCI doubled the size of its hospital and research facilities and was named a top cancer hospital by *U.S. News & World Report*. She is an internationally recognized leader and scientist whose research is focused on fundamental aspects of cancer biology. Beckerle currently serves on the Boards of Directors of Huntsman Corporation and Johnson & Johnson. She is an elected Fellow of the American Academy of Arts and Sciences and the American Philosophical Society. In 2021, Beckerle was elected as a member of the National Academy of Sciences.

Beckerle received a PhD in molecular, cellular, and developmental biology from the University of Colorado at Boulder, where she was the recipient of a Danforth Fellowship, and completed post-doctoral research at the University of North Carolina at Chapel Hill.

Willard Dere, MD, FACP
Associate Vice President, Research
University of Utah Health

As Associate Vice President for Research at U of U Health, Willard Dere guides institutional research strategy, establishes priorities for investment and effort, and develops and evaluates research initiatives. A professor of internal medicine, Dere also serves as the executive director for the Program in Personalized Health and co-directs the Center for Genomic Medicine and the Center for Clinical & Translational Science. He has extensive experience in clinical research from his 25 years in the biopharmaceutical industry, including substantive work in drug safety and regulations.

Dere received an MD from the University of California, Davis, completed a residency in internal medicine at the University of Utah, and postdoctoral training in endocrinology and metabolism at the University of California, San Francisco.

Sam Finlayson, MD, MPH, MBA
Associate Vice President, Clinical Affairs
Chief Clinical Officer

In 2020, Sam Finlayson was appointed Associate Vice President for Clinical Affairs and Chief Clinical Officer for University of Utah Health. Finlayson leads teams that create greater value for patients and improve clinical care in an evolving health care environment.

Finlayson joined the U of U faculty in 2013 as the Claudius Y. and Catherine B. Gates Presidential Endowed Chair in Surgery. Prior to joining U of U Health, he served as the Kessler Director of the Center for Surgery and Public Health, a joint health services research initiative of Brigham and Women’s Hospital, and Harvard Medical School and School of Public Health. He received an MD and MPH at Harvard and an MBA at the University of Utah David Eccles School of Business.
Wendy Hobson-Rohrer, MD, MSPH  
Associate Vice President, Health Sciences Education  
University of Utah Health
—
As Associate Vice President for Health Sciences Education, Wendy Hobson-Rohrer identifies and leverages the university’s distinct strengths, builds engagement and educational integration among colleges and schools, and maintains a culture of educational excellence.

A tenured professor of pediatrics, Hobson-Rohrer also serves as associate dean for Faculty Development and as executive clinical director for the South Main Clinic. She received an MD at Cornell University Medical College and completed a pediatric residency, education fellowship, and received a Master of Science in Public Health at the University of Utah.

Wyatt R. “Rory” Hume, DDS, PhD  
Associate Vice President, Academic Affairs and Education  
Dean, School of Dentistry
—
Rory Hume is an internationally acclaimed scholar and leader who has served at the highest administrative levels in dental schools and universities worldwide. In addition to his service within Academic Affairs and Education, he is also dean of the School of Dentistry.

Hume was a department chair and dean in Australia prior to his appointment as a department chair at the University of California, San Francisco. He then served as dean of the UCLA School of Dentistry and as executive vice chancellor at UCLA. Hume has also served as vice president for health affairs, provost, and executive vice president (chief academic officer and chief operating officer) for the 10-campus University of California system.

Marika Jones, MBA  
Associate Vice President, Advancement  
Chief Philanthropy Officer  
University of Utah Health
—
In her role at University of Utah Health, Marika Jones leads the clinical fundraisers who support key clinical, research, and multidisciplinary initiatives. Before joining U of U Health, Jones was president of the Trinity Health Foundation in Moline, Illinois, which serves UnityPoint Health—the fourth-largest nondenominational health system in the United States.

Prior to working for Trinity Health, she served as the executive director of Corporate and Foundation Relations at the Iowa State University Foundation, where she established the Corporate and Foundations Relations department. Jones earned an MBA from the University of Chicago.
Grant Lasson, MBA  
Associate Vice President, Strategy  
Chief Strategy Officer  
University of Utah Health

In his role at University of Utah Health, Grant Lasson leads through strategic and business planning; funds flow redesign within the academic, clinical, and teaching enterprise; service line planning; ambulatory care strategy development; and joint venture development among academic centers and private care delivery partners.

Lasson began his professional consulting career at APM Management Consulting. He was elected partner in 1998 and subsequently named a vice president of Computer Science Corporation’s (CSC) Global Health Solutions. Later, he founded the Metis Consulting Group, assisting clients in developing rigorous operations assessment and management processes. In 2003, he merged his practice with former APM/CSC colleagues into the Chartis Group. Lasson has also worked in other academic medical centers, including UC San Diego; Stanford; Universities of Arizona, Washington, Oklahoma, and Minnesota; Lucile Packard Children’s Hospital at Stanford; and Seattle Children’s Hospital.

Amy Locke, MD, FAAFP  
Chief Wellness Officer, University of Utah Health  
Executive Director, Resiliency Center

As chief wellness officer for University of Utah Health, Amy Locke leads the design, direction, and implementation of wellness/well-being programs across campus and the community in an effort to empower patients, faculty, staff, and learners to live a healthy life. In addition to her role as chief wellness officer, she is executive director of the U of U Health Resiliency Center, professor in the Department of Family and Preventive Medicine, and adjunct professor of Nutrition and Integrative Physiology in the College of Health. Locke is Vice Chair of the Board of Directors for the Academic Consortium for Integrative Medicine and Health.

Dan Lundergan, MHA  
Chief Executive Officer (Interim)  
Chief Operating Officer  
University of Utah Health Hospitals and Clinics

Dan Lundergan has worked for University of Utah Health for more than four decades, holding numerous positions within the organization. In addition to serving as interim CEO for U of U Health Hospitals and Clinics, Lundergan is chief operating officer. He works with the executive team to develop strategies to ensure the hospital’s ongoing financial viability and fulfill its safety, satisfaction, and quality priorities. Lundergan is committed to making a difference for both the patients and their families. Additionally, he is passionate about creating an atmosphere with positive working relationships, the flexibility to learn from mistakes, and an overall environment of trust, honesty and mutual respect. Lundergan received an MHA at the University of Minnesota.
Robyn Reynolds, MBA  
*Chief Marketing Communications Officer*  
*University of Utah Health*

Robyn Reynolds joined University of Utah Health as the chief marketing communications officer in January 2020. Reynolds oversees strategic communications and marketing efforts in patient care, research, education, and community engagement. Most recently, Reynolds was the director of Strategic Marketing for MultiCare Health System in Tacoma, WA, where she oversaw marketing and communications for five hospitals, the physician practice, and off-campus emergency departments within the Puget Sound region.

Before that, Reynolds served as administrator of Strategic Relations & Marketing at University of Virginia Health System for six years, where she served on the hospital’s emergency preparedness response team during Charlottesville’s Unite the Right rally in 2017. She received an MBA from Benedictine University.

José Rodríguez, MD, FAAFP  
*Associate Vice President for Health Equity, Diversity, & Inclusion*  
*University of Utah Health*

As Associate Vice President for Health Equity, Diversity, & Inclusion, José Rodríguez is committed to identifying and eliminating systemic anti-Black racism in medicine; equipping underrepresented minority faculty with tools to succeed in a system that was not designed for them; and enlisting allies in this work.

Along with efforts to advance the institutional goals for health equity and inclusion, Rodríguez is a professor in the Department of Family and Preventive Medicine, and a family physician and Associate Medical Director at the Redwood Health Center. He has represented the university at national conferences, sharing the university’s work and his research on diversity initiatives.

Rodríguez received an MD from Weill Cornell Medicine and completed a residency in social medicine at the Montefiore Medical Center at Albert Einstein College of Medicine.

Brian Shiozawa, MD  
*Associate Vice President for Health Policy*  
*University of Utah Health*

As associate vice president for health policy, Brian Shiozawa provides expert consultation on local, state, and federal health care policy. This includes collaboration between the University of Utah, governmental agencies, and private institutions on public health, legislation, regulations, and finance. From 2017-2019, he served as a regional director of the U.S. Department of Health and Human Services. He also served two terms in the Utah State Senate, sponsoring or co-sponsoring more than 50 bills.

In addition to his leadership role, Shiozawa is an associate professor of surgery in the Division of Emergency Medicine at University of Utah Health. He received a medical degree from the University of Washington and completed residency at the University of Utah.
Cynthia Best, MBA  
*Vice Dean for Finance & Administration*  
*University of Utah School of Medicine*  

In her role as associate dean for finance and administration for the University of Utah School of Medicine (SOM), Cynthia Best is responsible for all SOM financial operations, the malpractice insurance trust fund, policy setting, development and management of an integrated faculty information system, salary equity, and SOM department oversight.

Best also serves as a liaison to, and a resource for, department administrators, the broader university campus, and the Association of American Medical Colleges. She received an MBA with an emphasis in health care from the University of Utah.

Maia Hightower, MD, MBA, MPH  
*Chief Medical Information Officer*  
*Senior Director, Health Equity, Diversity, & Inclusion*  
*University of Utah Health*  

As chief medical information officer, Maia Hightower leads efforts to leverage investment in information technology infrastructure, including leading electronic medical record (EMR) optimization. Hightower was recently recognized by *Health Data Management* as one of the “Most Powerful Women in Healthcare IT” and one of the “25 leading CMIOs at healthcare organizations.”

In 2021, Hightower was appointed senior director for Health Equity, Diversity, & Inclusion to promote the institutional EDI mission. Prior to joining University of Utah Health, she was chief medical information officer and interim chief population health officer for University of Iowa Health Care and associate medical director for Stanford Health Care’s University Healthcare Alliance.

Hightower received an MD and master’s in public health from the University of Rochester and an MBA from the Wharton School of Business at the University of Pennsylvania. She completed residency in internal medicine and pediatrics at the University of California, San Diego.

Gregory Johns, MBA, MHA  
*Director of Finance and Accounting*  
*University of Utah Health*  

In his role as director of finance and accounting, Gregory Johns provides the necessary data and understanding to create a more efficient and effective university and health care organization. Johns began his career as an administrative fellow in the Senior Vice President’s Office, where he worked with entities across the health sciences including the College of Health, University of Utah Health Plans, University of Utah Medical Group, and the School of Medicine. In 2014, he took a position on the finance team and was promoted to a director in 2017. Johns received an MBA and an MHA from the University of Utah.
Juan Carlos Negrette, MBA  
*Director of Global Health*  
*University of Utah Health*

Juan Carlos Negrette uses his nearly 30 years of international experience in health institutions management, strategic partnerships development, and programs design and implementation in his role as director of Global Health at the University of Utah. In more than 20 countries in Asia, Africa, and Latin America, Negrette has designed and implemented strategic health interventions in challenging environments.

Before his work at the University of Utah, Negrette was the managing director of Africa and Multilateral Organizations at Johns Hopkins Medicine International. He also directed a health services social franchise in Bangladesh for Chemonics and worked at the Johns Hopkins Bloomberg School of Public Health Center for Communications as the senior programs officer and technical resident advisor.

Negrette holds an MBA in health services management from Johns Hopkins and a BA in business administration from Javeriana University in Bogotá, Colombia.

Catalina Ochoa, MPA  
*Budget Director and Controller*  
*University of Utah Health*

As budget director and controller, Catalina Ochoa oversees the U of U Health budget process, financial planning, and regulatory compliance and provides strategic financial counsel. After working in the manufacturing and corporate sectors, Ochoa spent 10 years managing financials for the Department of Pediatrics in the School of Medicine. She joined the Office of the Senior Vice President for Health Sciences in 2015. As part of her current role, she is a member of the Utah Poison Control Center Advisory Board. Ochoa earned an MPA at the University of Utah.

Steve Panish  
*Assistant Vice President, Capital Programs & Space Management*  
*University of Utah Health*

Steve Panish has more than 30 years of experience in capital and facility planning at academic medical centers. As Assistant Vice President for Capital Programs and Space Management, Panish evaluates and proposes capital needs for health sciences research and education facilities for renovations, maintenance, and repairs. This includes analysis and reports to health sciences leadership for review and approval of strategies, projects, and initiatives regarding facility needs.

Panish also provides project management and budget oversight for projects, including the off-campus real estate portfolio. He completed a master’s degree in Public Administration at California State University, Fullerton.
Sherrie L. Perkins, MD, PhD
Chief Executive Officer, ARUP Laboratories

As CEO of ARUP Laboratories, Sherrie L. Perkins promotes excellent patient care and cutting-edge laboratory medicine. A tenured professor of pathology in the School of Medicine, Perkins has served in numerous leadership roles, including director of hematopathology, division chief of clinical pathology, director of the ARUP R&D Institute, and member of the ARUP Laboratories’ executive management team.

Perkins is board certified in anatomic pathology and holds a special qualification in hematology. Perkins received a PhD in biochemistry from the University of Miami and earned an MD and completed a pathology residency at Washington University in St. Louis. She completed a hematopathology fellowship under Carl Kjeldsberg, MD, at the University of Utah.

Rick Smith
Senior Director of Human Resource Management
University of Utah Health Academics

As senior director of human resource management for University of Utah Health Academics, Rick Smith and his team work to improve recruitment, hiring, onboarding, engagement, performance management, training, and overall HR operations. Previously, Smith served as academic practice manager for the University of Washington School of Medicine, Children’s Hospital, and Medical Center, and as assistant administrator at Harborview Medical Center.

While on active duty with the U.S. Navy, he was director for Administration and Human Resources at Landstuhl Regional Medical Center in Germany and served in various leadership roles with the Navy Bureau of Medicine and Surgery in Washington, D.C. Smith completed an MBA at the University of Washington.

Chad Westover, MPA
Chief Executive Officer
University of Utah Health Plans

Chad Westover is responsible for the fiscal, operational, legislative, regulatory, and human resources objectives of University of Utah Health Plans. He is also the leading driver in improving quality and providing services to the members we serve. Westover joined U of U Health in 2015. Prior to that, he was the president of Molina Healthcare of Utah. Westover was the inaugural director of the Utah Children’s Health Insurance Program (CHIP) and was responsible for health insurance access initiatives for the Utah Department of Health. Other stops in his career include a four-year stint as a health policy consultant for Utah Governor Mike Leavitt and seven years as vice president of business development at Anthem, Inc. Westover received an MPA at Brigham Young University.
DEANS, UNIVERSITY OF UTAH HEALTH SCHOOLS AND COLLEGES

Marla De Jong PhD, RN, FAAN, Colonel (Ret.)  
*Dean, College of Nursing*

As dean of the College of Nursing, Marla De Jong focuses on preparing future nurses, gerontologists, and health care leaders to improve the health and care of individuals, families, and communities. She also works to attain distinction for the College in nurse-led interdisciplinary team science and cultivate an academic culture of belonging in which faculty, staff, and students of diverse backgrounds can thrive.

Prior to being named as dean, De Jong served as chair of Acute and Chronic Care. Before joining U of U Health, De Jong served for nearly 29 years in the Air Force, where she held clinical, leadership, research, and academic roles. De Jong is a fellow in the American Academy of Nursing. She received an MS in nursing from the University of Maryland at Baltimore and a PhD in nursing from the University of Kentucky.

Wyatt R. “Rory” Hume, DDS, PhD  
*Associate Vice President, Academic Affairs and Education*  
*Dean, School of Dentistry*

*(See bio on page 6.)*

David H. Perrin, PhD  
*Dean, College of Health*

In addition to his role as dean, David Perrin is a professor of physical therapy and athletic training at the University of Utah. He previously served as provost and executive vice chancellor at the University of North Carolina at Greensboro and as dean of the School of Health and Human Performance. For 15 years, Perrin directed the graduate programs in athletic training (MEd) and sports medicine (PhD and EdD) at the University of Virginia.

Among his professional honors are induction into the Legacy Laureate Society at the University of Pittsburgh and an Honorary Doctor of Humane Letters from the Arizona School of Health Sciences at A.T. Still University. Perrin received an MA in athletic training from Indiana State University and a PhD in exercise physiology from the University of Pittsburgh.
Randall T. Peterson, PhD
Dean, College of Pharmacy

Randall Peterson is the L. S. Skaggs Presidential Endowed Professor and dean of the College of Pharmacy at the University of Utah. A chemical biologist, Peterson’s research utilizes high-throughput screening technologies to discover new drug candidates for cardiovascular and nervous system disorders. Several compounds discovered by the Peterson laboratory have become widely used research tools or preclinical drug candidates.

Peterson received a PhD from Harvard University, where he studied as a Howard Hughes Medical Institute predoctoral fellow before completing a postdoctoral fellowship at Massachusetts General Hospital. He spent 14 years as a faculty member at Harvard, where he was the Charles Addison and Elizabeth Ann Sanders Chair in Basic Science at Harvard Medical School, scientific director of the MGH Cardiovascular Research Center, and senior associate member of the Broad Institute.

Wayne Samuelson, MD
Dean, Medical Education
University of Utah School of Medicine

Wayne Samuelson joined the faculty of the Division of Respiratory, Critical Care, and Occupational Pulmonary Medicine in the Department of Internal Medicine in 1995. Samuelson is a professor of medicine with clinical interests in the management of asthma patients.

Samuelson received an MD at the University of Utah. He completed a residency in internal medicine and a fellowship in pulmonary disease at Duke University Medical Center. Prior to joining the faculty at the University of Utah School of Medicine, he was a faculty member in the Division of Allergy, Respiratory, and Critical Care Medicine in the Department of Internal Medicine at Duke.

Catherine B. Soehner, MLS, BSN
Associate Dean for Research and Director,
Spencer S. Eccles Health Sciences Library

Catherine Soehner is the director of the Spencer S. Eccles Health Sciences Library and associate dean for research at the University of Utah’s J. Willard Marriott Library. During her time at the Marriott Library, Soehner has led the delivery of a wide range of library services, including research and information services, library instruction and training for users, and support for faculty, graduate students, and other advanced users in digital scholarship efforts.

Previously, Soehner served in academic libraries at the University of Michigan and the University of California, Santa Cruz, as well as the National Library of Medicine. She earned an MLS at Indiana University and a BSN at Mount St. Joseph University in Cincinnati.
HEALTH SCIENCES RESEARCH COUNCIL

The Health Sciences Research Council is led by key stakeholders throughout U of U Health. This council engages with faculty and leaders within the schools and colleges to determine strategies for the future, which continue to create better synergy between basic and translational research.

HEALTH SCIENCES EDUCATION EXECUTIVE COUNCIL

The Health Sciences Education Executive Council provides vision, engagement, and stewardship for the U of U Health educational mission. Council membership includes educational leaders from every health science academic unit and the Office of the Senior Vice President. The council meets monthly to promote strategic educational alignment, advance education technology, and foster educational impact and transformation.
EQUITY, DIVERSITY, AND INCLUSION

The Office of the Associate Vice President for Health Equity, Diversity, & Inclusion strives to create an inclusive climate throughout the University of Utah and U of U Health while also addressing education and health inequities that exist in our institution and community. Listening and working with the health sciences colleges and schools, the Eccles Health Sciences Library, Hospitals and Clinics, and the Huntsman Cancer Institute to resolve the systemic anti-Black racism and anti-woman sexism, microaggressions, and unconscious bias that pervade our educational and health care system is at the forefront of our work. In partnership with the University’s VP for Equity, Diversity, and Inclusion as well as the SOM Office for Health Equity, Diversity, & Inclusion, we are committed to helping the University chart a path forward by revolutionizing our practices and actions towards an equitable, inclusive, and anti-racist campus by:

1. Inviting individuals (with a focus on health sciences leaders) to educate themselves on the historical oppression of Black and other people of color by providing tools to have the tough, uncomfortable, and necessary conversations to dismantle systems of inequality embedded in our society.

2. Adopting and earning an anti-racist, anti-sexist, anti-oppression identity by openly examining and rewriting any policy that allows us to have outcomes that are racist, sexist, or oppressive.

3. Creating a health sciences anti-racist, anti-sexist strategy that all stakeholders can use to move the institution forward, which is in harmony with main campus strategy and utilizes best practices.
José Rodríguez, MD, FAAFP  
Associate Vice President for Health Equity, Diversity, & Inclusion  
University of Utah Health

As Associate Vice President for Health Equity, Diversity, & Inclusion, José Rodríguez is committed to identifying and eliminating systemic anti-Black racism in medicine; equipping underrepresented minority faculty with tools to succeed in a system that was not designed for them; and enlisting allies in this work.

Rodríguez is a professor in the Department of Family and Preventive Medicine, and a family physician and Associate Medical Director at the Redwood Health Center. He has represented the university at national conferences, sharing the university's work and his research on diversity initiatives.

Rodríguez received an MD from Weill Cornell Medicine and completed a residency in social medicine at the Montefiore Medical Center at Albert Einstein College of Medicine.

Paloma F Cariello, MD, MPH
Associate Dean for Health Equity, Diversity, & Inclusion
University of Utah School of Medicine

As associate dean for Health Equity, Diversity, & Inclusion, Paloma Cariello embraces diversity as a core value and fundamental priority across the different fields in medicine and believes in the power of a diverse group. In addition to her leadership and clinical roles, Cariello is an associate professor of infectious diseases and director of the Infectious Diseases Fellowship Program. She received an MD at the Universidade Federal do Rio de Janeiro Medical School and completed a residency in internal medicine at MetroWest Medical Center. Additionally, she completed fellowships in infectious diseases (University of Massachusetts) and transplant infectious diseases (University of Pittsburgh) and a master’s degree in public health (University of Massachusetts).

Maia Hightower, MD, MPH
Senior Director, Health Equity, Diversity, & Inclusion  
Chief Medical Information Officer  
University of Utah Health

In 2021, Maia Hightower was appointed senior director for Health Equity, Diversity, & Inclusion. A champion for EDI awareness and initiatives, Hightower developed the Healthcare IT Equity Maturity Model (HITEM) to dismantle structural bias hardwired in health care IT and develop an inclusive and equity-minded health care IT culture.

As Chief Medical Information Officer for U of U Health, Hightower led the charge for health equity in the COVID era to guide testing and vaccination efforts. She is also an advocate for salary equity among U of U Health employees.

Hightower received an MD and master’s in public health from the University of Rochester and an MBA from the Wharton School of Business at the University of Pennsylvania. She completed residency in internal medicine and pediatrics at the University of California, San Diego.
Line Kemeyou, MD
Assistant Dean for the Office for Health Equity, Diversity, & Inclusion
University of Utah School of Medicine

In 2020, Line Kemeyou was appointed assistant dean for Health Equity, Diversity, & Inclusion at the University of Utah School of Medicine. Kemeyou partners with the associate dean for Health Equity, Diversity, & Inclusion to ensure retention of minority faculty, diversity recruitment efforts of students and residents, and promote a climate of inclusiveness throughout the university.
An assistant professor of medicine, Kemeyou received an MD from the University of Texas Southwestern Medical School, completed a residency in internal medicine at Parkland Health & Hospital System, and fellowships in cardiovascular disease (University of Florida College of Medicine) and advanced heart failure and transplant (University of Utah School of Medicine).

Kola Okuyemi, MD, MPH
Senior Director, Equity, Diversity, & Inclusion, Huntsman Cancer Institute
Chair, Department of Family and Preventive Medicine

In addition to leading the Department of Family and Preventive Medicine, Kolawole Okuyemi serves as senior director for Equity, Diversity, & Inclusion at the Huntsman Cancer Institute and on the steering committee for the School of Medicine Anti-Racism Commission. As a physician-researcher and professor of family medicine, he focuses on improving the health of underserved and refugee populations and eliminating health disparities.
Okuyemi received an MD from the University of Ilorin in Nigeria, completed a residency in family medicine and a master’s degree in public health at the University of Kansas Medical Center, and completed a research fellowship at the Morehouse School of Medicine in Atlanta.

Mikel Whittier, MBA
Senior Director, Health Equity, Diversity, & Inclusion
University of Utah Health Hospitals and Clinics Human Resources

In 2021, Mikel Whittier joined the University of Utah Health Hospitals and Clinics Human Resources team as the inaugural senior director for Health Equity, Diversity, & Inclusion. Whittier works with Hospitals and Clinics leaders and U of U Health’s academic Health Equity, Diversity, & Inclusion office to foster an environment that is welcoming and safe for our staff, patients, and their families.
Prior to joining University of Utah Health, Whittier served as the strategist of Justice and Health Equity at St. Louis Integrated Health Network, aiding the advancement of health equity solutions. He received a master’s in health care administration from the University of Missouri.
2020 changed all of us. COVID-19 and the murder of George Floyd made painfully clear that we have a long way to go to achieve equity and eliminate systems that continue to oppress marginalized racial, ethnic, and gender communities. Faculty, students, and staff at U of U Health are invited to look inside ourselves and to work within our spheres of influence to change. We, as an institution, believe that “BLACK LIVES MATTER,” and we are challenged to act as if we believed that statement.

Institutional change starts with leaders, and our health sciences equity, diversity, and inclusion teams have grown immensely since Fall 2019. Our team is now comprised of a group that functions across multiple missions and facilities, including: an Associate Vice President, a Senior Director, and full staff of three managers for Health Equity, Diversity, & Inclusion, for U of U Health; an Associate Dean and an Assistant Dean, for the School of Medicine Office of Health Equity, Diversity, & Inclusion; a Senior Director of Equity, Diversity, & Inclusion, in University of Utah Hospitals and Clinics; and a Senior Director of Equity, Diversity, & Inclusion, at Huntsman Cancer Institute. Additionally, the Colleges of Health and Nursing have active searches for an Associate Dean for Equity, Diversity, & Inclusion, and the other colleges and units on health sciences campus are seeking to do the same. The School of Medicine departments have also named vice chairs, associate chairs, or faculty designees to lead this work at the department level. In two short years, we have increased the titled EDI officers almost ten-fold. The purpose of these titles is to ensure that our EDI work is coordinated with multiple representative voices at decision-making tables across all of our missions—at the health system level, hospital level, and academic level.

Multiple stakeholders are engaged in this work—through the formation of EDI and/or Anti-Racism Commissions (ARC). The MD program launched an anti-racism commission, designed to address suggestions for improvement from students dedicated to #WhiteCoats4BlackLives. The SOM-ARC focuses on improvements in law enforcement, admissions, curriculum reform, and support for Black, Indigenous, and People of Color, all within the MD program. The SOM-ARC was comprised of faculty and students from that program. They have issued their final recommendations and we are now in the implementation phase. At the Health Sciences Level, we also formed an ARC, incorporating members of the MD program.
commission and expanding to have faculty, staff, and student representation from each of the Colleges or Schools, and the Library. This HS-ARC has taken on the responsibilities of reviewing the health sciences EDI strategy, updating or creating anti-racist, anti-sexist diversity action plans for each of the colleges and/or departments, and examining hiring, admissions, and campus safety policies. The HS-ARC is delivering their report to the Council of Deans in the summer term of 2021. The Huntsman Cancer Institute also convened an EDI commission with broad representation from faculty, staff, and trainees, whose principal focus was to address racist acts from patients towards employees through revision of clinical policies, addressing trainee concerns, examining hiring policies, defining equity, diversity, and inclusion in our culture, and campus safety. Their final recommendations have been submitted and are now in the implementation phase. All of these efforts have informed and shaped our health sciences EDI strategy, which is scheduled to be released later this year.

University of Utah Health is committed to being accountable for our EDI efforts. For this reason, faculty evaluations will now include efforts in EDI; staff evaluations will also include them. In addition, as an institution, we are committed to being accountable at the highest levels. For this reason, the recommendations from the MD program anti-racism commission, the health sciences anti-racism commission, and the HCI EDI commission will be made public and posted on our websites. This will ensure that the communities at University of Utah Health can hold our leaders accountable for making changes.

Because sexism is still a pervasive issue on our health sciences campus, our Women in Health, Medicine, and Science (WiHMS) will lead an anti-sexism effort and will issue a report to our senior leaders later in 2021 with recommendations on improving our campus climate and eliminating sexism’s role in our decision-making processes.

In addition to the previously mentioned work, there are three EDI initiatives that are a priority for 2021:

1. Institutional leaders, individual students, faculty, staff, and trainees adopt the EDI values set and share ownership and accountability for outcomes.
2. Our scholarship, teaching, research, training, and clinical care delivery incorporate anti-sexism, anti-racism, decolonization, anti-oppression, and equity; further amplifying excellence in care for all people.
3. University of Utah Health—the academic units and the service delivery units—is known as the national leader in Equity, Diversity, Inclusion, anti-sexism, and anti-racism transformation.

As a major part of these overarching goals, in 2021 we have established certain action items:

- Create and recruit for EDI associate dean positions in each of our academic colleges and schools.
- Refine all mission and vision statements to include EDI language; continually recalibrated to address the needs of a changing population and in harmony with new or existing anti-racist, anti-sexist diversity action plans.
- Adopt NIH guided best practices to attract and hire diverse talent from the health sciences target diversity groups of women and Black, Latinx, Native American, and Pacific Islander populations.
- Identify and use best practices to ensure underrepresented residents in medicine match in our programs through evaluation of our recruitment policies.
- Establish robust anti-sexism initiatives based on recommendations from our WiHMS leadership group.
SECTION 02

UNIVERSITY OF UTAH HEALTH
OVERVIEW
UNIVERSITY OF UTAH HEALTH HISTORY

The University of Utah’s health care legacy began in 1905, when its two-year medical program began with only 14 students, six professors, and a meager $10,000 budget. In 1910, the Carnegie Foundation’s *Flexner Report* gave the school an excellent assessment. Spurred by the glowing report, the program became a separate, two-year medical school in 1912. In 1942, it became a four-year school and recruited faculty from prominent and established national institutions. One of those recruits was renowned Johns Hopkins hematologist Maxwell Wintrobe, MD, PhD. Two years after his arrival, the National Institutes of Medicine awarded the University of Utah its first National Institutes of Health research grant (Maxwell Wintrobe, MD, PhD).

ADVANCING HEALTH AND SCIENCE

U OF U HEALTH IS RESPONSIBLE FOR MANY MEDICAL FIRSTS:

- **1945**
  - Nation’s first National Institutes of Health research grant (Maxwell Wintrobe, MD, PhD)

- **1955**
  - Utah’s first open heart surgery (Russell M. Nelson, MD’47, PhD)

- **1964**
  - Nation’s first biomedical informatics department, pioneering evidence-based clinical care (Homer Warner, MD)

- **1968**
  - Region’s first neonatal intensive care unit

- **1976**
  - Region’s first and only American Burn Association Verified Center established

- **1977**
  - World’s largest population database, Utah Population Database, established

- **1979**
  - Nation’s first wearable artificial kidney (Willem Kolff, MD, PhD)

- **1982**
  - World’s first total artificial heart transplant. (William DeVries, MD’70)
Health awarded him its first-ever research grant, a $100,000 award to study hereditary and metabolic disorders.

Faculty and student clinical activities were conducted primarily at the Salt Lake County General Hospital until 1965, when University Medical Center opened its doors. Growth in scale and reputation has continued decade by decade, keeping up with the regional demand for health care services. Advances in clinical care, research, and education at University of Utah Health have continued to build an institution that is now a recognized leader locally, regionally, and nationally.

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**World’s first identification of BRCA1** (breast cancer and ovarian cancer gene). More than 50 additional genes discovered since.

**1994**

**Utah’s first level 1 trauma center** established

**2001**

**Certified as region’s first primary stroke center**

**2004**

**World’s first comprehensive map of the retina’s neuron** (Moran Eye Center)

**2011**

**Dedication of Huntsman Mental Health Institute**

**2020**

---

**Huntsman Cancer Institute** founded by Jon M. Huntsman and Ray White, PhD

**1999**

**Mario Capecchi, PhD, awarded Nobel Prize in Physiology of Medicine**

**2007**

**First in-human clinical trial of Percutaneous Osseointegrated Prosthesis (POP) device.**

**2015**

**First COVID-19 vaccine administered in Utah**

**2020**
UNIVERSITY OF UTAH HEALTH TODAY

University of Utah Health is the only academic medical center in the state of Utah and provides patient care for the people of Utah, Idaho, Wyoming, Montana, western Colorado, and much of Nevada. It also serves as the training ground for the majority of the state’s physicians, nurses, pharmacists, therapists, and other health care professionals.

With an annual budget of $4.3 billion (FY20), U of U Health is comprised of:

- Five hospitals and 12 community health care centers
- University of Utah Medical Group with 1,600+ members
- Highly-ranked $408 million research enterprise
- Six schools and colleges, including the Colleges of Health, Nursing, and Pharmacy, the Eccles Health Sciences Library, and the Schools of Dentistry and Medicine

All figures are FY20 unless otherwise indicated.
• 236,000+ member health plan, offering medical, mental health, and pharmacy benefits for employer groups, individuals, and families, as well as Medicare and Medicaid
• ARUP Laboratories, one of the nation’s largest reference laboratories
• Numerous institutes and centers reflecting the health system’s strengths in oncology, cardiology, diabetes treatment, genetics, ophthalmology, orthopaedics, neuroscience, psychiatry, precision medicine, population health, global health, and more.

Excellence in patient care, education, and research—all in service to the community—is vital to our overall mission. Staffed by more than 20,000 employees, U of U Health is recognized nationally as a transformative health care system and regionally as a provider of world-class care.
SERVING THE STATE
Together, as One U, we serve communities and the region, lead education and discovery, and innovate care accountable for outcomes.
INNOVATING CARE | ACCOUNTABLE FOR OUTCOMES

Health care is undergoing profound and rapid changes. University of Utah Health sees this transformation as an opportunity to lead. U of U Health leads the nation in delivering compassionate, quality health care. We have developed an innovative care system that is accountable for outcomes and leads education and discovery across a singular academic enterprise.

For 11 consecutive years, U of U Health has ranked among the nation’s top 10 academic hospitals for quality. This means that its medical and allied professional students train in one of the best clinical environments in the nation. It also signifies that patients have better access to care, fewer complications, better survival, improved communication, shorter stays, and fewer readmissions.

At U of U Health, transparency is more than a buzzword. In 2012, it became the first health system in the nation to publish patient satisfaction results and comments online for the world to see. Since then, hundreds of other health care systems have followed suit, using transparency to improve patient experiences nationwide. Patients value this information, and providers push one another to improve patient experiences and outcomes.

In 2019, Centers for Medicare & Medicaid Services Administrator Seema Verma named U of U Health one of three exemplary health systems nationwide for voluntarily taking steps to promote price transparency for their patients.

NATIONAL QUALITY RANKING FOR UNIVERSITY OF UTAH HEALTH INPATIENT CARE

Source: Vizient, Inc.
U of U Health is building a culture of value that can be modeled for its students and emulated by other health care systems. We first worked to understand and control health care costs in relation to quality outcomes. The Value-Driven Outcomes (VDO) tool developed at the University of Utah allows providers to examine costs against outcomes. VDO provides a detailed view for every patient, every provider, and every episode of care. Additionally, we continue to implement and improve the Patient Reported Outcomes tool, which integrates the patient voice into our definition of quality outcomes.

U of U Health established itself as one of the nation’s highest value academic medical centers. We have been a top performer in quality, safety, and caring, and are now positioning ourselves to be directly accountable for the outcomes our patients experience.

A highly collaborative system, U of U Health is uniquely equipped to transform health care in Utah, which already is one of the healthiest states in the nation. This fact gives the institution an unmatched capacity to innovate health care. By engaging the strengths of the entire institution—clinical, research, and education, including academic peers across the entire university—we can innovate care delivery and model improvements for other health centers in the U.S.
U OF U HEALTH FINANCIAL SUMMARY
Summary of expenditures by revenue source

University of Utah Health Hospitals and Clinics
$2.2B

School of Medicine
$1.2B

ARUP
$681.5M

Other $68.2M
College of Health $32.2M
College of Pharmacy $32.1M
College of Nursing $29.3M
School of Dentistry $24.1M
Eccles Health Sciences Library $6.5M

FY 2020 $4.3B
STRATEGY 2025

Together as One U, we serve communities and the region, lead education and discovery, and innovate care accountable for outcomes.

Communities, partners, and people make us who we are, and we are fully invested in their health, wellness, and success.

uofuhealth.utah.edu/strategy
SECTION 03

UNIVERSITY OF UTAH HEALTH COMMUNITY ENGAGEMENT
$340.6M RAISED IN COMMUNITY
PHILANTHROPIC SUPPORT

ADDRESSING SOCIAL DETERMINANTS OF HEALTH IN OUR COMMUNITY

**HEALTH**
- **8K** Utahns screened for chronic diseases (DRIVING OUT DIABETES INITIATIVE)
- **6K** Be Well Utah participants in 2020
- **18.5K** Underserved dental patient visits statewide in 2020

**SOCIAL**
- **130K** Crisis calls via HMHI Community Crisis Services and SafeUT
- **830K** Meals donated for Meals to Heal Food Drive (as of Apr. 2021)
- **43%** Of patients screened in the ED have social needs (July 2019-June 2020)

**EDUCATION**
- **37K** Utahns taught diabetes prevention and management
- **13K** Participants in K-12 health education programs
- **89** Rural clinical experiences completed by medical students (RUE1)

**ENVIRONMENT**
- **10M** Kilowatt hours/7.5 U.S. tons of CO2 saved through efficiency projects; enough to power 1,235 average homes for one year
- **17** U.S. tons of food waste avoided

**$172M PROVIDED IN UNCOMPENSATED CARE**

All figures are FY20 unless otherwise indicated.
ADDRESSING SOCIAL DETERMINANTS OF HEALTH

A significant advancement in modern health care is the deeper understanding of how social conditions—economic, social, educational, and natural environments—can impact health. University of Utah Health understands that treating patients includes treating societal problems. We consider community engagement to be as much of a core mission as clinical care, research, and education.

CARNEGIE COMMUNITY ENGAGEMENT CLASSIFICATION

In 2020, the University of Utah became one of 359 U.S. colleges and universities to hold the Carnegie Community Engagement Classification, an elective designation that indicates institutional commitment to community engagement. This classification was awarded following a rigorous process of self-study by each institution and assessed by a national review committee.

Every 10 years, the Carnegie Foundation evaluates community engagement in several dimensions. The Carnegie Community Engagement Classification has been the leading framework for institutional assessment and recognition of community engagement in U.S. higher education for the past 14 years with regular classification cycles. The University of Utah received initial designation in 2010, and again in 2020.

The self-study report highlighted the strong role of interprofessional education at U of U Health; the wide variety of community programming provided, including arts, education, and engineering; health programs; and more. A key goal of all programming is reaching individuals and communities that are traditionally underserved and developing strong community partnerships to assure engagement work is meaningful and sustainable.

HEALTHCARE ANCHOR NETWORK

U of U Health recognizes the importance of working side-by-side with communities to address social, economic, and environmental disparities. In 2019, we joined the Healthcare Anchor Network (HAN), a group of more than 60 hospitals and health systems across the country that collaborate to build inclusive, local economies.

Collectively, HAN members are setting institutional priorities to improve community health and well-being by leveraging all their assets—including hiring, purchasing, and investment—for equitable, local economic impact.

Members share best practices and redirect them to building and investing within their communities by creating more local jobs and empowering minority and female-owned businesses.

OPIOID ADDICTION

In 2021, Intermountain Healthcare and U of U Health announced they will jointly develop a new medical educational program to train the next generation of physicians in population health. The program will focus on pre-emptively addressing causes of illness, rather than just treating people when they are sick.
SETTING COMMUNITY HEALTH PRIORITIES

Community engagement is our opportunity to prioritize the needs of those we serve. Every three years, University of Utah Health engages with civic leaders, other local health care systems, non-profits, and residents to conduct the Community Health Needs Assessment (CHNA) and set priorities the health system can address in partnership with the community. In effect, the CHNA is the community telling us what their health needs are. It’s a gold mine of information that we can use to improve quality of life in Utah. Utilizing this invaluable resource at all levels of our health system is key to realizing the full impact we can have on improving the health and well-being of the communities we serve.

In December 2020, University of Utah Health released its 2018-2020 Community Health Assessment Completion Reports and its 2021-2023 Implementation Plan. These reports document the process through which U of U Health conducted the CHNA, the key findings, the identified priorities, and the implementation strategies. The three top priorities for our FY 2018-2020 CHNA were: improving mental health and reducing suicide; reducing prescription drug misuse, abuse, and overdose; and reducing obesity and obesity-related chronic conditions.

These three priority areas have carried over into our FY 2021-2023 CHNA for University of Utah Hospital, also released in 2020. And a new (fourth) priority was added: addressing racism to reduce inequities.
In 2017, in partnership with the Larry H. and Gail Miller Family Foundation, U of U Health launched an interdisciplinary initiative called Driving Out Diabetes (DODi), a Larry H. Miller Family Wellness Initiative to battle diabetes in the state of Utah and across the region. The program provides education and prevention outreach, supports innovations in clinical care, and funds cutting-edge research.

Through DODi, we are educating Utah residents of all ages about diabetes and the benefits of healthy lifestyle choices, taking this message to where people learn, work, pray, and play. We identify people with a higher chance of developing diabetes and target them for primary diabetes prevention strategies. The program delivers new models of clinical care to those who already have diabetes to help them better manage their health and prevent complications. It invests in innovative research to discover scientific breakthroughs that will lead to improved treatments—and eventually cures—for people with diabetes in Utah and beyond. DODi integrates and leverages strengths in the Office of Wellness & Integrative Health, School of Medicine, College of Health, and the Diabetes and Metabolism Research Center. To date, we have served more than 60,000 Utahns.

The Wellness Bus is a specially designed, 40-foot RV that has been in the community since 2018 to provide access to information and education about diabetes and other chronic conditions. In 2020, the Wellness Bus pivoted to provide COVID-19 testing in underserved areas in partnership with the Utah Department of Health and the COVID Community Partnership. After providing more than 14,000 COVID tests, the Wellness Bus is now back to its original mission to prevent and reduce the burden of diabetes.
MENTAL HEALTH

In the Fall of 2019, University of Utah announced a historic gift by the Huntsman Foundation, establishing Huntsman Mental Health Institute (HMHI) to address one of the most critical health issues facing our state and nation. At HMHI, community programs are imperative to educate, engage, and treat individuals. Community Crisis Intervention and Support Services includes a crisis line for 24/7 support, mobile crisis outreach teams, a receiving and stabilization center for short-term stays, a warm line for emotional support, and a text and tip line via SafeUT.

In 2020, more than 130,000 contacts were made through these crucial services. In addition, HMHI community research efforts include collaboration with programs like SafeUT, Occupational Trauma with the Unified Fire Authority, and the Adolescent Brain Cognitive Development (ABCD) Study. In the years to come, the institute will become a national center of mental health excellence, providing quality care to families, driving breakthrough research, and working to end the stigma surrounding mental health.

Licensed clinicians in our 24/7 CrisisLine call center respond to all incoming chats and calls by providing supportive or crisis counseling, suicide prevention, and referral services. SafeUT can help anyone with emotional crises, bullying, relationship problems, mental health, or suicide-related issues. If a SafeUT user is actively attempting suicide or has plans to harm themselves in the immediate future, SafeUT clinicians will work in coordination with first responders/school personnel to initiate an active rescue (life-saving intervention).
Better alternatives for treating pain and better services to treat addiction are part of our community outreach effort. The Program for Addiction Research, Clinical Care, Knowledge, and Advocacy (PARCKA) improves access and quality of health care for those with addictions or otherwise medically vulnerable. PARCKA provides an interdisciplinary approach to addiction-related clinical care, advocacy, research, and education.

U of U Health offers a free 30-day opioid recovery program in which caseworkers help patients with a long-term treatment plan. The Substance Use in Pregnancy Recovery Addiction Dependence Clinic (SUPeRAD) serves post-partum women who are actively using any substance or are in recovery for any addiction. To prevent the misuse and abuse of prescription drugs, U of U Health pharmacies offer 13 convenient locations where patients can safely dispose of unused prescription medications. An average of 500 pounds of unused medications are safely disposed every month.

The University’s Community Physician Group implemented a comprehensive opioid prescribing program in 2016 that has resulted in a 49.6 percent decrease in the number of opioid prescriptions; an approximately 26 percent drop in the number of high-dose prescriptions in the past year; and a precipitous drop in prescriptions of dangerous combinations of medications with opioids, with only 0.02 percent of all empaneled patients receiving such risky combinations.

Research targeting the opioid epidemic includes a grant by the National Institutes of Health to explore the effects of cannabinoids in pain management and a pilot study to evaluate whether integrating a pharmacist within the primary care team could reduce opioid prescriptions to at-risk patients.

**AIR QUALITY**

The University of Utah has a long history in understanding and addressing a community issue that affects everyone living along the Wasatch Front: bad air quality. Surrounded by towering mountains to the east and the Great Salt Lake to the west, unfortunately the landscape is sometimes obscured by wintertime inversions and summertime ozone. Salt Lake City is the 8th most polluted for short-term particulate pollution (PM2.5) and the 14th most polluted city for ozone, according to the American Lung Association.

Polluted air is associated with many negative health outcomes such as pneumonia and respiratory disease. In addition, polluted air contributes to increased school absences and test results among our youth.

The U community is committed to researching health outcomes, continuing to enact policies that reduce our own emissions, and disseminating cutting-edge research results. The commitment is to clean the air so it matches the natural beauty and health of our state.

Leveraging its breadth and depth of expertise in air quality causes, impacts, and solutions, the U is accelerating its efforts to serve as One U for Utah through air quality research and thereby improve lives.
RURAL HEALTH CARE

Rural & Underserved Utah Training Experience (RUUTE)

With Utah’s population growing rapidly, about 19 physicians per year are needed to replace retiring providers in rural and underserved communities. U of U Health is committed to training physicians to meet this need.

University of Utah School of Medicine’s Rural & Underserved Utah Training Experience (RUUTE) addresses the shortage of medical resources through several pipeline initiatives. RUUTE’s Utah Rural Outreach Program (UROP), Little RUUTES, and the RUUTE Undergraduate Ambassador program provide opportunities for medical and undergraduate students to teach health sciences curriculum in rural elementary and high schools to increase awareness and interest in health careers and education.

RUUTE also recruits rural physicians to act as clinical preceptors for University of Utah medical students to train and work in rural settings. In return, rural clinical preceptors become adjunct faculty and receive access to resources in a state-of-the-art academic health system, while providing students with first-hand experience of what it is like to practice in a rural area. Additionally, RUUTE launched a new podcast for physicians called “M.ED: Medical Education for the Practicing Clinician,” offering discussions to increase clinician competency and covering a variety of topics ranging from telemedicine, provider and medical student wellness, and diversity and inclusion.

Graduate Medical Education Resident Engagement & Training for Underserved & Rural Needs (RETURN)

RETURN provides GME trainees clinical and cultural exposure to Utah’s rural and underserved health needs. This exposure increases likelihood of retention. RETURN strives to improve retention as a “return” on the 652 days spent by our 32 trainees in rural/underserved communities. In addition, our Concept to Community (C2C) contest engages more trainees, students, and faculty in interprofessional projects to address these health needs. RETURN’s Resident-as-Teacher and Global and Rural Health Scholars programs create synergies for our future rural physicians. For sustained impact, we procured a $1.56M HRSA grant to develop the first rural training track (RTT) in Utah and first rural Internal Medicine-Pediatrics program in the country.

$12.6M in HRSA Grants Awarded in 2020 to Provide Care in Utah’s Rural, Tribal, or Medically Underserved Communities

» $7M grant—School of Medicine’s Value-Based Medical Student Education Training Program

» $4M grant—Addiction Medicine and Addiction Psychiatry Fellowships Program

» $1.56M grant—Internal Medicine-Pediatrics Rural Residency Training Program (nation’s first)
COVID-19 Pandemic Response

**Patient Care & Testing**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVID Patients Treated</td>
<td>1,700 (as of 4/15/21)</td>
</tr>
<tr>
<td>Unique Patients Tested</td>
<td>297.5K (as of 4/15/21)</td>
</tr>
<tr>
<td>People Tested</td>
<td>14.5K via wellness bus</td>
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**Vaccinations**

<table>
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<tbody>
<tr>
<td>Health Care Personnel Vaccinated</td>
<td>14K+ (as of 4/15/21)</td>
</tr>
<tr>
<td>Vaccines Administered to Patients</td>
<td>41K+ (as of 4/15/21)</td>
</tr>
</tbody>
</table>
  - 12.7K at Redwood Health Center
  - 7.7K BIPOC Patients
  - 9.6K from Salt Lake underserved communities

**Community Support**

<table>
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<th>Statistic</th>
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<tbody>
<tr>
<td>Masks Sewn by 50,000 volunteers</td>
<td>6M</td>
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<tr>
<td>PPE Items Donated</td>
<td>205K (160K from SOM student-organized drives)</td>
</tr>
<tr>
<td>Meals Donated by Local Restaurants for Health Care Personnel</td>
<td>32K+</td>
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**University COVID Research**

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<td>U Seed Funding</td>
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<td>Research Projects</td>
<td>200+</td>
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<td>Publications</td>
<td>130+</td>
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Blood samples collected from 24K Utahns for Utah HERO Project, in collaboration with David Eccles School of Business.

All figures are FY20 unless otherwise indicated. All data representative of patient care, testing, and vaccinations administered by University of Utah Health.
SERVING OUR COMMUNITY DURING THE CORONAVIRUS PANDEMIC

As a community, we came together to take proactive measures to slow the spread of the coronavirus and prevent our health systems from exceeding capacity. Because of these collective efforts, every COVID-19 patient that needed a hospital bed in Utah was able to find one. And within one year of University of Utah Hospital admitting its first COVID-19 patient, we began administering COVID-19 vaccines at our facilities.

Leading The Way

In response to COVID-19, University of Utah Health has been working to support, inform, and influence both state and national policy regarding the pandemic. Leadership from the state’s only academic medical center is providing its renowned expertise and guidance for the community, state, and nation:

- **Michael Good, MD**, CEO of U of U Health, A. Lorris Betz SVP for Health Sciences, and Executive Dean of the School of Medicine, serves on Utah’s Public Health and Economic Emergency Commission, organized by the Utah Legislature in March 2020. Good also chairs the Commission’s Medical Advisory Subcommittee.
- **Brian Shiozawa, MD**, associate vice president for health policy, serves on the Lieutenant Governor’s Utah COVID-19 Community Task Force.
- **Thomas Miller, MD**, chief medical officer, is a member of the COVID-19 Chief Medical Officer Group convened by the Utah Hospital Association.
- **Russell Vinik, MD**, chief medical operations officer, serves on the state’s COVID-19 Crisis Standards of Care Task Force.
- **Peter Weir, MD**, executive medical director of population health, serves on the state’s COVID-19 Long-Term Care Task Force.
Global Volunteer Initiative

University of Utah Health, Intermountain Healthcare, Latter-day Saint Charities, and several Utah nonprofits, partnered to lead the global ProjectProtect initiative. More than 50,000 volunteer sewers made more than 6 million medical-grade masks and other Personal Protective Equipment that was distributed to frontline health workers in Utah and other parts of the world.

Caring for Underserved Populations

Across the nation, COVID-19 hit some communities harder than others, and Utah was no exception. This pandemic is shining a spotlight on health disparities that exist within health care settings and our communities.

The U of U Health Wellness Bus and the Huntsman Cancer Institute’s Cancer Screening and Education Bus shifted regular operations and were retrofitted to provide COVID-19 screening, health consultations, and education in underserved communities in Utah. Collectively, the buses tested 22,000 people.

When the Navajo Nation hit the highest rate of confirmed coronavirus cases in the country, the U of U Health community partnered with the Urban Indian Center of Salt Lake to collect essential PPE, cleaning supplies, and non-perishable food—enough to fill three 20-foot-long U-Haul trucks.
Social Needs Screening and Support

Social needs screening conducted during the pandemic shows racial/ethnic disparities largely disappear when social factors—education, occupation, and commuting patterns—are controlled. Through a partnership with the College of Nursing, Emergency Department, Utah Department of Health, and United Way of Utah 2-1-1, more than 5,000 U of U Health patients were screened for social needs as part of COVID-19 testing (Nov. 2020–Mar. 2021).

Of those screened, 23 percent screened positive for social needs, primarily needing assistance with employment and medical expenses. More than 500 of these patients expressed a desire to be referred to 2-1-1 for support services. 2-1-1 is currently following up with an average of 100 patients each month, within 48-hours of COVID testing referral.

Vaccination Outreach

In Utah, Hispanics account for 14.2 percent of our state’s population but 24 percent of COVID-19 cases. We see a similar theme among our native Hawaiian and Pacific Islander community members. U of U Health is assisting the State of Utah with distribution of the COVID-19 vaccine and engaging in vaccination outreach efforts to reach non-English-speaking members of our community. We are working with the state’s Multicultural Advisory Committee to produce educational YouTube videos and host virtual town halls and Facebook Live events in multiple languages—including Arabic, Marshallese, Nepali, Samoan, Somali, Tongan, Spanish, Mandarin, and Swahili.
Racism is a Public Health Crisis

More than 100 studies link racism to adverse health outcomes. Our society only truly thrives when everyone has an opportunity to succeed and live a healthy life. In January 2021, University of Utah Health and 17 other health care systems and hospitals throughout the state declared that systemic racism is a real threat to the health of our patients, our families, and our communities. As allies, we are working to end oppression through self-examination and critical thinking about implicit bias and our roles in homes, organizations, and communities.

As a member of the national Healthcare Anchor Network, U of U Health also joined 60 health systems in 45 states and Washington, D.C., in a commitment to address racism and the public health disparities caused by racism.

988 Crisis Hotline

The coronavirus pandemic exposed both existing and new barriers to accessing mental health and substance use disorder services. It underscored the need to address mental health with the same urgency as other medical interventions.

In 2020, after several years and multiple acts of Congress, the Federal Communications Commission adopted 988 as the three-digit crisis number to be used nationwide to reach the National Suicide Prevention Lifeline. Over the last 12 months the Huntsman Mental Health Institute received more than 100,000 calls to this number.

Steve Eliason, senior finance director for U of U Health Hospitals and Clinics, and Utah State Representative, sponsored a legislative resolution in 2017 that laid the groundwork for this national crisis hotline. The 988 Crisis Hotline, scheduled to go into effect nationwide in July of 2022, is a critical step toward creating a unified system of care.
ECONOMIC CONTRIBUTION
In May 2020, the Kem C. Gardner Policy Institute released a study showing that University of Utah's patient care, training, and research make a significant economic contribution in Utah and help people live healthier lives. Our tier 1 research institution directly and indirectly supported 47,500 jobs, $3.0 billion in earnings, and $3.9 billion in the Utah economy. More than a third of U of U Health's clinical revenue comes from out-of-state revenue sources, representing new money in Utah's economy.

U of U Health Economic Contribution Summary, FY 2019
($ Billions)

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs (47,500)</td>
<td>2.4%</td>
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</tr>
<tr>
<td>Earnings ($3.0 Billion)</td>
<td>3.1%</td>
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</tr>
<tr>
<td>GDP ($3.9 Billion)</td>
<td>2.3%</td>
<td></td>
</tr>
<tr>
<td>Output ($6.0 Billion)</td>
<td>2.0%</td>
<td></td>
</tr>
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Source: Kem C. Gardner Policy Institute analysis of University of Utah data using IMPLAN 2017

U of U Health Revenue by Origin, FY2019

<table>
<thead>
<tr>
<th>Origin</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-State</td>
<td>60.7%</td>
</tr>
<tr>
<td>Out-Of-State</td>
<td>39.3%</td>
</tr>
</tbody>
</table>

Source: Kem C. Gardner Policy Institute analysis of University of Utah data
20K+ FACULTY AND STAFF PROVIDING WORLD-CLASS CARE FOR OUR COMMUNITY

2M PATIENT VISITS

$2.2B UNIVERSITY HOSPITALS AND CLINICS BUDGET

$172M PROVIDED IN UNCOMPENSATED CARE

ACCESS

12 COMMUNITY HEALTH CENTERS
5 HOSPITALS

- University of Utah Hospital
- Huntsman Cancer Hospital
- Huntsman Mental Health Institute
- University Orthopaedic Center
- Craig H. Neilsen Rehabilitation Hospital

808 BEDS

10%+ OF CONTINENTAL U.S.

75 TELEHEALTH SITES

9 URGENT CARE LOCATIONS

PATIENTS FIRST

#1 HOSPITAL IN UTAH, 2020 U.S. NEWS & WORLD REPORT (2015-2021)

Top 10 for 11 INPATIENT QUALITY RANKING
Top 10 in the nation for 11 years running

Top 5 for 6 OUTPATIENT QUALITY RANKING
Top 5 in the nation for 6 years running

SPECIALTY CARE

222 SPECIALTIES AND 730+ SUBSPECIALTIES

27K+ HEALTH SCIENCES PERSONNEL AND STUDENTS

Utah’s 1st LEVEL 1 TRAUMA CENTER

Region’s Only STROKE AND BURN TREATMENT CENTERS

All figures are FY20 unless otherwise indicated.
NATIONAL DISTINCTION
IN CLINICAL CARE

» Only Academic Medical Center in Utah: Serves patients in frontier, rural, and urban areas that cover 10 percent of the continental U.S., offering care in more than 200 specialties, with 75 telemedicine sites across the region and 5 hospitals, 12 community health centers, and 22 regional partners.

» Nationally Ranked: Top 10 national ranking for 11 years in a row for quality health care among leading academic medical centers (Vizient, Quality Leadership Award). Ranked No. 1 in quality and safety nationally in 2020, 2016, and 2010. Also ranked top 5 for six years in a row for ambulatory care, ranking No. 2 in 2020.

» No. 1 in Utah: For the seventh consecutive year, U.S. News & World Report ranked University of Utah Hospital the top hospital in Utah. Additionally, in adult specialties, U of U Health ranks No. 13 for ophthalmology and No. 41 for cancer.

» Promoting a Healthy State: The state has one of the youngest and healthiest populations in the nation (United Health Foundation).

» A New Era in Mental Health: In January 2021, University of Utah Health and the Huntsman Foundation celebrated the dedication of the Huntsman Mental Health Institute, the next step in the evolution of becoming a premier institution for mental health research and training while continuing its tradition of exceptional mental health care.

» Top in Patient Satisfaction: Nearly 30 percent of our clinical providers rank in the top 10 percent for patient satisfaction, nationwide. More than half of those are in the top 1 percent.

» High-Value Health System: Thanks to the development of an analytic cost management system, University of Utah Health has been able to control costs while improving patient care.

» Top Medicare Rating in Utah: University of Utah Hospital received a 5-out-of-5-star quality rating from the Centers for Medicare and Medicaid Services.

» Home to Huntsman Cancer Institute: In 2020, the National Cancer Institute renewed the designation of Huntsman Cancer Institute (HCI) as a Comprehensive Cancer Center, the highest federal rank possible for a cancer research organization. The grant awards HCI more than $29 million over seven years, an increase of 84 percent in annual funding from the previous award cycle. HCI is the only cancer institute in the region with this designation.
UNIVERSITY OF UTAH HEALTH HOSPITALS AND CLINICS

University of Utah Health Hospitals and Clinics is staffed by 5,000 practicing clinicians, including 1,600 physicians who support five hospitals (University of Utah Hospital, Huntsman Cancer Institute, Huntsman Mental Health Institute, University Orthopaedic Center, and the Craig H. Neilsen Rehabilitation Hospital); 12 community health centers; nine urgent care locations; and numerous specialty centers for cardiology, gastroenterology, men’s and women’s health, fertility services, orthopaedics, surgery, and more. U of U physicians also provide all the care for pediatric patients through a formal affiliation agreement with the Intermountain Healthcare-operated Primary Children’s Hospital on campus.

U of U Health's clinical care footprint covers approximately 10 percent of the continental United States, providing a Level 1 trauma center and the region’s only comprehensive burn center. Eight AirMed bases offer air transportation to care facilities within a 1,700-mile radius. A growing network of 22 regional affiliates and 75 telehealth sites further extends that reach through urban, rural, and frontier populations of the six-state Mountain West.

U of U Health Hospitals and Clinics care facilities handle two million annual patient visits. It is one of the state’s largest providers of ambulatory care services, with more than 50 general and specialty clinics for outpatients across the region. Providers and staff deliver care in more than 200 specialties and are a market leader in bone marrow transplants, burn care, dermatology, HIV, transplants, oncology, neurology, neurosurgery, ophthalmology, orthopedics, otolaryngology, plastics, psychiatry, and physical rehabilitation.

Hospitals and Clinics is the clinical arm of the Schools of Dentistry and Medicine and the Colleges of Health, Nursing, and Pharmacy. It provides clinical training for health care providers from physical therapy to dentistry, pharmacy, occupational health, and all specialties in medicine and nursing.
OPERATIONAL PLAN: SERVICE, QUALITY, FINANCIAL STRENGTH

University of Utah Health Hospitals and Clinics continues to focus on three areas of delivering the highest value of care to our patients, community, and employees: exceptional patient experience, quality, and financial strength.

Key highlights include:

- Being in the top 10 in academic medical center quality rankings for 11 consecutive years and top five in ambulatory care for six consecutive years (Vizient)
- Enhancing ambulatory and inpatient visit experience and coordination
- Expanding online scheduling and appointment reminder text messaging
- Increasing MyChart enrollment and usage
- Improving provider satisfaction and wellness
- Developing workforce planning and real-time tracking tools
- Increasing health plan enrollment
- Expanding Virtual Visits online urgent care
- Expanding telemedicine visits

Measures for each goal were defined through collaborative efforts with leaders across the health system.

VALUE ROAD MAP FY21

SURGE, RECOVERY, AND PROSPER

<table>
<thead>
<tr>
<th>SYSTEM GOALS</th>
<th>EXCEPTIONAL PATIENT EXPERIENCE</th>
<th>QUALITY</th>
<th>FINANCIAL STRENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYSTEM BENCHMARKED EXCEPTIONAL PATIENT EXPERIENCE</td>
<td>IMPROVE HOSPITAL-BASED SAFETY OUTCOMES</td>
<td>IMPROVE VALUE BY LOWERING COST AND INCREASING EFFICIENCY</td>
<td></td>
</tr>
<tr>
<td>MAKE CARE MORE ACCESSIBLE &amp; COORDINATED</td>
<td>SUPPORT OUTCOME-BASED AMBULATORY CARE</td>
<td>CREATE GROWTH FOR GREATER ACCESS FOR PATIENTS SERVED</td>
<td></td>
</tr>
<tr>
<td>MEET PATIENT RESPONSIVE COVID-19 CARE DEMANDS</td>
<td>OPTIMIZE COVID-19 PATIENT OUTCOMES</td>
<td>COVID-RELATED EFFICIENCY/COST</td>
<td></td>
</tr>
</tbody>
</table>

FOUNDATION

- A SAFE & INCLUSIVE WORKFORCE
- STRATEGIC COMMUNITY PARTNERSHIPS
- EQUITY & DIVERSITY
U OF U HEALTH PHYSICIAN LEADERSHIP
(UNIVERSITY OF UTAH MEDICAL GROUP BOARD)

Michael Good
Chair, Medical Group

Sam Finlayson
Chief Clinical Officer
Associate Vice President for Clinical Affairs

Dayle Benson
Executive Director, Medical Group
Chief of Staff for Clinical Affairs

John Bohnsack
Executive Medical Officer

Blake Hamilton
Chair,
Practice Management

Molly Conroy
Director,
Primary Care Integration

David Webber
Senior Director,
Group Operations & Finance

Heidi Cozart
Sr. Director,
Medical Group Analytics

Peter Weir
Executive Medical Director,
Population Health

John Barrett
Executive Medical Director, CPG

Mark Zenger
Sr. Director, Contracting & Payer Relations

Donna Roach
Chief Information Officer

Dan Lundergan
Chief Executive Officer (Interim)

Chad Westover
Chief Executive Officer,
Health Plans

Phyllis Vetter
Vice President & General Counsel,
University of Utah

Tad Morley
Executive Director,
Network Development & Telehealth

Charlton Park
Chief Financial Officer

Thomas Miller, MD
Chief Medical Officer

Anna Rogers
Operations & Finance

Tracey Nixon
Chief Nursing Officer

Sarah Sherer
Chief Human Resources Officer

Alison Flynn Gaffney
Executive Director,
Service Lines, Ancillary & Support Services

Bart Adams
Executive Director,
Orthopaedic Center &
Nielsen Rehabilitation Hospital

Russell Vinik
Chief Medical Operations Officer

CPC

Kim Phillips
Sr. Director

Richard Orlandi, MD
Chief Medical Officer,
Ambulatory Assoc. CMO

Maia Hightower, MD
Chief Medical Information Officer

Kencee Graves, MD
Assoc. CMO,
Inpatient

JeanMarie Mayer, MD
Chief Medical Epidemiologist,
Assoc. CMO

Mark Harris, MD
Chief Medical Edu Officer,
Assoc. CMO

Sandi Gulbransen
Chief Quality Officer

Mari Ransco
Sr. Director

Patient Exp. & Accelerate

Hospitals and Clinics Executive Org Chart
Dan Lundergan, MHA  
*Chief Executive Officer (Interim)*  
*Chief Operating Officer*  
*University of Utah Health Hospitals and Clinics*

Dan Lundergan has worked for University of Utah Health for more than four decades, holding numerous positions within the organization. In addition to serving as interim CEO for U of U Health Hospitals and Clinics, Lundergan is chief operating officer. He works with the executive team to develop strategies to ensure the hospital’s ongoing financial viability and fulfill its safety, satisfaction, and quality priorities. Lundergan is committed to making a difference for both the patients and their families. Additionally, he is passionate about creating an atmosphere with positive working relationships, the flexibility to learn from mistakes, and an overall environment of trust, honesty, and mutual respect. Lundergan received an MHA at the University of Minnesota.

Thomas L. Miller, MD  
*Chief Medical Officer*  
*University of Utah Health Hospitals and Clinics*

Tom Miller is the chief medical officer for U of U Health and the executive director for the ambulatory clinics. As a member of the University of Utah Hospital administrative team, Miller is responsible for overseeing all executive and clinical medical issues of the hospital. He is also a practicing and teaching clinician in the Division of General Medicine, Department of Medicine at the University of Utah School of Medicine.

Miller received an MD from George Washington University in Washington, D.C. He completed residency and chief residency in internal medicine at the University of Utah's Department of Medicine in 1992.

Tracey Nixon, MSN  
*Chief Nursing Officer*  
*University of Utah Health Hospitals and Clinics*

As chief nursing officer, Tracey Nixon provides leadership for nursing and advocates for patients and staff across the hospital system. With a tenure of nearly 15 years at U of U Health, she has a background in critical care nursing and has led nursing teams in capacity management, cardiovascular services, and critical care units. Nixon and the capacity management nursing team have been recognized nationally for their work to improve the flow of patients through the hospital. Before joining U of U Health, she was a project professional in the engineering and construction industries. Nixon received an MSN in nursing from the University of Utah and is a member of the American Organization for Nurse Leadership and the American College of Healthcare Executives.
Charlton Park, MBA, MHSM  
*Chief Financial Officer*  
*Chief Analytics Officer*  
*University of Utah Health Hospitals and Clinics*

Charlton Park is the chief financial officer and chief analytics officer for U of U Health Hospitals and Clinics. Park oversees the financial planning, budgeting, general accounting, operational and capital financial planning, analytics, and revenue cycle functions. He has played an important role in the development of various integration models across several clinical programs, using financial and clinical data to increase collaboration and alignment between physician specialties and the hospital. Charlton also played a key role in developing the Value-Driven Outcomes (VDO) tool, which provides accurate, actionable cost accounting and outcomes information at the patient visit level. Charlton received an MBA and a Master of Health Sector Management from Arizona State University.

Donna M. Roach, CHCIO, FCHIME, FHIMSS  
*Chief Information Officer*  
*University of Utah Health Hospitals and Clinics*

Donna Roach joined U of U Heath in 2020 as Chief Information Officer for University of Utah Health Hospitals and Clinics. With more than 35 years of experience in the health care industry, Roach oversees IT operations for the health system while balancing the needs of the hospital, physicians, and clinicians to create an environment for health care quality and efficiency. Previously, she was the vice president for Information Services at BJC HealthCare and Washington University Medical School and oversaw the Epic program for BJC Hospitals and Medical School. Roach is a Certified Healthcare Chief Information Officer and a Fellow of the College of Healthcare Information Management Executives and Healthcare Information Management Systems Society. She completed an MS in Health Systems Management at Rush University in Chicago, and her fellowship at the Veterans Administration, Chicago.

Sarah Sherer, MSHR, SPHR  
*Chief Human Resources Officer*  
*University of Utah Health Hospitals and Clinics*

As Chief Human Resources Officer for U of U Health Hospitals and Clinics, Sarah Sherer works with her team to focus on people-first strategies. The HR division supports over 13,000 employees and works diligently to foster an environment of respect, strategic collaboration, and innovation. Sherer is passionate about building relationships that help move the mission of top quality of care for patients forward, all while empowering leaders to support and grow their teams. She received a Master's of Human Resources Management from Southern New Hampshire University.
Linda Tyler, PharmD, FASHP
*Chief Pharmacy Officer, University of Utah Health Hospitals and Clinics
Associate Dean, College of Pharmacy*

Linda Tyler is responsible for the comprehensive pharmacy services of five hospitals, four infusion services, and 14 retail pharmacies, as well as ambulatory clinical services and the University of Utah Drug Information Service. She also serves as residency program director for the two-year combined health system pharmacy administration residency and MS degree program. She has served as the senior pharmacy leader for U of U Health since 2008. Tyler completed a PharmD degree at the University of Utah and completed a residency in pharmacy practice at University of Nebraska Medical Center.

Mikel Whittier, MBA
*Senior Director, Health Equity, Diversity, & Inclusion
University of Utah Health Hospitals and Clinics Human Resources*

In 2021, Mikel Whittier joined the University of Utah Health Hospitals and Clinics Human Resources team as the inaugural senior director for Health Equity, Diversity, & Inclusion. Whittier works with Hospitals and Clinics leaders and U of U Health’s academic Health Equity, Diversity, & Inclusion office to foster an environment that is welcoming and safe for our staff, patients, and their families. Prior to joining University of Utah Health, Whittier served as the strategist of Justice and Health Equity at St. Louis Integrated Health Network, aiding the advancement of health equity solutions. He received a master’s in health care administration from the University of Missouri.

LEADERSHIP—UNIVERSITY OF UTAH HEALTH PLANS

Chad Westover, MPA
*Chief Executive Officer
University of Utah Health Plans*

Chad Westover is responsible for the fiscal, operational, legislative, regulatory, and human resources objectives of the health plan. He also leads quality improvement and providing services to the members we serve. Westover joined U of U Health in 2015. Previously, he was the president of Molina Healthcare of Utah.

Westover was the inaugural director of the Utah Children’s Health Insurance Program (CHIP) and was responsible for health insurance access initiatives for the Utah Department of Health. Other stops in his career include serving as a health policy consultant for Utah Governor Mike Leavitt and as vice president of business development at Anthem, Inc. Westover received an MPA at Brigham Young University.
University of Utah Medical Group (UUMG) is among the largest academic practices in the country, representing physicians and many advanced practice clinicians. We deliver clinical care in more than 200 specialties and train the clinical workforce of the Mountain West region and beyond. UUMG is a strategic partner within U of U Health, providing tertiary care for the region, population health for the Wasatch Front, and care for the underserved. Members improve care by implementing value-driven strategies, innovating new standards of practice, and integrating patient-centered care. UUMG leads clinical and business operations, contracting and payer relations, and advanced data analytics.

Michael L. Good, MD
Chair, University of Utah Medical Group
Chief Executive Officer, University of Utah Health
Executive Dean, University of Utah School of Medicine
A. Lorris Betz Senior Vice President for Health Sciences

(See bio on page 4.)

Sam Finlayson, MD, MPH, MBA
Chief Clinical Officer
Associate Vice President, Clinical Affairs

In 2020, Sam Finlayson was appointed Associate Vice President for Clinical Affairs and Chief Clinical Officer. Finlayson leads clinical teams implementing the value proposition in clinical care in preparation for major changes in health care in the United States.

He served as vice chair for Academic Affairs in the Department of Surgery and Surgical Residency Program Director at Dartmouth. He also served as the Kessler Director of the Center for Surgery and Public Health, a joint health services research initiative of Brigham and Women’s Hospital, Harvard Medical School and School of Public Health.

Finlayson joined U of U faculty in 2013 as the Claudius Y. and Catherine B. Gates Presidential Endowed Chair in Surgery. He received an MD and MPH in International Health at Harvard, and an MBA at the University of Utah David Eccles School of Business.

Dayle Benson, DHA
Chief of Staff of Clinical Affairs
Executive Director, University of Utah Medical Group

As chief of staff of clinical affairs for the University of Utah Medical Group, Dayle Benson focuses on clinical partnerships, care delivery models, workforce needs, clinical innovations, and clinical vision and strategy. As Executive Director, Benson leads clinical and business operations, contracting and payer relations, advanced data analytics, workforce needs, and population health strategies.

During her tenure, the Medical Group has grown to more than half a billion dollars in clinical revenue and achieved best practice performance.
Chief Value Officers (CVOs) are physician leaders embedded in departments and service lines throughout the health system. They are the champions of health care value in their areas and lead improvements in quality, cost, and service. CVOs are a critical component in U of U Health’s transformational effort to create more value in health care and provide better, more affordable care to patients.

**James Ashworth, MD**  
*Psychiatry*

**Susan Baggaley, FNP-BC, MSN**  
*Neurology*

**John Barrett, MD**  
*Community Physician Group*

**John Bohnsack, MD**  
*Ambulatory Health/Medical Group*

**Richard Brown, MD, FACR**  
*Radiology*

**Karen Buchi, MD, FAAP**  
*Pediatrics*

**Benjamin Chortkoff, MD**  
*Anesthesiology*

**Andrew Dailey, MD**  
*Neurosurgery*

**Mark Eliason, MD**  
*Dermatology*

**Erin Fox, PharmD**  
*Pharmacy*

**Alexandra Flis, MD**  
*Rehabilitation*

**Patrick Greis, MD**  
*Orthopaedics*

**Ying Hitchcock, MD**  
*Radiation Oncology*

**Christy Hopkins, MD**  
*Emergency Medicine*

**Troy Hutchins, MD**  
*Radiology*

**Richard Kendall, DO**  
*Rehabilitation*

**Bernadette Kiraly, MD**  
*Family & Preventive Medicine*

**Amy Locke, MD, FAAFP**  
*Resiliency Center*
AWARDS AND RECOGNITION

Top 10 in Quality for 11 Years Running
For 11 consecutive years, Vizient Inc. has ranked University of Utah Health in the nation’s top 10 for quality health care among leading academic medical centers. U of U Health achieved the No. 1 ranking in the nation in 2020, 2016, and 2010.

Top 5 in Ambulatory Care for 6 Years Running
U of U Health has also ranked in the top five for ambulatory care for six consecutive years, ranking No. 2 in 2020. The Vizient Ambulatory Care Quality and Accountability Award measures the quality of outpatient care in five domains: access to care, capacity and throughput, quality and efficiency, continuum of care, and equity.

2021-2022 U.S. News & World Report Best Hospital Rankings
For the seventh consecutive year, University of Utah Hospital was ranked No. 1 in Utah and in the Salt Lake City metro area. Additionally, U of U Health is nationally ranked No. 13 for ophthalmology and No. 41 for cancer.

U.S. News also rated U of U Health “High Performing” in five specialty areas:
- Gastroenterology & GI Surgery
- Nephrology
- Orthopedics
- Psychiatry
- Pulmonology & Lung Surgery

Forbes Magazine List of Best Employers
In 2020, Forbes recognized University of Utah Health as one of America’s Best Employers By State and No. 1 in Utah. The list was compiled by surveying 80,000 Americans working for businesses with at least 500 employees. Respondents rated their employers on a variety of criteria and how likely they were to recommend their employer to others.

Digital Health Most Wired Hospital for 7 Years Running
For the seventh consecutive year, University of Utah Hospital was recognized among CHIME Healthcare’s Digital Health Most Wired Hospitals for effectively applying core and advanced technologies into its clinical and business programs to improve health and care in its communities. U of U Health earned a Level 8 “Honor” certification for both acute and ambulatory care.
National Cancer Institute’s Comprehensive Cancer Center Status

In 2020, the National Cancer Institute (NCI) renewed the designation of Huntsman Cancer Institute (HCI) as a Comprehensive Cancer Center. An NCI-designated Comprehensive Cancer Center must demonstrate depth and breadth of cancer research, as well as substantial transdisciplinary research that bridges these scientific areas and changes cancer care. HCI is the only cancer center in the region with this designation.

Centers for Medicare and Medicaid Services (CMS): 5-Star Quality Rating, Top Medicare Rating in Utah

In its annual quality rankings of hospitals, CMS awarded University of Utah Hospital five out of five stars, the highest ranking in Utah. CMS’s Hospital Compare ranking shows University of Utah Hospital performing above the national average in safety of care, readmission rates, and patient experience.

IBM Watson Top 100 Hospitals & Everest Award Winner

In 2020, IBM Watson Health recognized University of Utah Hospital among 100 top-performing hospitals in the U.S. based on a balanced scorecard using publicly available data for clinical, operational, and patient satisfaction metrics. The annual study found that top-performing hospitals provide better care at lower cost and higher profit margins than peer group hospitals. Additionally, U of U Hospital was one of only 20 organizations to receive IBM Watson Health’s Everest Award in 2020 for achieving both the highest current performance and the fastest long-term improvement in the five years of data analyzed.

Becker’s 2020 List of 100 Great Hospitals

University of Utah Hospital was named to the 2020 edition of the Becker’s Healthcare list of “100 Great Hospitals in America.” The hospitals included on this list have been recognized nationally for excellence in clinical care, patient outcomes, and staff and physician satisfaction. Selection is based on analysis of ranking and award agencies, including U.S. News & World Report’s 2019-20 rankings, CareChex, Healthgrades, CMS star ratings, Leapfrog grades, and IBM Watson Health top hospitals.
CLINICAL NETWORK
Since University of Utah Hospital opened its doors in Salt Lake City in 1965, University of Utah Health has grown from a single county hospital to an exemplary regional health care system that includes five hospitals, 12 community health centers, several specialty centers, and an extensive network of affiliate partners throughout the Mountain West region. Additionally, 75 telehealth sites offer on-demand access for both referring providers and patients.

SERVING 10 PERCENT OF THE CONTINENTAL U.S.
U of U Health serves the urban, rural, and frontier communities of the Mountain West region with some of the highest quality care in the nation. Its clinical footprint covers roughly 10 percent of the total area of the continental U.S.
UNIVERSITY OF UTAH HOSPITAL

University of Utah Hospital includes a Level I trauma center and the region’s only comprehensive burn center. It is equipped to treat any patient with high-quality, high-value, cutting-edge care extending across the entire continuum, from birth to end of life. University Hospital has been ranked by U.S. News & World Report as the No. 1 hospital in Utah for the last seven years in a row.

HUNTSMAN CANCER INSTITUTE

Huntsman Cancer Institute (HCI) at the University of Utah is the Mountain West region’s premier cancer treatment center. In 2020, the National Cancer Institute renewed the designation of HCI as a Comprehensive Cancer Center, the highest federal rank possible for a cancer research organization. HCI is the only cancer center in the region with this designation. It is also a member of the National Comprehensive Cancer Network (NCCN), a not-for-profit alliance of the world’s leading cancer centers.

UNIVERSITY ORTHOPAEDIC CENTER

The University Orthopaedic Center is the only full-service specialty center of its kind in the Mountain West. Services include the latest in sports medicine; total joint, knee, and hip replacement; pediatric orthopaedics; spinal disorders; trauma; and physical therapy. Orthopaedic specialty care can also be found at U of U Health’s Farmington, Madsen, Redwood, South Jordan, and Sugar House Health Centers.

HUNTSMAN MENTAL HEALTH INSTITUTE

Huntsman Mental Health Institute (formerly University Neuropsychiatric Institute) is a highly regarded behavioral health facility serving patients in Utah and the Mountain West. Specialists treat conditions like anxiety, major depression, anxiety, mood disorders, personality disorders, schizophrenia, and substance use disorders. HMHI clinical services range from community crisis services, inpatient hospital, day treatment programs, and outpatient services.
CRAIG H. NEILSEN REHABILITATION HOSPITAL

The new Craig H. Neilsen Rehabilitation Hospital blends hospitality with state-of-the-art care and innovation. Every touchpoint leverages our mission of transforming lives through excellence in research, technology, and clinical care while reflecting our vision of reimagining, reinventing, and rebuilding. We’re setting a new standard across the Mountain West and beyond. As the preeminent destination for patients recovering from life-altering injuries and conditions, the hospital focuses on preserving, enhancing, and restoring function through the dedicated work of our therapy, nursing, and medical teams. Our world-renowned specialists support patients on their rehabilitation journey to wellness and independence. We are home to the only CARF accredited inpatient and outpatient rehabilitation program in Utah.

JOHN A. MORAN EYE CENTER

The John A. Moran Eye Center at the University of Utah is the most comprehensive ophthalmology center in the Mountain West, with specialties in neuro-ophthalmology, uveitis, and pediatrics. Performing nearly 7,000 surgeries and more than 150,000 clinic visits each year, Moran ranks among the country’s top 10 hospitals for ophthalmic care and has placed among the nation’s top 10 institutions receiving National Institutes of Health funding.

A highly competitive residency program offers extensive surgical experience. Moran has one of the most comprehensive patient support programs in the nation. Its Global Outreach Division is the only program of its kind at an academic medical center, working to develop sustainable eye care around the globe.
CARDIOVASCULAR CENTER

Cardiovascular Center services include heart care, heart surgery, and treatment for all types of heart disease. Specialties include cardiology, cardiothoracic surgery, and vascular surgery. Treatment is patient-focused with customized plans to fit individual needs, including research into specialized conditions that are not treated elsewhere. In 1982, University of Utah made history when surgeons implanted the first total artificial heart in a human. Other notable advances include beta-blocker therapy for heart failure, treatment of myocarditis, as well as discovering the genetic basis of long QT syndrome, Williams syndrome, and hereditary hemorrhagic telangiectasia.

U of U Health’s Division of Cardiovascular Medicine currently leads the world in using cardiac magnetic resonance imaging to plan the management of atrial fibrillation and the use of left ventricular assist devices to recover the failing heart.

CLINICAL NEUROSCIENCES CENTER

The Clinical Neurosciences Center (CNC) creates customized treatment and prevention plans for patients. Working with the departments of neurology, neurosurgery, and radiology at the University of Utah School of Medicine, the CNC team seeks tomorrow’s answers to today’s medical mysteries through research. They also work to heal individuals currently fighting life’s greatest medical challenges and to train the next generation of medical providers. Because many neurological disorders and diseases can be avoided or slowed by early treatment and diagnosis, CNC promotes public awareness and education about prevention practices through community events and support groups.
UTAH DIABETES & ENDOCRINOLOGY CENTER

The Utah Diabetes and Endocrinology Center (UDEC) is the only facility for comprehensive and continuous diabetes care and management in Utah and the Mountain West region. For diabetes patients, UDEC helps reduce complications and suffering with the end goal of ultimately preventing diabetes. For patients with other endocrinology disorders, including nodules in the endocrine system, it offers specialty care and individualized treatment plans that focus on the patient’s needs.

The UDEC is also a research facility consistently applying the newest findings in the field of diabetes management and care. The Larry H. and Gail Miller Family Foundation donated $5.3 million to launch Driving Out Diabetes, a Larry H. Miller Family Foundation Wellness Initiative. This partnership between the foundation and U of U Health provides education and diabetes complications screening to help those who have diabetes better manage their disease and improve their health.

ARUP LABORATORIES

ARUP Laboratories is a national clinical and anatomic pathology reference laboratory and a non-profit enterprise of the University of Utah and its Department of Pathology. Known for its quality, service, and depth of expertise, ARUP offers in excess of 3,500 tests and test combinations, ranging from routine screening tests to highly specialized laboratory tests.

The faculty-led laboratory operates 24/7 with more than 4,500 employees and volumes exceeding 55,000 samples per day. It serves more than 50 percent of the nation’s university medical centers, pediatric hospitals, and teaching hospitals.

The pathology department and ARUP also collect and provide blood and transfusion services for University of Utah Hospitals and Clinics, Huntsman Cancer Institute, and Shriners Hospital for Children.

With department faculty based at Huntsman Cancer Institute, ARUP evaluates around 40,000 surgical pathology and more than 40,000 cytology cases annually. Its broad research portfolio includes extensive scholarship in diagnostic medicine and cancer pathogenesis.

In 2020, ARUP contributed $681 million in revenue and tested more than 16.5 million specimens, impacting the care of nearly 14 million patients.
NEW FACILITIES

University of Utah Health’s Campus Transformation project continues to bring new levels of access and care to patients. The major projects completed within the last three years include the Care Navigation facility in South Jordan, the Sugar House Health Center, Hospital Area E, the Interventional Radiology floors in University Hospital, and the Craig H. Neilsen Rehabilitation Hospital.

Currently under construction are two new buildings: the Kathryn F. Kirk Center for Comprehensive Cancer Care and Women’s Cancers and the Healthcare, Educators, Leaders, & Innovators Complex (HELIX) office building.

The Kathryn F. Kirk Center for Comprehensive Cancer Care and Women’s Cancers expands Huntsman Cancer Institute’s (HCI) ability to serve patients. The new center includes a floor dedicated to women’s cancers; a new endoscopy center; increased services for blood and marrow transplant patients; an expansion of the HCI Wellness and Integrative Health Center; and 48 new inpatient hospital rooms.

The Healthcare, Educators, Leaders, & Innovators Complex (HELIX) will serve as a collaboration and office space for University of Utah Health faculty and staff. With the aging School of Medicine building at the end of its useful life, HELIX will become the new home for many School of Medicine departments and occupants.

Future construction projects include the Medical Education & Discovery Building, which will replace the current School of Medicine building as the center of medical education and innovation at University of Utah Health.
COMMUNITY HEALTH CENTERS

To fulfill our commitment to improving the health of individuals and communities, University of Utah Health operates 12 community health centers throughout the Wasatch Front. These health centers provide neighborhood convenience for primary, specialty, and urgent care services. The Sugar House, Farmington, South Jordan, and Redwood Health Centers offer the broadest spectrum of care, including access to the Moran Eye Center, Huntsman Cancer Institute, radiology, urgent care, and dozens of other specialty outpatient services.

In 2020, the coronavirus pandemic did not keep us from providing high-quality service and exceptional patient experiences at our community health center locations. Health center teams responded by rapidly deploying testing services with an impressive testing turnaround time of fewer than 30 hours. This critical effort produced more than 350,000 completed tests in the space of one year. Of patients tested for COVID-19 at U of U Health, more than 80 percent were likely to recommend the service to a friend. In addition, staff quickly instituted new processes and technologies to see patients virtually when prudent and keep them safe while on-site.

Plans for additional ambulatory care sites are underway.
AFFILIATES AND TELEHEALTH

University of Utah Health has a long history of sharing knowledge and resources to provide quality care across the Mountain West. The Affiliate Network was developed to give hospitals and providers access to the clinical expertise, research, and resources from our top-ranked academic medical center, in order to help serve patients within their own communities.

The Affiliate Network includes 22 regional partners working together for the benefit of their patients. U of U Health works with each partner to identify clinical opportunities to bring high-quality care closer to home. Additionally, U of U Health has 75 telehealth sites offering on-demand access to U of U Health providers through virtual visits. During the coronavirus pandemic, our telehealth program grew by 1,475 percent. U of U Health avoided 12,000 direct physician interactions per day during the pandemic, bringing care into 9,000 homes per week. This has been a life-saver for patients with chronic conditions and comorbidities needing regular monitoring.
UNIVERSITY OF UTAH HEALTH PLANS

University of Utah Health Plans was formed in 1998 as a strategic initiative to provide better care to Utah’s communities and the surrounding states. It specializes in administration of medical, behavioral health, and pharmacy benefits for fully insured and self-funded employer groups, individuals and families, as well as Medicaid and Medicare. In January 2021, U of U Health Plans acquired Steward Health Choice Utah, adding 32,000 new members to its Medicaid portfolio.

U of U Health Plans is committed to improving health, providing access to the highest quality of care, and delivering exceptional value to our members, clients, and the community.

U of U Health Plans recognizes the importance of population health and payment reform and has developed extensive care management and value-based payment programs that improve health and align provider reimbursement with value and positive outcomes. Being integrated with U of U Health uniquely positions it to bring greater value, enhance cost efficiency, and increase focus on members and clients.

UNIVERSITY OF UTAH HEALTH PLANS MEMBERSHIP TREND

[Graph showing membership trend from 1998 to 2020]

PARTNERSHIPS

University of Utah Health is a designated U.S. Olympic and Paralympic Regional Medical Center. We are also the Official Health Care Provider for the Utah Jazz NBA franchise, the Real Salt Lake MLS franchise and Real Monarchs USL Championship franchise, the Salt Lake City Stars NBA G League team, the Salt Lake Bees minor league baseball team, Utah Olympic Park, Utah Olympic Oval, and University of Utah Athletics.
POWERED BY UNIVERSITY OF UTAH HEALTH

Our physicians and trainees believe that care and community are connected, and that health outcomes improve when trusted relationships and meaningful partnerships evolve in the neighborhoods where we live, work, and play.
FINANCIAL STRENGTH—
UNIVERSITY OF UTAH HEALTH HOSPITALS AND CLINICS
Summary of expenditures by revenue source

University of Utah Hospital
$1.1B

Huntsman Cancer Hospital
$398.8M

University Community Health Centers
$292.4M

- University of Utah Health Plans $234.2M
- Huntsman Mental Health Institute $123.2M
- University Orthopaedic Center $51.2M
- Moran Eye Center $38.8M
- Neilsen Rehabilitation Hospital $2.7M

FY 2020 $2.2B
$408M
GRANT FUNDING

50+
DISEASE-CAUSING GENES IDENTIFIED

1
NATIONAL CANCER INSTITUTE COMPREHENSIVE CANCER CENTER

13
ALL-TIME MEMBERS OF NATIONAL ACADEMY OF SCIENCES OR MEDICINE

1
NOBEL LAUREATE

INNOVATION & PRODUCTIVITY

$29M EXTRAMURAL FUNDING FOR UNIVERSITY COVID RESEARCH

$12.5M REVENUE FOR COMMERCIALIZED HEALTH SCIENCE-RELATED INNOVATIONS

3,587 PEER-REVIEWED ARTICLES PUBLISHED ACROSS HEALTH SCIENCES

915 INVESTIGATORS WITH ACTIVE RESEARCH PROJECTS

200+ UNIVERSITY COVID RESEARCH PROJECTS

89 PATENTS FILED: 44 PATENTS ISSUED

8 ALL TIME HOWARD HUGHES MEDICAL INVESTIGATORS

2 ALL TIME MACARTHUR FOUNDATION GENIUS GRANT RECIPIENTS

MAJOR CENTERS AND INSTITUTES

✓ Huntsman Cancer Institute
✓ Nora Eccles Harrison Cardiovascular Research Training Institute
✓ Huntsman Mental Health Institute
✓ John A. Moran Eye Center
✓ Clinical Neurosciences Center
✓ Center for Genomic Medicine
✓ Center for Clinical & Translational Science
✓ Diabetes and Metabolism Research Center
✓ Center for Aging
✓ Center for Medical Innovation
✓ Rocky Mountain Center for Occupational and Environmental Health

All figures are FY20 unless otherwise indicated.
**NATIONAL DISTINCTION IN RESEARCH AND INNOVATION**

» **Grants and Publications:** U of U Health researchers were awarded more than $408 million in research grants (FY20) and published 3,587 papers in peer-reviewed journals in 2020.

» **Genetic Discoveries:** U of U Health researchers were the first to identify the breast and ovarian cancer gene BRCA1 and have identified more than 50 inherited disease-causing genes using the Utah Population Database (UPDB), the world’s largest population database tied to demographic and medical information.

» **Starving Cancer:** Huntsman Cancer Institute and Howard Hughes Medical Investigator Jared Rutter, PhD, discovered that the Mitochondrial Pyruvate Carrier is critical for converting carbohydrates to fuel, a key to understanding how cancerous cells thrive. The discovery is inspiring new therapeutics.

» **Incubator for Innovation:** 178 startup technology companies have been founded since 1970, including Myriad Genetics, Biofire, and ARUP Laboratories. ARUP Laboratories was created from the U of U’s Department of Pathology and has developed more than 3,500 diagnostic tests to ensure better prevention, diagnosis, and treatment of disease.

» **Patent Applications:** In FY 2020, 44 patents were issued to U of U Health. That same year, 89 applications for new patents were filed.

» **National Academy Inductees:** 13 current and former researchers have been inducted into the National Academies of Sciences, Medicine, and Engineering.

» **Next-Generation Therapy for ALS:** 2020 American Association of the Advancement of Science fellow and Chair of Neurology Stefan Pulst, MD, made a genetic discovery and transformed it into a unique treatment for amyotrophic lateral syndrome (ALS) that is now in human clinical trials.

» **Precision Genome Editing:** National Academy of Sciences member Dana Carroll, PhD, established zinc finger nucleases as the first tools for targeted manipulation of genomic DNA. This and successor technologies are used worldwide to enhance desirable characteristics, repair mutations, and answer biological questions.

» **Improved Blood Pressure Control:** Research from investigators across U of U Health was instrumental in defining new blood pressure guidelines to reduce the risk of heart disease and stroke in patients with hypertension.

» **A Genius in Our Midst:** Nels Elde, MD, professor of human genetics, was awarded a 2020 MacArthur Fellowship or "genius grant" for his innovative research investigating the evolutionary processes driving host-pathogen interactions.

» **How to Beat Back Pain:** Based on more than a decade of research, Julie Fritz, PT, PhD, distinguished professor in the College of Health, is giving hope to people with debilitating back pain with sciatica. In contrast to the traditional wait-and-see approach, her clinical trial found that immediate physical therapy is key and could change medical practice.
NATIONAL DISTINCTION IN RESEARCH AND INNOVATION

» COVID-19 Rapid Response with Impact: Within weeks of the onset of the pandemic, U of U Health and U researchers shifted priorities to meet urgent needs for new treatments and technologies and to assess social, health, and environmental impacts. Now, more than 200 investigators are leading 136 projects that have already spurred $26 million in research grants and more than 100 peer-reviewed publications.

» COVID-19 and Vulnerable Populations: COVID-19 is more likely to kill Black essential workers than other segments of the population, a tragic outcome of racial disparities in the U.S. Collaborative research between the Division of Public Health and the U of U School of Business led to these important insights.

» How the Microbiome Shapes Obesity: A pivotal study published in Science by June Round, PhD, demonstrates that the immune system prevents obesity by controlling which communities of bacteria live in the intestine.

» Ceramides Are the New Cholesterol: Move over, cholesterol. Research by Scott Summers, PhD, in the College of Health is showing that the fatty lipid ceramide is central to developing diabetes and heart disease. What’s more, his group has found that an enzyme that changes the structure of the lipid is a promising drug target for combatting these health conditions.

» Brain Proteins That Behave Like Viruses: In a surprising discovery, neuroscientist Jason Shepherd, PhD, found that a protein involved in cognition and storing long-term memories looks and acts like a protein from viruses, changing our understanding of how memories are made and opening new avenues for investigating neurological disorders.

» Increasing Choices for Contraception: Published in the New England Journal of Medicine, OB/GYN professors David Turok, MD, and Lori Gawron, MD, demonstrated that highly effective and increasingly popular hormonal intrauterine devices (IUDs) are effective as emergency contraception, increasing contraception choices for women.

» Genetic Science Learning Center: The team behind the world’s most visited genetics education website, learn.genetics.utah.edu, is leading public and patient education for the National Institutes of Health’s massive All of Us precision medicine initiative.

» Advocate for Affordable Insulin: Nursing assistant professor Michelle Litchman, PhD, APRN, has become a leader in the push to make insulin more affordable to patients. Her cause is fueled by her research, which reveals why people are driven to buy, trade, and donate diabetes medications and technologies on the black market.

» Rapid Genome Testing In Newborns: By combining expertise from the Center for Genomic Medicine with the Department of Pediatrics and ARUP Laboratories, U of U Health launched rapid whole genome sequencing of critically ill infants with a goal of improving diagnosis and care and enhancing analysis tools.
Research at the University of Utah is reshaping the course of science and medicine worldwide. These achievements have one common denominator: they were seeded by an idea, a passion for observation, and a quest for understanding. University of Utah Health has proven itself remarkably capable of focusing efforts to align our research enterprise with our education and health care delivery systems to generate remarkable momentum and attract talent and resources to advance knowledge.

From basic science to clinical research to population health, U of U Health faculty are transforming our understanding of health and disease and impacting the lives of individuals by investigating ways to improve medical practice and health and wellness in communities. Continued successes build on a foundation of firsts, including the very first National Institutes of Health grant given to hematologist Maxwell Wintrobe, MD, and the 2007 Nobel Prize in Physiology or Medicine awarded to geneticist Mario Capecchi, PhD.

Today, biochemists, pathologists, and neurobiologists are opening novel avenues in therapeutics based on new understandings of cellular metabolism in cancer, the microbiome in diabetes, and viral mechanisms in fundamental processes in the brain. Investigators across the School of Medicine and in the College of Pharmacy have been instrumental in development and implementation of new blood pressure guidelines aimed at significantly reducing the number of strokes and heart attacks in the U.S. Researchers in the Colleges of Nursing and Health and the School of Dentistry are devoted to understanding and meeting the health-related needs of underserved communities, including individuals with substance use issues, autistic youth, women in rural communities, and underrepresented minorities.
As Associate Vice President for Research at U of U Health, Willard Dere guides institutional research strategy, establishes priorities for investment and effort, and develops and evaluates research initiatives. A professor of internal medicine, Dere also serves as the executive director for the Program in Personalized Health and co-directs the Center for Genomic Medicine and Center for Clinical & Translational Science. He has extensive experience in clinical research from his 25 years in the biopharmaceutical industry, including substantive work in drug safety and regulations. Dere received an MD from the University of California, Davis, completed a residency in internal medicine at the University of Utah, and postdoctoral training in endocrinology and metabolism at the University of California, San Francisco.

As associate dean for Clinical Research, Michael Dean directs support efforts related to all clinical research, including industry-sponsored and investigator-initiated trials and clinical research studies. A professor of pediatrics, Dean also serves as vice chair for research in the Department of Pediatrics and directs the department’s Clinical Trials Office. He is the PI for the Utah Trial Innovation Center, which attempts to accelerate clinical research processes across the nation. Dean received an MD at Northwestern University Medical School, completed residency in pediatrics at Children’s Hospital of Los Angeles, and received an MBA from the Wharton School of the University of Pennsylvania.

As Associate Dean for Clinical and Translational Science, Rachel Hess works to advance clinical research and the science of translational research, to create a top-notch translational medicine enterprise that empowers our community. A professor of population health sciences and internal medicine, Hess also serves as co-director of the Utah Center for Clinical and Translational Science and chief of the University of Utah’s Division of Health System Innovation and Research. Hess received an MD at the University of New Mexico School of Medicine and completed residencies in internal medicine at Temple University Hospital and Western Pennsylvania Hospital, and received an MS in clinical research at the University of Pittsburgh.
Christopher P. Hill, D.Phil  
*Vice Dean, Research*  
*School of Medicine*  

As Vice Dean for Research for the School of Medicine, Chris Hill works closely with the Associate Vice President for Research on research programs and initiatives, infrastructure, research mission performance, and increasing research excellence across the translational spectrum. Hill is a noted research scientist and distinguished professor in the Department of Biochemistry and former co-chair of the department. He holds the endowed H.A. and Edna Benning Society Chair and is an elected member of the American Academy of Arts and Sciences. Hill received a DPhil in chemistry from the University of York, England, and completed postdoctoral fellowships in chemistry (University of York) and structural biology (University of California, Los Angeles).

John D. Phillips, PhD  
*Associate Dean, Research and Infrastructure*  
*School of Medicine*  

As Associate Dean for Research and Infrastructure for the School of Medicine, John Phillips oversees matters related to research space, equipment, and related infrastructure. A professor of internal medicine, Phillips also serves as director of the University of Utah Health Sciences Center (HSC) Core Research Facilities and as director of the Cell Therapy and Regenerative Medicine Program. Phillips received a PhD from Dartmouth College and completed a postdoctoral research fellowship at the University of Utah.

Amy Tanner, MHA, MPH  
*Senior Director, Office of the Associate Vice President for Research*  

As senior director for the Office of the Associate Vice President for Research—which includes the reporting units of the SVPHS Research Unit, Molecular Medicine Program, and institutional training programs—Amy Tanner is responsible for providing strategic and operational leadership for research mission activities broadly and vigorously advancing the research-related priorities of U of U Health. Tanner received master’s degrees in public health and health care administration at the University of Utah.
AWARDS & ACCOLADES

Our research successes have been recognized through countless publications, awards, and accolades. Twelve current and former U of U Health researchers have received the honored distinction of being inducted into the National Academies of Sciences, Medicine, and Engineering during their tenure here.

Brenda Bass, PhD
Biochemistry: National Academy of Sciences

Mary Beckerle, PhD
Biology and Oncological Sciences: National Academy of Sciences

Carrie Byington, MD
Pediatrics: National Academy of Medicine (former faculty)

Mario Capecchi, PhD
Human Genetics: National Academy of Sciences and National Academy of Medicine

Dana Carroll, PhD
Biochemistry: National Academy of Sciences

Wendy Chapman, PhD
Biomedical Informatics: National Academy of Medicine (former faculty)

Louis Goodman, MD
Pharmacology: National Academy of Sciences (deceased)

Sung Wan Kim, PhD
Pharmaceutics and Pharmaceutical Chemistry: National Academy of Sciences and National Academy of Engineering (deceased)

Jindrich Kopecek, PhD
Pharmaceutics and Pharmaceutical Chemistry: National Academy of Engineering

Vivian Lee, MD, PhD, MBA
Radiology: National Academy of Medicine (former faculty)

Wesley Sundquist, PhD
Biochemistry: National Academy of Sciences

Sidney Velick, PhD
Biochemistry: National Academy of Sciences (deceased)

Homer G. Warner, MD, PhD
Biomedical Informatics: National Academy of Sciences (deceased)
PIONEERING NEW RESEARCH

Every year, University of Utah Health accepts nominations from all areas of health sciences for the Vitae program. Nominees are generally early-stage investigators who have received noteworthy national recognition, significant funding, or have had a recent high-impact publication. Since 2013, 53 investigators have been selected to present the story and inspiration behind their pioneering research at an annual Vitae event.

Vitae speakers have included Pew Scholars, NIH Director’s New Innovator awardees, Alfred P. Sloan Research Fellows, a TED Fellow, and recipients of other high-profile national awards.

2020 Vitae Speakers

Robert Campbell, PhD
Research Assistant Professor
Internal Medicine

Mingnan Chen, PhD
Associate Professor
Pharmaceutics & Pharmaceutical Chemistry

Anna Docherty, PhD
Assistant Professor
Psychiatry

Mary Playdon, PhD, MPH
Assistant Professor
Nutrition & Integrative Physiology

Paul Sigala, PhD
Assistant Professor
Biochemistry

Moriel Zelikowsky, PhD
Assistant Professor
Neurobiology

2013–2019 Vitae Speakers

Cammon Arrington, MD
Amy Barrios, PhD
Brenda Bass, PhD
Josh Bonkowski, MD, PhD
Adam Bress, PharmD, MS
Jessica C.S. Brown, PhD
Timothy Brusseau, PhD
Erhu Cao, PhD
Dana Carroll, PhD
Wendy Chapman, PhD
Danny Chou, PhD
Adam de Havenon, MD
Adam Douglass, PhD
Stavros Drakos, MD, PhD, FACC
Nels Elde, PhD
Tracy Frech, MD, MS
Adam Frost, MD, PhD
Katsu Funai, PhD
Chris Gregg, PhD
Jia-Wen Guo, PhD, RN
Adam Hughes, PhD
Will Holland, PhD
Janet Iwasa, PhD
Barbara Jones, MD, MSCI

Gabrielle Kardon, PhD
Mei Koh, PhD
Daniel Leung, MD, MSC
Jennifer Majersik, MD, MS
Michelle Mendoza, PhD
Benjamin Myers, PhD
Ryan O’Connell, PhD
Trudy Oliver, PhD
Allison Payne, PhD
Matt Rondina, MD
Charles Rogers, PhD, MPH, MS, MSCHES
June Round, PhD
Josh Schiffman, MD
Eric Schmidt, PhD
Alex Shcheglovitov, PhD, MS
Jason Shepherd, PhD
David Shprecher, DO, MSCI
Adam Spivak, MD
Alexandra Terrill, PhD
K-T Varley, PhD
Claudio Villanueva, PhD
Megan Williams, PhD
Jaclyn Winter, PhD
REACHING NEW HEIGHTS

Since 2015, University of Utah Health research funding has grown by 50 percent, driven by an impressive increase in proposal submissions in recent years. In fiscal year 2020, the university raised $603 million in research funding. Two-thirds of that total—$408 million—was awarded to U of U Health researchers.

In addition to extramural grant support, the university continues to invest in research through university-sponsored seed grants and fellowship opportunities for new and promising research projects.

### FY20 FUNDING BY SOURCE

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<th>Source</th>
<th>Amount</th>
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### FY20 FUNDING BY SCHOOL/COLLEGE

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MAJOR RESEARCH PROJECTS & INITIATIVES

CENTER FOR GENOMIC MEDICINE

The Center for Genomic Medicine (CGM) harnesses the power of family-based genomics to prevent and cure disease. For more than 50 years, the university’s scientific teams have leveraged well-phenotyped, multi-generational pedigrees and innovative technologies to uncover the genetic basis of human disease. U of U Health scientists have identified genes and risk factors for dozens of diseases, including breast and ovarian cancers (BRCA1, 2), colon cancer (APC), and heart arrhythmia (KCNH2, hERG), among others. Their discoveries have improved health care for millions of patients worldwide.

Fueling this success is the Utah Population Database (UPDB), a one-of-a-kind resource managed by Huntsman Cancer Institute that contains genealogical, public health, medical, and environmental exposure records for more than 11 million people. The UPDB is one of the world’s richest sources of data that supports research on genetics epidemiology, demography, and public health. It currently supports approximately 400 individual research projects.
The Diabetes and Metabolism Research Center (DMRC) catalyzes innovative diabetes and metabolism research among clinicians, investigators, and educators. From basic mechanisms to health behaviors, the DMRC seeks to understand the full spectrum of metabolic disease. The DMRC encompasses over 100 faculty across 26 departments in areas of molecular mechanisms, integrative physiology, genetics, diabetes complications, health behaviors, and population health. Since 2014, the DMRC has helped recruit 15 research-intensive faculty who have secured more than $37.5M in research funding.

The DMRC has awarded 48 seed grants that have yielded 28 extramural grants totaling $20.2M. The DMRC helped launch Driving Out Diabetes, a Larry H. Miller Family Wellness Initiative that provides numerous community engagement and clinical opportunities in diabetes prevention and care, as well as critical support for DMRC-related research efforts. DMRC creates an infrastructure that helps scientists succeed by supporting core facilities, developing industry and philanthropic partnerships, and fostering interdisciplinary community building.

The Utah Genome Project (UGP), launched in 2012, unites scientists, statisticians, software engineers, health care professionals, community members, and participants working to improve health through the genomic sequencing of Utah families.

The Utah Center for Genetic Discovery (UCGD) serves as the computational genomics hub for CGM. This group of more than 40 software developers, engineers, bioinformaticists, and biologists comprise one of the strongest computational genomics teams in the world. Their innovative software and data science solutions are enabling genomic discoveries worldwide.

CGM strengthens cooperation among UGP, UCGD, and UPDB and collaborations with our clinical departments, the College of Pharmacy, and ARUP Laboratories. Together, they turn genetic discoveries into accurate diagnoses, targeted treatments, prevention strategies, and cures. Additionally, CGM is training the next generation of researchers and health care professionals to make genomic medicine part of routine patient care.
NEUROSCIENCE INITIATIVE

Originally launched by U of U Health in 2013, the Neuroscience Initiative (NSI) was established to unify and promote the work of basic, clinical, and translational researchers whose efforts are aimed at alleviating the devastating effects of brain disorders. The driving goal of the NSI is to further our understanding of the brain and transform this knowledge into patient care solutions.

U of U Health boasts a long tradition of excellence in neuroscience, related disciplines, and clinical care. The community—ranging from neurologists to imaging specialists to molecular biologists—spans six colleges and schools, 15 centers and institutes, and more than 30 departments. As the NSI builds an integrated academic environment, it fosters collaboration across disciplines, creates pipelines of innovation, recruits top academic talent, and helps investigators grow their research enterprise.

NORA ECCLES HARRISON CARDIOVASCULAR RESEARCH TRAINING INSTITUTE

For more than 50 years, the Nora Eccles Harrison Cardiovascular Research and Training Institute (CVRTI) has conducted basic and translational research for the heart. CVRTI’s multidisciplinary team of investigators includes physicians, bioengineers, physiologists, biochemists, and computational modelers who take a highly integrated approach to researching heart failure and cardiac electrophysiology. In addition to research, CVRTI supports new generations of scientists by providing mentoring and research training to students, residents, interns, postdoctoral fellows, and junior faculty.

CVRTI has an outstanding legacy of landmark discoveries in cardiovascular science. Of special note are seminal discoveries regarding mechanisms of cardiac electrical disorders, the molecular basis of drug-induced arrhythmias, and the molecular regulation of cardiac contraction and relaxation. Recently, CVRTI investigators have spearheaded clinical trials for heart failure recovery and the development of a novel gene therapy for chronic heart failure. CVRTI investigators have a history of support from the Nora Eccles Treadwell Foundation as well as the National Institutes of Health (NIH), an amount that has doubled over the past year, the Department of Defense (DoD), and American Heart Association. The result is millions of dollars in grant funding and hundreds of scientific papers. CVRTI will soon start construction on a new wing, which will add new wet-bench laboratories allowing for the recruitment of additional, distinguished researchers to join the team.
HUNTSMAN CANCER INSTITUTE

Huntsman Cancer Institute (HCI) is the only National Cancer Institute-designated Comprehensive Cancer Center in the Mountain West. Its mission is to understand cancer from its beginnings, use that knowledge to improve and create new cancer treatments, and provide education about cancer risk, prevention, and care.

HCI’s campus includes a state-of-the-art cancer hospital and dedicated space for cancer research in laboratory, clinical, and population sciences domains. Community clinics and affiliate hospitals extend its reach. At any given time, approximately 150 clinical trials are open to patients, including the region’s only Phase I clinical research program.

HCI will soon open the region’s first and only Center for Proton Therapy. Construction on a major expansion of the cancer hospital, the Kathryn F. Kirk Center for Comprehensive Care and Women’s Cancers, is currently underway. This 220,000 square-foot new building will add 50 percent more clinical space at HCI.

HUNTSMAN MENTAL HEALTH INSTITUTE

Spearheaded by the Department of Psychiatry, mental health research at University of Utah Health aims to optimize mental health through the early detection, prevention, and treatment of psychiatric disorders. To achieve these goals, department faculty are engaged in studies across the translational continuum in an effort to improve understanding of biological mechanisms and psychosocial factors associated with psychiatric disorders. Notable areas of research focus include depression, anxiety, and suicide risk. Thanks to a $150 million gift from the Huntsman Foundation, U of U Heath dedicated the Huntsman Mental Health Institute (HMHI) in 2021. HMHI will allow us to expand ongoing research initiatives, grow our research training program, and advance innovative approaches to mental health care.

Research on brain development, neurophysiology, and innovative clinical treatments continue to provide a strategic focus. Critical studies on familial and genetic factors building on work from the Utah Population Database, and techniques developed with Huntsman Cancer Institute, are ongoing. Research on risk factors for depression and suicide include genetic and neurobiological influences, as well as studies on social connectedness, cognitive capacity, personality traits, and early life trauma.

Collaborative research with pulmonary medicine has examined high rates of depression observed in individuals with idiopathic pulmonary fibrosis. Additionally, strong partnerships exist between psychiatry, biomedical informatics, and population health on projects aimed at the early detection of risk for psychiatric disorders. Studies of youth are being expanded as this is a critical developmental period for early intervention through development of strategies for prevention as well as risk reduction.
IMMUNOLOGY, INFLAMMATION, AND INFECTIOUS DISEASE INITIATIVE

The Immunology, Inflammation, and Infectious Disease (3i) Initiative at U of U Health was formally established in 2017 on the premise that a better understanding of the three “I”s will fundamentally change the way we think about disease.

The vision of the 3i Initiative is to become a center of scientific excellence known internationally for its top-tier research performed at the nexus of the immunology, inflammation, and infectious disease fields and to make fundamental discoveries that ultimately improve patient care.

3i is built on a strong foundation of almost 180 faculty, who do research in related fields in 30 departments across campus. A major goal is to integrate basic, translational, and clinical research in these areas by strengthening the 3i community and fostering collaborations.

CENTER FOR CLINICAL & TRANSLATIONAL SCIENCE

The Utah Center for Clinical & Translational Science (CCTS) is U of U Health’s Clinical and Translational Science Award (CTSA) program. One of more than 50 such sites nationwide funded by the National Center for Advancing Translational Science (NCATS), it is the home for clinical and translational science at U of U Health and throughout the Mountain West. The CCTS is composed of four Foundations for Discovery: Clinical Trials Support, Population Health, Precision Medicine, and Workforce Development. It also provides services through its cores, including a Biomedical Informatics Core, a Community and Collaboration Core, and a Tracking and Evaluation Core. The CCTS has a national reputation for excellence in all these areas. Notably, its community engagement activities are nationally recognized as a model for success. They have established a number of successful platforms for researchers to engage with members of the greater Salt Lake City community on diverse topics, including recruitment into clinical research, creating culturally appropriate materials for research, and how to return results from studies to participants.

UNIVERSITY OF UTAH INTERMOUNTAIN HEALTHCARE DEPARTMENT OF POPULATION HEALTH SCIENCES

The University of Utah Intermountain Healthcare Department of Population Health Sciences drives health care transformation and aims to be a hub for education, investigation, and expertise in health services, cost, quality, outcomes, and health delivery systems research. Collaborations across campus—and, clinically, with our Health Plans—provide methodological expertise and infrastructure for population health scientists to pursue impact-driven research. Simultaneously, these partnerships are designed to train a new generation of population health care providers and allow clinical professionals to provide better patient and population-oriented care in an increasingly complex health care delivery environment.
CENTER FOR MEDICAL INNOVATION

Founded in 2012, the Center for Medical Innovation (CMI) is revolutionizing the delivery of health care worldwide by providing access to all the training and resources needed to create new technologies and solutions that solve some of the world’s biggest medical problems. The vibrant innovation ecosystem within the CMI has produced hundreds of new medical devices and digital health care solutions over the past decade. Bringing together creative students, expert faculty, and ingenious staff from many schools and colleges across campus, the CMI supports the research, development, and commercialization of physical and digital health care solutions.

The CMI is home to the Therapeutic Games and Apps Lab (The GApp Lab), the University of Utah’s flagship digital health development lab, and Bench to Bedside, a medical innovation competition that brings students together to create novel medical technologies.

ROCKY MOUNTAIN CENTER FOR OCCUPATIONAL AND ENVIRONMENTAL HEALTH

The Rocky Mountain Center for Occupational and Environmental Health (RMCOEH) is one of 18 education and research centers (ERC) supported by the National Institute of Occupational Safety and Health (NIOSH) in the United States. The RMCOEH is housed within the Department of Family and Preventive Medicine and has components and faculty in health sciences, mechanical engineering, economics, business, and mines and earth sciences—all of which are dedicated to protecting workers and their environment through interdisciplinary education, research, and service.

The need for nationwide research on occupational health and safety was highlighted during the COVID-19 pandemic. Addressing this need was part of RMCOEH’s FY 2020 research priorities. In addition to a renewal of a NIEHS-funded consortium agreement providing hazardous materials handling training and emergency response, funded research included a large prospective cohort study to track rates of COVID-19 infection among health care personnel, first responders, and essential workers; pilot research funded by the University of Utah’s 3i initiative to investigate alternative respiratory protection and infection control among health care workers; and a Department of Defense-funded contract to build a containment device for infectious aerosols that could be deployed in military and health care settings.
CENTER ON AGING
For nearly 50 years, The Center on Aging (CoA) has provided educational and research programs at the University of Utah. The center has more than 200 University of Utah faculty members representing 11 schools and colleges, including all of the Health Sciences Schools and Colleges.

Since its establishment in 1972, CoA has gained international recognition for its gerontology educational and research programs focused on caregiving, longevity, and vascular aging. Aging research at the university is supported, in part, by $18 million in annual research awards and grants from the National Institute on Aging, other NIH Institutes, and the VA Office of Research and Development.

With the support of an NIA grant, Lee Ellington, PhD (Nursing) is establishing a “Research Collaborative for Family Caregivers of Older Adults.” This collaborative will connect and amplify existing strengths of caregiving and geriatric-centered programs, including the Consortium for Families and Health Research (C-FAHR) and the CoA, to support the next generation of caregiving scientists and enhance the well-being of family caregivers caring for older adults.

The bristlecone pine (pictured here at Great Basin National Park) is earth’s oldest single living inhabitant and the logo for the Center on Aging. The oldest bristlecone pines, just under 5,000 years old, are found only in Utah and five other western states. Its extraordinary longevity and ability to adapt and survive in extremely harsh environmental conditions above 10,000 feet embodies the investigative spirit and mission of the Center on Aging.

TECHNOLOGY TRANSFER AND COMMERCIALIZATION
Commercialization also continues to be an avenue of success at U of U Health. Since 1970, a total of 184 health science startup technology companies have been founded through research projects that began here (six in FY20).

Some notable examples include Myriad Genetics, Biofire, Recursion, and ARUP, the latter of which has since developed more than 3,500 diagnostic tests to ensure better prevention, diagnosis, and treatment of diseases.

This innovation continues to thrive. In FY20, 89 applications for new patents were filed and 44 patents were issued. Additionally, the University of Utah received $12.5 million in revenue for commercialized health science-related innovations, which continues to support ongoing research and education here.
HEALTH SCIENCES CENTER CORES

The HSC Cores facilitate research with specialized equipment run by dedicated and highly trained directors and staff. The goal of the Cores is to make technology and expertise available to all faculty researchers and students. Core facilities are a highly effective and efficient approach to enabling ground breaking scientific advances by U of U investigators. Expertise in these cores includes cell imaging, zebrafish husbandry, DNA sequencing, electron microscopy, metabolomics, proteomics, machine shop, flow cytometry, and small preclinical imaging (PET/CT/MRI). Access to the facilities is managed through central scheduling and billing software that enables users to plan and execute experiments in an efficient manner. A single-rate system for all of campus ensures equal access to all investigators.

FACULTY SUPPORT

The Office of Academic Affairs & Faculty Development promotes professional development opportunities for faculty. It is a central resource for providing guidance, resources, and training to enhance faculty success.

Faculty development is key to continued success in research. The Vice President’s Clinical & Translational (VPCAT) program offers intensive mentorship and support to junior faculty who are committed to careers in clinical or translational research. VPCAT Research Scholars are selected through a competitive application process each fall. Accepted scholars join a two-year program to develop leadership competencies and the essential research knowledge and practical skills to be an effective clinical or translational researcher.

VETERANS ADMINISTRATION COLLABORATIONS

U of U Health faculty benefit from a longstanding, synergistic array of research opportunities within the VA Salt Lake City Health Care System (VASLCHCS). In 2020, the VASLCHCS had hundreds of funded projects from more than 150 investigators ($31.2 million). Research awards span a broad range of activities, with notable emphases on merit review and career development awards. They include all major research service lines of clinical science, health services, rehabilitation, and biomedical lab research and development. Research is ongoing in field-leading projects on informatics, traumatic brain injury, osseointegration, cardiovascular rehabilitation, antibiotic stewardship, and the impact of the SARS-CoV-2 pandemic. Of particular note is collaboration between the Huntsman Cancer Institute (HCI) and VASLCHCS enabling veterans receiving cancer care at the VA to participate in groundbreaking clinical trials being conducted at HCI.
RAPID RESPONSE TO COVID-19 CRISIS

In March 2020, the research community at the University of Utah demonstrated its nimbleness by transforming efforts and resources to respond to the SARS-CoV-2 pandemic. The Immunology, Inflammation, and Infectious Disease Initiative (3i) was particularly instrumental in coordinating the One U COVID-19 response. The 3i Initiative leveraged its existing communications platforms to serve as a connection point between the campus entities involved in the research response. Researchers came together to create a COVID-19 research community, bolstered by seed funding—in partnership with the Vice President for Research Office, 60 investigators from across campus were awarded $1.3 million. Altogether, more than 200 university investigators are leading 136 projects, garnering $29 million in external funding and more than 130 peer-reviewed publications.

Our U research community is an important part of both the global response to the pandemic and helping our Utah neighbors and economy to recover. As experts, they are informing not only state but also national policy. Utah HERO (Health and Economic Recovery Outreach) provides rapid information on COVID-19 infection rates to decision makers to help Utah’s citizens and economy return to normal in a safe and informed way. At the national level, the initiative’s efforts monitoring COVID-19 in Salt Lake area schools played a major role in forming the U.S. Center for Disease Control and Prevention’s COVID-19 guidelines for U.S. classrooms.

Beyond policy, U investigators are helping communities rebound by increasing our understanding of the virus, the illness, the pandemic, and strategies for recovery. This research spans nearly every discipline, ranging from testing and clinical trials to evaluating COVID-19’s impact on vulnerable communities and rates of domestic violence. Advances in technology promise to lead to virus-blocking drugs and make COVID-19 testing as easy as breathing into our phones. This work will continue to make a difference as the ripple effects of the pandemic continue for years to come.
Other Centers

- AIDS Center
- Center for Cell and Genome Sciences (Main Campus)
- Center for Controlled Chemical Delivery
- Center for Excellence for Biomedical Microfluidics (Main Campus)
- Center for Excellence for Exposure Health Informatics
- Center for Extreme Data Management, Analysis, and Visualization (Main Campus)
- Center for High Performance Computing (Main Campus)
- Center for Human Toxicology
- Center for Law and Biomedical Sciences (Main Campus)
- Center for Neural Interfaces (Main Campus)
- Center for Patient Simulation
- Center for Peptide Neuropharmacology
- Emma Eccles Jones Nursing Research Center
- Genetic Science Learning Center
- Hartford Center of Geriatric Nursing Excellence
- Intermountain Healthcare Simulation Learning Center
- Matheson Center for Health Care Studies
- Nano Institute
- National Center for Voice and Speech
- Pain Research Center
- Pharmacotherapy Outcomes Research Center
- Study Design and Biostatistics Center
- University of Utah Center for Community Nutrition
- Utah Addiction Center
- Utah Area Health Education Center
- Utah Center for Advanced Imaging Research
- Utah Center for Neuroimage Analysis
- Utah Center for Reproductive Medicine

Other Institutes

- Lassonde Entrepreneurship Institute (Main Campus)
- Scientific Computing and Imaging Institute (Main Campus)

Other Programs

- Global Health
- Global Health Education
- Global Public Health
- Health Equity, Diversity, & Inclusion
- Games and Apps (GApp) Lab
SECTION 06

UNIVERSITY OF UTAH HEALTH EDUCATION
1,425 HEALTH CARE PROFESSIONALS TRAINED IN 2020

602 HEALTH GRADUATES
367 MEDICINE GRADUATES
342 NURSING GRADUATES
68 PHARMACY GRADUATES
45 DENTISTRY GRADUATES

2,127 FACULTY
5,400 TOTAL STUDENTS ENROLLED

SUPPORTING RESEARCH & TRAINING

SPENCER S. ECCLES HEALTH SCIENCES LIBRARY IS HOME TO NETWORK OF NATIONAL LIBRARY OF MEDICINE TRAINING OFFICE

NATIONALLY RANKED

12 GRADUATE PROGRAMS RANKED IN NATION’S TOP 30 AMONG PUBLIC INSTITUTIONS (2022 U.S. & WORLD REPORT)

SCHOOL OF MEDICINE | 3.8 FTE FACULTY TO EVERY 1 STUDENT

All figures are FY20 unless otherwise indicated.
NATIONAL DISTINCTION IN EDUCATION

University of Utah Health trains about two-thirds of all physicians practicing in the state. Since 1967, more than 40,000 doctors, nurses, dentists, advanced practice clinicians, scientists, health sciences educators, and other health professionals have graduated from the U.

Each U of U Health school or college is nationally recognized for various accomplishments and competencies. This is reflected in rankings published by U.S. News & World Report and in high levels of research funding from the National Institutes of Health (NIH).

College of Health
- No. 13 Physical Therapy Program
- No. 32 Speech-Language Pathology
- No. 22 Audiology Program
- No. 42 Occupational Therapy

College of Pharmacy
- No. 14 PharmD Program
- No. 15 NIH Research Funding

School of Medicine
- No. 4 Physician Assistant
- No. 17 Family Medicine
- No. 32 Primary Care
- No. 33 Rural Medicine
- No. 41 Research
- No. 36 NIH Research Funding

College of Nursing
- No. 11 Nursing-Midwifery Program
- No. 23 Doctor of Nursing Practice
- No. 38 Online Master’s in Nursing
- No. 22 NIH Research Funding

College of Nursing
- No. 11 Nursing-Midwifery Program
- No. 23 Doctor of Nursing Practice
- No. 38 Online Master’s in Nursing
- No. 22 NIH Research Funding

Population Health Scholars Program
In 2021, Intermountain Healthcare and U of U Health announced they will jointly develop a new medical educational program to train the next generation of physicians in population health, with a focus on pre-emptively addressing causes of illness, rather than just treating people when they are sick.

The partnership will:
- Establish the University of Utah Intermountain Healthcare Population Health Student Scholars Program.
- Provide tuition support for medical students accepted into the Program.
- 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 and four endowed chairs in the University of Utah School of Medicine to teach student scholars and lead research and clinical education opportunities.
INNOVATING EDUCATION

In July 2019, Wendy Hobson-Rohrer, MD, MSPH, was appointed Associate Vice President for Health Sciences Education at the University of Utah. In this unique, first-of-its-kind role, Hobson-Rohrer works with leaders and educators across the health sciences to leverage our distinct strengths, build engagement and educational integration among colleges and schools, and maintain a culture of educational excellence.

The big goal moving forward is to further distinguish our uniquely resourced academic system, a center of health care advancement that equips learners with industry-leading skills and a deep desire to improve the lives of others.

GREATER ALIGNMENT

U of U Health’s schools and colleges already provide exceptional educational opportunities, including highly individualized experiences. Here, learners are exposed to pioneering efforts in health care, and student innovation is highly encouraged.

A current priority is aligning the planning in our six academic units: Colleges of Health, Nursing, and Pharmacy, Eccles Health Sciences Library, and the Schools of Dentistry and Medicine. Alignment creates the advantage of shared resources and minimized redundancy. It means more informed planning and increased data-driven decision-making.

EXCELLENCE IS THE STATUS QUO

As medicine and health care continue to evolve, so does education. We have an obligation, rooted in our mission, to train students and educators to be prepared for a dynamic health care landscape. The University of Utah’s Exceptional Education Experience and the School of Medicine’s Exceptional Learning Experience—strategic transformation programs emphasizing community, relationships, and professionalism in the learning culture—provide our education community with tools to transform the future of health care.

MEASURING PERFORMANCE

Currently, there is no comprehensive metric or ranking to demonstrate national distinction in health sciences education. Beyond the long-established boards and licensing exams that test knowledge and skill, we are developing metrics for measuring educational performance that demonstrate the impact of health sciences education on our learners, faculty, and the communities we serve.
OFFICE OF THE AVP FOR HEALTH SCIENCES EDUCATION

The Office of the Associate Vice President for Health Science Education aims to integrate, support and create exceptional educational strategies, programs, and activities for faculty and learners across University of Utah Health, that will distinguish us nationally.

Org Chart—
U of U Health Sciences
Education Unit

Wendy Hobson-Rohrer
Associate Vice President for Education,
University of Utah Health

Kim Clark
Director, Education and Faculty Development

DEANS OF EDUCATION

Vice and Associate Deans of Education oversee educational activities and student experiences within their respective school or college.

Donald Blumenthal,
PhD
Pharmacy

Mark Harris,
MBCHB, MPH
Medicine

James Herron,
PhD
Pharmacy

Lea Erickson,
DDS, MSPH
Dentistry

Sara Lamb,
MD,
Medicine
(Vice Dean)

Gwen Latendresse,
PhD, CNM, FACNM
Nursing

Karen Paisley,
PhD
Health

Adam Stevenson,
MD
Medicine

Linda Tyler,
PharmD
Pharmacy

Richard Wiggins,
MD
Medicine
As Associate Vice President for Health Sciences Education, Wendy Hobson-Rohrer identifies and leverages the university’s distinct strengths, builds engagement and educational integration among colleges and schools, and maintains a culture of educational excellence.

A tenured professor of pediatrics, Hobson-Rohrer also serves as associate dean for Faculty Development and as executive clinical director for the South Main Clinic. She received an MD at Cornell University Medical College and completed a pediatric residency, education fellowship, and received a Master of Science in Public Health at the University of Utah.

As Director of the University of Utah Health Interprofessional Education Program (IPE), named as 1 of 4 national Hotspotting Hubs in 2017. Farrell oversees IPE activities involving 1,500 health professions trainees every year from the Colleges of Health, Nursing, and Pharmacy and the Schools of Dentistry and Medicine, as well as students from the College of Social Work. An associate professor of medicine, he is a physician investigator at the VA Salt Lake City Geriatric Research, Education, and Clinical Center, and a fellow of the Academy of Health Science Educators. Farrell received an MD at the University of Massachusetts Medical School and completed a residency in family medicine and fellowship training in geriatrics at Brown University.

A tenured professor in medicine, Michael Rubin holds several key leadership roles at the University of Utah and the VA Salt Lake City Health Care System, reflecting his dedication to faculty development and mentorship. Rubin directs the Vice President’s Clinical & Translational Research (VPCAT) Scholars Program. He also serves as associate director for the VA Salt Lake IDEAS Center of Innovation and as vice chair for Faculty Development in the Department of Internal Medicine, overseeing faculty mentoring, advancement, and career development. Additionally, Rubin is the section chief of epidemiology for VA Salt Lake City Health Center. Rubin received an MD and PhD in immunology at the University of Illinois, Chicago. He completed a residency in internal medicine, a fellowship in infectious disease, and received an MS in biomedical informatics at the University of Utah.
Antonius Tsai, MBA  
*Director, Leadership and Career Development*  
*University of Utah Health*

As director of Leadership and Career Development for University of Utah Health, Tony Tsai helps people connect to the meaning and authentic purpose in their careers through innovative, practical programming and coaching. In previous roles, Tsai led strategic transformation efforts in medical education. He was formerly head of career advising at the Ross School of Business at the University of Michigan, and a former officer in the U.S. Army. He received an MBA from Columbia Business School.

Rebecca Wilson, PhD, RN  
*Director, Masters of Education in Health Professions*  
*Director & Fellow, Academy of Health Science Educators*  
*Specialty Director, Nursing Education Track Program*  
*University of Utah Health*

Rebecca Wilson is the director for the Academy of Health Science Educators, a community of educators committed to advancing excellence and value in health science education. Wilson advocates for faculty in their educator role. An associate professor and the inaugural Fredrick Q. Lawson Excellence in Teaching Endowed Chair at the University of Utah College of Nursing, Wilson also directs and teaches for the Nursing Education Specialty Track Program. Wilson received an MEd and PhD in educational technology at Arizona State University and an MS in critical care nursing at Columbia University School of Nursing.
EXPERIENTIAL LEARNING
To enhance education in health professions and provide learners with a safe environment in which to learn—while also improving patient safety—the Office of the AVP for Health Sciences is working to expand and advance the scope and structure of the Center for Interprofessional Experiential Learning. In this newly envisioned Center, learners from all areas of health sciences converge to utilize state-of-the-art simulation technologies to improve clinical skills. Collaborating with the Therapeutic Games and Apps Lab (GApp Lab) and the Eccles Health Sciences Library, the Center will converge and explore the educational capabilities of virtual, augmented, and extended reality.

LEADERSHIP DEVELOPMENT
U of U Health aims to increase leadership skills for all faculty. The Office of the AVP for Health Sciences Education provides training through the Leadership and Career Development Seminar Series (LDCSS), a new program launched in 2020 and through peer faculty coaches in the Utah Coaching and Advancement Network (UCAN). It also supports faculty in attending the David Eccles School of Business Leadership Development Program to develop innovative strategies and communicate a compelling vision of high quality, cost-effective care.

INVESTING IN JUNIOR FACULTY
U of U Health is filled with brilliant young faculty poised to make a difference in health and health care worldwide. The Vice President’s Clinical and Translational (VPCAT) Research Scholars Program provides tools to support those critical early steps and define the vision for their careers. Now in its 12th year, VPCAT proves that investing in emerging leaders pays off.
Vice President’s Clinical & Translational (VPCAT) Research Scholars Program

VPCAT Scholars Research Funding Tops $159 Million

Contributing to the overall success of the University’s mission, alumni and current VPCAT scholars have surpassed $159 million in university research funding.

**History**

VPCAT is a holistic, 2-year competitive mentoring program supporting early career faculty engaged in clinical & translational research in their transition to independence.

- **FY2008**—Program started as PCAT to support faculty from women’s and child health
- **MID-FY2013**—Transitioned to VPCAT with inclusion of U of U Health faculty
- **MID-FY2016**—Addition of University of Utah main campus faculty

- 162 VPCAT graduates
- 64% women and under-represented minorities
- 98% VPCAT graduates remain in academic medicine
- 79% VPCAT graduates remain at the U
- 9 schools, colleges, and institutions (UofU, IHC, & UDOH)

**Funding Sources**

Between FY2017–21, VPCAT scholars received 58% of all university–awarded NIH K01, K07, K08, & K23 awards

- $42M R Award or Equivalent
- $33.1M K Award or Equivalent
- $38.9M Clinical Trials
- $23.8M Other Federal
- $13.1M Foundation
- $8.5M Other

**11-Year Impact**

Thanks to the efforts and quality of our VPCAT staff, mentors, and faculty, the program continues to provide excellent value to our scholars and our institution.

- $159M in total awarded new proposals
- 609 total new proposals funded
- $28M in total indirects awarded
- 7 to 1 U of U return on investment from FY2013–21
With more than 1,800 undergraduates and nearly 600 graduate students, the College of Health (COH) is among the largest colleges on the University of Utah campus. Its 18 baccalaureate programs, 16 master’s programs, three clinical doctorates, and five PhD programs span 12 distinct program areas within six departments. Additionally, the COH supports 30 laboratories and three rehabilitation clinics that perform research and provide valuable services to the community, profession, and university.

The COH has adopted an integrated, comprehensive, individualized, and systemic approach to health and wellness. The College helps U of U Health link metabolism, physical activity, the neurosciences, and other disciplines to the prevention and treatment of chronic diseases. Through research and by teaching and modeling prevention, rehabilitation, restoration, and health maintenance, the COH plays a crucial role in U of U Health’s overarching effort to transform health care.

### Departments
- Communication Sciences and Disorders
- Health and Kinesiology
- Nutrition and Integrative Physiology
- Occupational and Recreational Therapies
- Parks, Recreation, and Tourism
- Physical Therapy and Athletic Training

### Points of Emphasis
- Discovering and applying new knowledge to prevent chronic disease and develop evidence-based rehabilitation practices.
- Enhance student success.
- Improve health and quality of life for university employees, the community, and others.
- $60M active research portfolio.
- 42K contacts made through community engagement programs in FY20.

### National Rankings
- #7 Parks, Recreation, & Tourism
- #10 Kinesiology
- #13 Physical Therapy
- #29 Audiology
- #32 Speech-Language Pathology
- #42 Occupational Therapy

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**David H. Perrin, PhD**
*Dean, College of Health*
COLLEGE OF NURSING
With an annual enrollment of 700+ graduate and undergraduate students, the College of Nursing (CON) prepares the next generation of highly skilled nursing, gerontology, and health care leaders. Its pre-licensure track within the BS in Nursing program ranks No. 12 for best value nationwide (Value Colleges, 2020). In addition to a BS in Nursing, the CON also offers a program for transition from RN to BS, ranked No. 8 in the nation for affordability (Value Colleges, 2020), with no out-of-state fees and no tuition differential. The CON offers 10 Doctor of Nursing Practice (DNP) specialty tracks and is the only nursing school in Utah with a PhD program. It also offers a dual DNP-PhD—one of only six programs of its kind nationwide. The College ranks No. 11 in the nation for nurse-midwifery, and No. 23 for DNP (U.S. News, 2022). Additionally, the College ranks No. 22 in the nation for in research funding from NIH.

Among other specialties, the CON excels in interdisciplinary gerontology education and leads in caregiving across the lifespan through the Family Caregiving Collaborative. It has a nationally recognized simulation center and specializes in informatics and systems science through the Center of Excellence for Exposure Health Informatics (CEEHI). More than half of the college’s 100+ faculty members provide in-person and telehealth care for all patient populations.

Points of Emphasis
• Serving the people of Utah and beyond by continually improving health and quality of life for individuals and communities.
• $35 million active research portfolio. Research expenditures grew from $5 million in FY16 to $6.5 million in FY20 (30 percent increase).
• Faculty and trainees received 10 grant awards totaling $3.2 million for COVID-related research studies and nursing workforce projects.
• Caring Connections: A Hope and Comfort in Grief Program received CARES Act funds to offer COVID-grief and COVID-recovery support programs, making more than 6,000 contacts.

Marla De Jong, PhD, RN, FAAN
Dean, College of Nursing

Number of Students
- Masters 48
- Baccalaureate 346
- PhD 37
- DNP 266
- Dual DNP-PhD 1

National Rankings
- #11 Nursing-Midwifery Program
- #23 Doctor of Nursing Practice
- #38 Online Master’s in Nursing
- #22 NIH Research Funding
With nearly 300 students, the College of Pharmacy’s (COP) PharmD program represents a collaborative effort of the college’s four academic departments: Medicinal Chemistry, Pharmaceutics and Pharmaceutical Chemistry, Pharmacology and Toxicology, and Pharmacotherapy. The success of this collaborative effort is recognized by a No. 14 national ranking among pharmacy schools (U.S. News, 2022). The COP is also a research powerhouse. For more than 40 years, the college has ranked among the nation’s top 10 pharmacy schools for NIH grants.

The COP is committed to the highest level of work in educating future pharmacists and conducting boundary-pushing research in pharmaceutical sciences. It is also dedicated to providing service to the university, local, and regional communities and the pharmacy profession. Complementary to this commitment, the COP strives to be a leader in applying pharmaceutical science to personalized medicine, improving health care delivery through optimized medication outcomes.

**Departments**
- Medicinal Chemistry
- Pharmacotherapy
- Pharmaceutics & Pharmaceutical Chemistry
- Pharmacology and Toxicology

**Points of Emphasis**
- More than 80 percent of Utah’s pharmacy graduates are trained at the U.
- Advance health care education and training.
- Discover new biomedical knowledge and technology.
- Provide pharmacy-based services and outreach activities to the community.

 Randall T. Peterson, PhD  
Dean, College of Pharmacy

**Number of Students**
- Masters 9
- PharmD 216
- PhD 47

**National Rankings**
- #14 PharmD Program
- #11 Overall grant funding within the American Association of Colleges of Pharmacy (AACP)
- #15 NIH Research Funding
The Spencer S. Eccles Health Sciences Library (EHSL) is a vibrant component of University success and a vital hub where information and innovation intersect. The library is the electricity that powers the education and research enterprise. It helps point the way toward informed health care decision making, better care, and better outcomes. The EHSL leads campus efforts in systematic and scoping review services that fuel health sciences research and serves as a central hub for emerging technology in health information.

The EHSL is the Regional Medical Library (RML) for Region 4 of the Network of the National Library of Medicine (NNLM)—one of seven RMLs nationwide. It also houses the NNLM Training Office, which provides online courses to more than 2,000 learners nationally each year.

In 2021, the EHSL received a $10 million grant from the National Library of Medicine, an institute of the National Institutes of Health. The award solidifies the library’s national distinction as the RML for Region 4 and as the continuing—and only—home of the NNLM Training Office, a designation it was first awarded in 2011. The renewed grant will focus on improving access to quality health, giving special attention to underrepresented communities. It will also allow EHSL to continue collaborations with other NLM RMLs, offices, and centers.

Points of Emphasis

- Home to the Network of the National Library of Medicine Training Office.
- Six national and regional awards in 2020.
- Two peer-reviewed journals launched in partnership with U faculty (FY20).
- 5,576 people received training in various research skills (FY20).
- 416 education sessions (FY20).
- Academic medical library for web content use
- 21 Million annual website visits
- 10 Articles authored by EHSL faculty and staff (FY20)
- Two books co-authored by EHSL faculty (FY20)
- 12,900 requests provided through Interlibrary Loan (FY20)
- 1 of 7 Regional Medical Libraries nationwide

Catherine B. Soehner, MLS, BSN
Associate Dean for Research and Director, Spencer S. Eccles Health Sciences Library
Director, Region 4 and Training Office, Network of the National Library of Medicine
The School of Dentistry’s (SOD) four-year DDS program began in 2013 with an entering class of 20 students. Now with 200 students spread across four years and a 50-student entering class size, the SOD is housed in the stunning 85,000-square-foot Ray and Tye Noorda Oral Health Sciences Building. The school is rooted in its mission to provide comprehensive oral health care to communities in need across the state of Utah. Now with eight clinical sites from Ogden to St. George and a mobile dental outreach program, the SOD is actively bringing oral health care to rural Utah. The school’s vision engages faculty, students, and residents to collaborate on research, clinical, educational, and outreach initiatives.

The SOD continues to graduate students prepared to enter the most prestigious advanced dental residency programs across the country. It is home to an ADA-approved program with 10 residents who gain deep experience working within U of U Health. In collaboration with their medical student colleagues, SOD dental students and residents are reimagining comprehensive health care, including integrated medical and dental records.

Points of Emphasis

- Improve the oral and overall health of the community through education, research, and service.
- Increase access to care for the underserved across Utah.
- Utah’s sole Medicaid dental provider for the elderly, people with visual impairments or disabilities, and patients in substance abuse treatment.
- Largest clinical network of any dental school in the nation—eight clinical locations from St. George to Ogden offer comprehensive dental care.
- High success rate for placing students into prestigious residency programs across the U.S.
- New mobile dentistry capability with a focus on increasing access to oral health care in rural communities across Utah.

Wyatt R. “Rory” Hume, DDS, PhD
Associate Vice President, Academic Affairs and Education Dean, School of Dentistry

**SCHOOL OF DENTISTRY**

Number of Students

<table>
<thead>
<tr>
<th>Number of Students</th>
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<tbody>
<tr>
<td>DS4s 50</td>
</tr>
<tr>
<td>DS3s 50</td>
</tr>
<tr>
<td>DS2s 50</td>
</tr>
<tr>
<td>DS1s 50</td>
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</tbody>
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National Ranking

#33 NIH Research Funding
Points of Emphasis

• Combining excellence in teaching, research, and clinical expertise to train tomorrow’s physicians for the rapidly changing world of medicine.

• Interdisciplinary research in the genetics of disease, cancer, biomedical informatics, infectious diseases, and other areas of expertise.

• Intermountain Healthcare and U of U Health are developing a new medical educational to train the next generation of physicians in population health.

SCHOOL OF MEDICINE

The School of Medicine (SOM) houses 22 clinical and basic science departments and more than 1,800 physician and research faculty. With an entering class of 125, SOM has more than 500 MD students spread across four years and several joint degree programs.

The SOM trains two-thirds of Utah physicians, offering an MD degree, several PhD programs, and the No. 4-ranked physician assistant program in the nation. 2020 introduced a brand-new Master of Cardiovascular Perfusion program. The SOM also offers degrees in public health, medical laboratory science, occupational and environmental health, and several research disciplines. Convenient co-location with University of Utah Hospital and relative proximity to the rest of the health system and its affiliates, the SOM provides learners with deep exposure to pioneering efforts in health care value and quality.

A robust Graduate Medical Education office oversees nearly 900 trainees in 29 residency and 104 fellowship specialties. As a research institution, the SOM is known for its work in genetics, cancer, biomedical informatics, neuroscience, cardiology, hematology, ophthalmology, orthopedics, and obstetrics/gynecology, among other disciplines.

Wayne Samuelson, MD
Dean, Medical Education
School of Medicine

Number of Students
- GME 896
- Masters 378
- PhD 358
- Undergraduate 205
- MD 521

National Rankings
- #4 Physician Assistant Program
- #17 Family Medicine
- #32 Primary Care
- #41 Research
FACES OF UNIVERSITY OF UTAH HEALTH
UNIVERSITY OF UTAH HEALTH
ACADEMIC DEPARTMENTS
NATIONAL DISTINCTION IN HEALTH SCIENCES

As a truly integrated health system, our academic departments are utilizing talent, resources, and collaboration to change the way science and medicine are practiced and delivered—locally, regionally, nationally, and globally.

Anesthesiology
Played key roles in development of the transmucosal fentanyl delivery system (i.e., fentanyl lollipop) for cancer pain and the short-acting opioid remifentanil for intravenous anesthesia.

Biochemistry
The first breakthroughs on the structure of the ribosome, which ultimately led to the 2009 Nobel Prize in Chemistry.

Biomedical Informatics
Integral to many early informatics achievements such as early electronic medical record (EMR) systems (HELP) and the first diagnostic expert system (Iliad).

Communication Sciences and Disorders
Seven faculty have been honored as Fellows of the American Speech-Language-Hearing Association, the highest honor the organization bestows upon its members.

Dermatology
Dermatology faculty were instrumental in discovering p16, the first familial melanoma gene.

Family and Preventive Medicine
The DFPM is home to the Rocky Mountain Center for Occupational and Environmental Health, the only National Institute for Occupational Safety and Health (NIOSH)-supported education and research center in the Mountain West.

Health and Kinesiology
Working with the U.S. Military to develop new clinically deployable assessments that enhance service member safety and better determine readiness for duty after mild traumatic brain injury (mTBI).

Human Genetics
First to identify the BRCA1 (breast cancer and ovarian cancer) gene, an accomplishment that paved the way for the discovery of more than 50 additional genes at U of U Health.

Internal Medicine
- Division of Cardiovascular Medicine
  Developed the first artificial heart and the intra-aortic balloon pump (IABP) as a short-term treatment for heart conditions.
- Division of Endocrinology, Metabolism, and Diabetes
  Opened the region’s first General Clinical Research Center at the University of Utah in 1977.
- Division of Gastroenterology, Hepatology, and Nutrition
  Identified the genetic cause of an inherited form of colon cancer and defined clinical standards in caring for patients with the disease.
- Division of General Internal Medicine
  Played an important role in identifying methods for accurately measuring blood pressure and integrating them into the clinic.
- Division of Geriatrics
  Instrumental in making the key discovery that decreasing systolic blood pressure to lower-than-standard levels delays the onset of cognitive impairment in older adults.
- Division of Hematology and Hematologic Malignancies
  Pioneered the field of hematology through the study of the basic pathophysiology and genetics of blood disease.
- Division of Infectious Diseases
  Opened the inaugural PrEP clinic in Utah for preventing HIV, amongst the first in the nation.
- Division of Oncology
  Found that a drug—apalutamide—prolongs survival in men with metastatic prostate cancer.
- Division of Respiratory, Critical Care, and Occupational Pulmonary Medicine
  Identified new roles for platelet dysfunction in acute (sepsis) and chronic (diabetes) states of inflammation, opening up novel avenues for intervention.
- Division of Rheumatology
  Developed methods and objective measures essential for carrying out multi-centered clinical trials on rheumatic diseases.

Medicinal Chemistry
Part of an international team of researchers who discovered a new species of giant shipworm in 2017.

Neurobiology and Anatomy
Discovered that a gene originally from viruses is important for our ability to learn and form memories, and revealed a novel form of communication between cells in the brain.
Neurology
Inventor of a licensed method for treating neurodegenerative diseases with an antisense oligonucleotide–based molecular therapy.

Neurosurgery
Developed a device used worldwide for fusing cervical vertebrae following trauma and for treating degenerative conditions.

Nutrition and Integrative Physiology
Defined a class of fats, called ceramides, as a cause of diabetes and metabolic disorders.

Obstetrics and Gynecology
Pioneered a laser ablation procedure for a serious complication of twin pregnancies, called twin–twin transfusion syndrome. The technique is now performed worldwide.

Occupational and Recreational Therapies
ORT is internationally recognized for a unique clinical fieldwork program in which students from several universities provide therapy services to individuals with refugee and immigrant status.

Oncological Sciences
A leader in understanding cancer mechanisms, including orthotopic models for breast cancer, chromatin regulation of gene expression, and mouse models of lung cancer.

Ophthalmology and Visual Sciences
Created the first gene therapy and will carry out clinical trials for age–related macular degeneration (AMD), the leading cause of blindness in the industrialized world.

Orthopaedics
First in-human clinical trial of the Percutaneous Osseointegrated Prosthesis (POP), a device implanted into the bone in above-knee amputees, allowing them to walk with comfort and control.

Parks, Recreation, and Tourism
The Parks, Recreation, and Tourism program is ranked No. 7 out of all Parks, Recreation, and Leisure programs in the U.S. (Universities.com), based on career preparation, students & culture, facilities, and activities and groups. The program is also accredited through the Council on Accreditation for Parks, Recreation, Tourism, and Related Professions (COAPRT).

Pathology
Inventor of lightcycler real-time polymerase chain reaction (PCR) technology, increasing the speed and precision of molecular diagnostics.

Pediatrics
A pioneer in EPAC (Education in Pediatrics Across the Continuum), an exciting project to establish a model for true competency–based medical education.

Pharmaceutics and Pharmaceutical Chemistry
Pioneered the field of polymer therapeutics for targeted drug delivery.

Pharmacology and Toxicology
Began Anticonvulsant Drug Development Program in 1975 and, since then, has tested the vast majority of the drugs used to control seizures in patients with epilepsy, helping millions of people worldwide.

Pharmacotherapy
The Pharmacotherapy Outcomes Research Center is an internationally recognized center of excellence for pharmacy outcomes and health economics research.

Physical Medicine and Rehabilitation
Played an important role in development of advanced rehabilitation technology, including the TetraSki and other Tetradapt sports equipment, for people with complex disabilities.

Physical Therapy and Athletic Training
Celebrated the 50th anniversary of the physical therapy program in 2019—rising from humble beginnings to now being ranked the No. 13 Doctor of Physical Therapy program in the U.S.

Population Health Sciences
A leading force in developing digital health interventions to improve the physical and mental health of our patients.

Psychiatry
Developed and maintain the clinical aspects of the SafeUT app, a crisis chat and tip line, which is disseminated throughout K–12th grade in Utah schools and credited with saving numerous lives.

Radiation Oncology
Opens the Senator Orrin G. Hatch Center for Proton Therapy in January 2021, the first of its kind, bringing advanced radiation therapy to patients in the Mountain West.

Radiology and Imaging Sciences
Innovated statistical brain mapping, and disseminated the technology internationally, to improve diagnosis and treatment of Alzheimer’s.

Surgery
Pioneered development of the cochlear implant, which has revolutionized rehabilitation of hearing loss.
ANESTHESIOLOGY

The Department of Anesthesiology provides first-class perioperative medicine services, advances the frontiers of scientific knowledge in anesthesiology, pain medicine, and critical care, and trains the perioperative medicine specialists of the future.

DEPARTMENT STATISTICS

<table>
<thead>
<tr>
<th>Count</th>
<th>Description</th>
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</thead>
<tbody>
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<td>Faculty (114 primary, 70 adjunct)</td>
</tr>
<tr>
<td>45</td>
<td>Residents</td>
</tr>
<tr>
<td>11</td>
<td>Post-Doctoral Fellows</td>
</tr>
<tr>
<td>27</td>
<td>Advanced Practice Clinicians</td>
</tr>
<tr>
<td>$2.27M</td>
<td>Research Expenditures (FY20)</td>
</tr>
</tbody>
</table>

Education

The highly competitive anesthesiology residency attracts the best medical students nationwide. One unique program feature is the Anesthesiology Center for Patient Simulation, which offers high-fidelity, immersive, mannequin-based patient simulation for teaching, board recertification, and research. The department also supports numerous fellowship programs, including chronic pain management, cardiothoracic anesthesiology, acute pain management, liver transplantation, and perioperative echocardiography.

Research

A broad research portfolio includes investigation in the areas of pain and fatigue, medical device development, clinical pharmacology and drug development, echocardiography, and “big data” analytics. The department’s entrepreneurial research enterprise has 10 licensed products on the market.

Clinical

The department offers comprehensive perioperative and pain medicine services. Unique clinical strengths include an internationally known perioperative echocardiography service, offering 24/7/365 “rescue echo” for patients suffering circulatory failure in operating rooms and intensive care units. The department is a national leader in the advancement of acute pain management and total intravenous anesthesia. Outside the operating rooms, department physicians attend in four perioperative intensive care units within University of Utah Hospital and the Huntsman Cancer Hospital. Additionally, the Pain Management Center attracts patients from around the Mountain West for evaluation and treatment of complex pain syndromes.

Other

The department has enjoyed considerable success in entrepreneurial research. Currently, more than a half-dozen active spin-off companies from the department market medical devices, software, and drug-delivery systems. For example, Anesta developed the “fentanyl lollipop,” which emerged as a successful treatment for patients suffering from cancer pain.

Department Chair

Talmage D. Egan, MD
K.C. Wong Presidential Endowed Chair in Anesthesiology | Professor, Anesthesiology • Adjunct Professor, Bioengineering, Neurosurgery, Pharmaceutics, and Pharmaceutical Chemistry • MD, University of Utah School of Medicine • Residency: Surgery, University of Utah; Anesthesiology, Stanford U. • Fellowship: Clinical Pharmacology, Stanford U.
**BIOCHEMISTRY**

The Department of Biochemistry is a diverse and inclusive community conducting biochemical research at the forefront of current knowledge; educating medical students, graduate students and fellows; serving the institution, the extended scientific community, and society at large. Departmental areas of focus include the characterization of macromolecules and biological processes at the molecular level. Research groups address the structures of biological macromolecules, the mechanisms by which they function, and their applications to research technology and medicine.

### DEPARTMENT STATISTICS

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<tbody>
<tr>
<td>54</td>
<td>Faculty (21 tenure, 13 research track, 20 adjunct)</td>
</tr>
<tr>
<td>41</td>
<td>Post-Doctoral Fellows</td>
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<tr>
<td>64</td>
<td>Students</td>
</tr>
<tr>
<td>$15M</td>
<td>Research Expenditures (FY20)</td>
</tr>
<tr>
<td>#11</td>
<td>Dept. Funding Rank (NIH)</td>
</tr>
</tbody>
</table>

### Research

A broad research portfolio includes strengths in metabolism and diabetes, nucleic acids biochemistry, structural biology, and chemical biology. Areas of growth include protein, biochemical, and cell engineering; molecular imaging; and cell biology. The department is currently ranked 11th nationally in total NIH funding ($15M in FY20), despite being the smallest department in the top 20. Current faculty research honors include five Pew/Searle Scholar Awards, five Distinguished Professors, a Howard Hughes Medical Institute investigator, three members of the American Academy of Arts and Sciences, and three members of the National Academy of Sciences.

### Education

The biochemistry department offers combined graduate programs in biological chemistry, molecular biology, and neuroscience. It also supports the MD/PhD program and undergraduate medical education. Department faculty have won three University of Utah Outstanding Mentor/Educator Awards for graduate education.

### Other

Other departmental strengths include molecular animation and communication; success in commercialization, as reflected by the establishment of multiple, well-capitalized start-ups; and a successful commitment to recruiting and supporting underrepresented minorities.

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**Department Chair**

**Wesley I. Sundquist, PhD**

*Leo T. and Barbara K. Samuels Presidential Endowed Chair • Distinguished Professor, Biochemistry • PhD, Massachusetts Institute of Technology*
BIOMEDICAL INFORMATICS

The Department of Biomedical Informatics (DBMI) is an international hub for students, faculty, researchers, and industry partners for discovery, innovation, and application of informatics to advance biomedical science focusing on research, education, and operational services.

DEPARTMENT STATISTICS

<table>
<thead>
<tr>
<th>90</th>
<th>Faculty (22 primary, 68 adjunct)</th>
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</thead>
<tbody>
<tr>
<td>6</td>
<td>Post-Doctoral Fellows</td>
</tr>
<tr>
<td>81</td>
<td>Students</td>
</tr>
<tr>
<td>$5.8M</td>
<td>Research Expenditures (FY20)</td>
</tr>
</tbody>
</table>

Education

DBMI offers a variety of opportunities for interdisciplinary training through its PhD program and its professional track Master’s program. As part of its educational mission, DBMI provides intensive coursework and research training in a collaborative culture to ensure its students gain the expertise and leadership skills to impact the field of biomedical informatics beyond Utah. It also provides numerous CME activities annually and contributes to the medical school’s curriculum and teaching as well as offering sponsored talks and seminars monthly through its partnership with industry leaders to foster multidisciplinary collaborations.

Research

DBMI’s research portfolio covers a broad range of domains and applications including clinical decision support (CDS), population health management, natural language processing, bioinformatics, and translational research informatics. Its strategy is to foster multidisciplinary team-science research programs that capitalize on synergy among all three missions of University of Utah Health.

Research initiatives include (1) ReImagine EHR, which is a part of four center grants, is leading the nation in the design, development, implementation, and evaluation of interoperable digital innovations that are integrated with the EHR to improve care, and (2) Translational Informatics, which reflects a large focus of DBMI over the last 10 years, provides informatics support via systems development, standards, vocabularies and metadata for interoperability, for clinical researchers to translate their findings in the practice of medicine. In addition, DBMI pursues research in areas including translational bioinformatics and precision medicine and prepares its students for careers in these growing fields.

Other

DBMI operates two service lines: Sociotechnical and Natural Language Processing (NLP). BMI faculty provides informatics leadership to the Utah Center for Clinical and Translational Research and manages its Informatics Core. Established in 1964 as the first biomedical informatics department in the U.S., DBMI has granted more than 450 PhD and MS degrees and has alumni in key positions in academia, clinical medicine, government, and private industry.

Department Chair

Yves Lussier, MD, FACMI

Professor, Biomedical Informatics • MD, University of Sherbrooke • Residency: Family Medicine, University of Sherbrooke • Fellowship: Biomedical Informatics, Columbia University
COMMUNICATION SCIENCES & DISORDERS

The Department of Communication Sciences and Disorders (CSD) is an exciting place to learn and work. Faculty members are nationally and internationally recognized scholars who are advancing clinical and theoretical knowledge through their research in speech, language, and hearing.

DEPARTMENT STATISTICS

<table>
<thead>
<tr>
<th>31</th>
<th>Faculty (9 tenure track, 22 clinical or adjunct)</th>
</tr>
</thead>
<tbody>
<tr>
<td>105</td>
<td>Graduate Students</td>
</tr>
<tr>
<td>42</td>
<td>Clinical Doctorate Students</td>
</tr>
<tr>
<td>$1.25M</td>
<td>Research Expenditures (FY20)</td>
</tr>
</tbody>
</table>

Education

The CSD mission is to prepare highly competent and caring professional audiologists and speech-language pathologists. The department provides undergraduate students a strong background in the basic processes underlying typically developing speech, language, and hearing. We provide our graduate students with world-class pedagogical and clinical experiences.

CSD offers a Bachelor of Science (BS) degree in Speech and Hearing Science, a Speech-Language Pathology Assistant (SLPA) certification program, a Master of Science (MS) degree in Speech-Language Pathology, a Professional Doctorate of Audiology (AuD) degree, and a Doctor of Philosophy (PhD) degree. The BS degree in Speech and Hearing Science is a preparatory degree for the MS degree and the AuD degree programs. The PhD program trains outstanding research scientists in the fields of communication disorders and speech and hearing sciences.

Research

Home to nine research laboratories, CSD is a preeminent research and teaching department with national and global reach. The department cultivates an academic environment in which the highest standards of scholarship and clinical service are practiced. All faculty, staff, and students promote a climate of respect and equity that cultivates and sustains transformative practices in the classroom, clinic, and community.

Clinical

The department runs an active on-campus speech and hearing clinic serving people of all ages that have speech, language, voice, swallowing, and hearing impairments. The department also offers numerous specialty clinics, including an intensive stuttering clinic, preschool language groups, a transgender voice clinic, a Parkinson's disease clinic, and a vestibular (balance) clinic.

Department Chair
Michael Blomgren, PhD, CCC-SLP
Professor, Communication Sciences & Disorders
PhD, University of Connecticut
DERMATOLOGY
The Department of Dermatology aspires to be the best in the country and is dedicated to discovery, education, and delivery of collaborative, compassionate care.

DEPARTMENT STATISTICS

<table>
<thead>
<tr>
<th>71</th>
<th>Faculty (50 primary, 21 adjunct)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Residents</td>
</tr>
<tr>
<td>10</td>
<td>Advanced Practice Clinicians</td>
</tr>
<tr>
<td>$3.5M</td>
<td>Research Expenditures (FY20)</td>
</tr>
</tbody>
</table>

Education
The department’s residency program has 12 dermatology residents and ranks among the top 20 programs in the nation (No. 14 on Doximity). The department supports fellowship programs in autoimmune and complex medical dermatology, psoriasis, melanoma and micrographic surgery.

Research
The department’s research portfolio includes clinical and translational research in melanoma, psoriasis, autoimmune blistering disease, and patient-reported outcomes. The department obtained $3.5 million in extramural funding in FY20.

Clinical
The department’s 50 faculty members provide care at 15 clinical locations and 5 hospitals. Clinically, the department is recognized as a national leader in psoriasis, bullous and other autoimmune skin diseases, and melanoma. The Midvalley facility operates several Areas of Excellence providing expertise in allergy, Mohs surgery, mole mapping, autoimmunity, psoriasis, and aesthetics, among others. Faculty also provide telemedicine consultations throughout the Mountain West region.

Other
In the last five years, a departmental faculty member has served as president of the American Board of Dermatology, while others have served on the Board of the American Contact Dermatitis Society and the National Psoriasis Foundation. In addition, numerous faculty members have served as president of both the Intermountain Dermatology Society and the Utah Dermatology Society. Dr. Gerald Krueger was honored with a Lifetime Achievement Award from the National Psoriasis Foundation in 2017. The Department of Dermatology has recruited experts in all areas of skin disease and care.

Department Chair
Kristina Callis Duffin, MD
Professor, Dermatology • MD, University of Washington • Residency: Internal Medicine, Maine Medical Center; Dermatology, University of Utah School of Medicine
FAMILY & PREVENTIVE MEDICINE

The Department of Family and Preventive Medicine optimizes quality of life through scholarship that advances health and well-being in homes, workplaces, and communities.

Departmental Divisions
- Family Medicine
- Physician Assistant Studies
- Public Health
- Occupational & Environmental Health

DEPARTMENT STATISTICS

| 679 | Faculty (84 career line, 595 adjunct) |
| 358 | Graduate Students                |
| 34  | Residents and Fellows             |
| 5   | Post-Doctoral Fellows             |
| 9   | Advanced Practice Clinicians      |

$8.45M Research Expenditures (FY20)

#2 Dept. Funding Rank (NIH)

Education

The department offers medical student education in family medicine and occupational medicine, PhD programs in public health and occupational & environmental health, and master’s programs in physician assistant studies, public health, biostatistics, and occupational and environmental health. The department operates extended rural and global campuses in St. George, Utah; Kpong, Ghana; and Incheon, South Korea. Nationally, the Physician Assistant Studies program ranks No. 4 and Medical-Primary Care ranks No. 20 (U.S. News & World Report, 2021 Rankings).

Research

The department’s core research strengths garner national recognition. Well-known work includes cancer research in conjunction with the Huntsman Cancer Institute, reproduction perinatal epidemiology, global health, primary care, community health, and the Rocky Mountain Center for Occupational and Environmental Health. The department is home to one of 15 OSHA-funded education and research centers. The department is currently ranked No. 2 nationally for total NIH funding ($8.45 million in FY20).

Clinical

The department’s clinical practices operate team-based models and have been nationally recognized for patient satisfaction, achievements in quality improvement, and leadership in occupational and environmental health. The department is committed to outreach and providing high-quality care to patients in medically underserved communities.

Other

The department is instrumental in engaging with communities within Utah and worldwide, providing expertise across missions and partnering with community members and organizations to improve quality of life. The department also houses the Professional Development Core of the National Research Mentoring Network, an NIH-funded nationwide consortium collaborating to provide trainees with evidence-based mentorship and professional development programming.

Department Chair
Kolawole S. Okuyemi, MD, MPH
George D. Gross, M.D. & Esther M. Gross, M.D. Presidential Endowed Chair in Family & Preventive Medicine • Professor, Family and Preventive Medicine • MD, University of Ilorin School of Medicine (Nigeria) • MPH, University of Kansas • Residency: Medicine, University of Ilorin Teaching Hospital (Nigeria); Family Medicine, University of Kansas
HEALTH & KINESIOLOGY

The Health & Kinesiology Department (H&K) is home to several undergraduate and graduate programs that provide intensive specialized training in biological, environmental, psychological, social, physical, and medical sciences. It also develops strategies large and small to assist individuals, communities, and societies in adopting and maintaining healthy lifestyles.

DEPARTMENT STATISTICS

<table>
<thead>
<tr>
<th>Faculty</th>
<th>33</th>
<th>Faculty (17 tenure track, 16 career line)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fitness Instructors</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Undergraduate Students</td>
<td>1,300</td>
<td></td>
</tr>
<tr>
<td>Graduate Students</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Post-Doctoral Fellows</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Research Expenditures (FY20)</td>
<td>$443K</td>
<td></td>
</tr>
</tbody>
</table>

Undergraduate Education

H&K faculty and staff aspire to be globally recognized for excellence in advancing and mentoring future leaders. Students have multiple opportunities to engage in community, educational, and research initiatives. They may also customize their experience to best suit their professional goals. Areas of undergraduate study include kinesiology; nuclear medicine; community health education; health and physical education teaching; and emergency medical services. Minors in health; occupational safety and health; and health teaching are also available.

Research and Graduate Studies

Scientific investigation is at the forefront of the department. The H&K graduate programs train students interested in conducting translational research that will enhance health, quality of life, and human performance. Students who pursue an MS or PhD degree in Health & Kinesiology conduct innovative research in three focus areas: Exercise and Disease; Physical Activity and Well-Being; and Cognitive and Motor Neuroscience. A practical application-focused non-thesis MS option in Health Education and Wellness Coaching is also available. Students in this program are prepared to work in clinical health settings promoting more health and less medicine through the development of healthy lifestyles.

Department Programs

The ESSF (Exercise Sport Science Fitness) Program provides a plethora of fitness courses as well as instructor certifications. The aim of the program is to encourage and support lifelong physical activity and healthy habits. Classes are open to students, faculty, staff, and members of the community.

The Center for Emergency Programs offers a variety of training courses in emergency medical services (EMS), wilderness rescue, and pre-hospital training including: First Aid, CPR, EMT, AEMT, Swift Water Rescue, Avalanche Rescue, and many others. Courses are offered every semester following the academic calendar as well as in short formats for community groups and businesses.

Department Chair (Interim)

Tim Brusseau, PhD
Associate Professor, Health & Kinesiology
PhD, Arizona State University
HUMAN GENETICS
The Department of Human Genetics is dedicated to studying the genetic control and development of disease.

DEPARTMENT STATISTICS

| 42 | Faculty (22 primary, 20 adjunct) |
| 33 | Post-Doctoral Fellows          |
| 21 | Graduate Students              |
| $14.5M | Research Expenditures (FY20)  |
| No. 23 | Dept. Funding Rank (NIH)     |

Education
The department hosts MS and PhD programs in human genetics. It confers five to 10 PhD degrees per year. The department’s Genetic Counseling Training Program admits seven students per year. In addition, department faculty participate extensively in medical student education.

The department supports predoctoral trainees through a T32 Training Program in Genetics (PIs Gillian Stanfield and David Grunwald) and postdoctoral trainees through a T32 Training Program in Genomic Medicine (PI Lynn Jorde).

Research
Faculty research interests are wide-ranging and include the identification of genes implicated in human disease using human data and the major model systems for genetic research: C. elegans, Drosophila, mice, and zebrafish. Research interests also include bioinformatics, genomics, statistical genetics, population genetics, clinical genetics, and evolution. Cutting-edge genetic research is a key focus of the department.

Other
Many Human Genetics faculty work closely with the Center for Genomic Medicine to discover the genetic causes of disease and translate these discoveries into accurate diagnoses, targeted treatments, prevention strategies, and cures. This work stems from the Utah Genome Project, a genome sequencing initiative within the department. The department is also home to the Utah Center for Genetic Discovery, which leads the development of technologies that enable researchers and clinicians to visualize and interpret genomic big data.

Faculty include one Nobel Laureate, one member of the National Academy of Sciences, three elected fellows of the American Association for the Advancement of Science, and eight endowed chairs. The widely acclaimed Genetic Science Learning Center is also housed within the department.

Department Chair
Lynn B. Jorde, PhD
Mark and Kathie Miller Presidential Endowed Chair
Professor, Human Genetics
PhD, University of New Mexico
INTERNAL MEDICINE

The University of Utah’s Department of Internal Medicine advances health through excellence in each of its core domains—education, patient care, and discovery—by inspiring engaged faculty, staff, and trainees, encouraging innovative thinking, and building collaborative partnerships.

Departmental Divisions

- Cardiovascular Medicine
- Endocrinology, Metabolism, and Diabetes
- Epidemiology
- Gastroenterology, Hepatology, and Nutrition
- General Internal Medicine
- Geriatrics
- Hematology and Hematologic Malignancies
- Infectious Diseases
- Nephrology and Hypertension
- Oncology
- Respiratory, Critical Care, and Occupational Pulmonary Medicine
- Rheumatology

Education

The Department of Internal Medicine plays a foundational role in academics at the University of Utah. The department has the largest degree of engagement in UME education, comprising 35 percent of teaching, 16 percent of faculty, 22 percent of residents, and 37 percent of fellows within the School of Medicine. The department trains more than 140 residents annually in its categorical, preliminary, and combined Internal Medicine-Pediatrics residency programs. In addition, our 19 fellowship programs train nearly 100 fellows annually.

The categorical residency program attracts high-quality residents from across the United States and is proud to emphasize diversity in its residency class. The program is well balanced to offer exceptional clinical training in both the inpatient and outpatient settings, allowing residents the option to choose areas of training that include traditional, global health and underserved, or academic hospitalist training tracks. The program strategically grows their curriculum with active initiatives in substance use, resilience training and burnout prevention and recognition, health care policy and advocacy, health care disparities, and health equity. Mentoring and opportunities for research are high priorities for the department. While in residency training, the 2019-2020 categorical IM graduates participated in scholarship projects resulting in 21 presentations at international, national, and regional meetings and more than 29 publications.

Research

Internal Medicine maintains a proud research tradition, including the first ever NIH grant, which was awarded to our founding chair, Maxwell M. Wintrobe, in the 1940s. Research continues to be our central focus, with a growing research faculty base and increased grant funding. Currently, sponsored research in the Department of Internal Medicine represents approximately one-third of the total extramural dollars awarded to the School of Medicine.

The department exemplifies the collaborative spirit found within the University of Utah. It maintains strong partnerships among divisions, across departments, and with the VA Hospital, as well as the Huntsman Cancer Institute. Members of the department engage with investigators in health

DEPARTMENT STATISTICS

<table>
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<th>Value</th>
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<td>Faculty (adjunct)</td>
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<tr>
<td>Residents</td>
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<tr>
<td>Clinical Fellows</td>
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<td>Advanced Practice Clinicians</td>
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<td>Research Expenditures (FY20)</td>
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</tbody>
</table>
sciences initiatives, including the Molecular Medicine Program, the Diabetes and Metabolism Center, the Triple-i Initiative, the Program in Personalized Health, and the Utah Genome Project. As part of the Utah Genome Project, department scientists are discovering the genetic causes of multiple diseases, including primary ovarian insufficiency, diabetic kidney disease, chronic obstructive pulmonary disease, and idiopathic pulmonary fibrosis. The department is also embarking on initiatives in cardiovascular medicine.

The department strives to create an environment for successful career development across the continuum—from students to established investigators. Early career faculty are typically supported by NIH K and other competitive research career development awards. Extensive focus is placed on the transition from career development to research independence. Emphasis on mentorship and sponsorship is key to our success.

Clinical

With 38,300+ new patients, 1 million wRVUs, 315+ MDs, and 170+ APCs across 11 clinical divisions, the department is one of the major drivers of the School of Medicine’s Clinical Mission. The department is a destination care treatment center for many diseases, including cystic fibrosis, hemophilia, interstitial lung disease, hypertrophic cardiomyopathy, pulmonary hypertension, amyloidosis, vasculitis, multi-organ transplant, and medical oncology. Skilled clinicians provide both routine and lifesaving care to patients living in Utah and across the five-state Mountain West region. In a recent national survey of 650 outpatient medical practices, 109 Internal Medicine providers scored in the top 10 percent in Exceptional Patient Experience; 86 providers scored in the top 1 percent.

Other

With 12 divisions, 690+ faculty, and more than 230 residents and fellows, Internal Medicine is U of U Health’s largest clinical department. For more than 75 years, the department has built a rich history of providing excellent care, quality research, and valuable education in Utah. We are committed to fostering professional conduct among all members of this community through creating an environment of compassion, excellence, and respect. These values embody the foundation that supports and pervades all that we do in the Department of Internal Medicine.

Department Chair
John Inadomi, MD
Jon M. Huntsman Presidential Chair • Professor, Internal Medicine • MD, University of California, San Francisco • Residency: Internal Medicine, University of California, San Francisco • Fellowship: Gastroenterology, University of California, San Francisco
MEDICINAL CHEMISTRY

The Department of Medicinal Chemistry is dedicated to creating new knowledge for the discovery and development of the next generation of pharmaceutical agents, training pharmacy students and graduate students, and serving the institution and the larger community.

DEPARTMENT STATISTICS

| Faculty (10 tenure track, 7 research, 3 adjunct) | 20 |
| PhD Students | 16 |
| Post-Doctoral Fellows | 11 |
| Research Expenditures (FY20) | $2.26M |

Education
Medicinal Chemistry offers a PhD degree and recruits students from the combined graduate programs in biological chemistry, molecular biology, and from the Department of Biomedical Engineering. It also has a central role in educating Doctor of Pharmacy (PharmD) students. Department faculty have received the University of Utah Outstanding Mentor Award for graduate education and College of Pharmacy Outstanding Teacher awards.

Research
A broad research portfolio includes strengths in marine natural products compound discovery, metagenomics of natural product biosynthetic pathways, inhibitors of protein phosphatases, nucleic acid-targeted therapeutics, computational modeling, and DNA-encoded drug libraries.

Areas of growth include bio-orthogonal drug design, epigenetic structure and regulation, microbiome symbiosis and regulation, and chemical biology. The department is one of four in the College of Pharmacy that, in aggregate, place it No. 9 for NIH funding among all pharmacy schools in the United States. Current faculty awards include AACP Paul Dawson Biotechnology, two University of Utah Presidential Scholars, and a Teva Pharmaceuticals Scholar.

Other
Other department strengths include success in commercialization, as reflected by the establishment of multiple, well-capitalized startup companies. The department has demonstrated success in diversity recruiting within the faculty and a history of supporting underrepresented minorities in the PhD student population.

Department Chair
Darrell Davis, PhD
Professor, Medicinal Chemistry
Adjunct Professor, Biochemistry
PhD, University of Utah
NEUROBIOLOGY

The Department of Neurobiology is vibrant and growing. It has significant research strength in neuroscience, with a focus on the molecular basis of synaptic communication, neural connectivity, and behavior. Understanding nervous system function at this level is critical for addressing significant human health problems due to brain disease and dysfunction. The department is an integral part of the campus-wide neuroscience community. The newly created Division of Anatomical Sciences supports department activities related to health professional education.

DEPARTMENT STATISTICS

<table>
<thead>
<tr>
<th>42</th>
<th>Faculty (23 primary, 19 adjunct)</th>
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<tbody>
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<td>Post-Doctoral Fellows</td>
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<tr>
<td>$10.2M</td>
<td>Research Expenditures (FY20)</td>
</tr>
<tr>
<td>#25</td>
<td>Dept. Fund Ranking (NIH)</td>
</tr>
</tbody>
</table>

Education

The department is strongly committed to graduate and postdoctoral training, emphasizing both research excellence and professional development. Department faculty serve as the backbone for the Interdepartmental Graduate Program in Neuroscience. The department also contributes substantially to both the medical and dental school education, as well as to the physician assistant program. Faculty educators and the Body Donor Program comprise the newly created Division of Anatomical Sciences. Faculty are active in curriculum development, education scholarship, and innovation, and are recipients of numerous teaching awards.

Research

With 17 distinct labs, the department is active in numerous research areas. Faculty specialize in the molecular and genetic basis of synaptic communication, neural connectivity, circuits, and behavior in health and disease. The department is an integral part of a campus-wide neuroscience community and provides a basic science foundation for addressing disease-relevant problems through collaboration, embedding, and partnerships. Department faculty have been recognized with multiple research awards and also have significant roles in three T32 training grant programs.

Other

Department faculty member Moriel Zelikowsky was awarded a prestigious Klingenstein-Simons Fellowship Award in the Neurosciences in 2020. This award is presented to highly promising, early-career scientists and is aimed at advancing cutting-edge investigations in neuroscience. Zelikowsky is the first recipient of this award from the University of Utah School of Medicine.

Department Chair
Monica Vetter, PhD
George and Lorna Winder Presidential Endowed Chair in Neurosciences • Professor, Neurobiology and Anatomy • Adjunct Professor, Ophthalmology/Visual Sciences • PhD, University of California, San Francisco
NEUROLOGY

The Department of Neurology delivers excellence in patient care, teaching, and research. Clinical faculty strive to treat patients with compassion, understand the basis of neurological disease, teach this knowledge to others, and apply it to improve medical diagnoses. The department is committed to diversity, equity, and inclusion in all its missions.

Departmental Divisions

- Cognitive Neurology
- Epilepsy
- General Neurology
- Headache & Neuro-Ophthalmology
- Neurocritical Care
- Neuroimmunology
- Neuromuscular Medicine
- Neuropsychology in Neurology
- Pediatric Neurology
- Sleep & Movement Disorders
- Translational Neuroscience
- Vascular Neurology

DEPARTMENT STATISTICS

121 Faculty (63 career line, 58 adjunct)
24 Residents
5 Post-Doctoral Fellows
11 Advanced Practice Clinicians
$13M Research Expenditures (FY20)

Education

The neurology department trains the next generation of academic neurologists in 10 accredited fellowship programs: autoimmune neurology, clinical neurophysiology, epilepsy, headache, movement disorder, neurocritical care, neuroimmunology, neuromuscular, stroke/neurovascular, and neuro-ophtalmology. The department hosts the Western Intermountain Neurology Organization with its semiannual national CME programs, as well as the annual Utah Stroke Symposium.

Research

Department research covers all aspects of basic and translational neuroscience. It is a national leader in clinical trials with NIH-funded centers in NeuroNext and StrokeNet. The department has a research budget that exceeds 12M and ranks No. 41 nationally for total NIH funding. The broad research portfolio includes federally funded projects by NIH and foundation grants. The department leads development of novel treatments using antisense oligonucleotides ranging from preclinical testing to clinical trials for diseases such as Huntington's disease, cerebellar ataxia, and ALS.

Clinical

The department is a recognized leader in subspecialty neurological care. University faculty in multiple subspecialty disciplines staff the Neurology service at the Salt Lake City Veterans Administration Medical Center. It runs the only supraregional center of excellence for patients with Parkinson's disease, Ataxia, ALS, muscular dystrophy, Tourette syndrome, and Huntington's disease. It is home to one of the nation's largest telestroke networks, offering 24/7 medical and surgical support to patients throughout the Mountain West region. The department leads integrated programs with the Department of Neurosurgery for neurocritical care, movement disorders, epilepsy, and one of the nation's largest centers for deep brain stimulation.

Department Chair
Stefan Pulst, MD
Professor, Neurology • Adjunct Professor, Human Genetics • MD, Medizinische Hochschule Hanover (Germany) • Residency: Neurology, Medizinische Hochschule Hanover and Harvard Medical School
NEUROSURGERY

Through world-class, patient-focused care, clinical and laboratory research, and specialized academic training programs, the Department of Neurosurgery provides complete neurosurgical expertise to patients with cranial and spinal injuries, diseases, and disorders.

Departmental Divisions
- Functional/Epilepsy
- Neuro-Oncology
- Pediatric Neurosurgery
- Spine
- Vascular

DEPARTMENT STATISTICS

<table>
<thead>
<tr>
<th>Faculty (28 primary, 22 adjunct)</th>
<th>Residents</th>
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<tr>
<th>Post-Doctoral Fellows</th>
<th>Advanced Practice Clinicians</th>
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<td>4</td>
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<tr>
<th>Research Expenditures (FY20)</th>
<th>Dept. Funding Rank (NIH)</th>
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<tr>
<td>$3.35M</td>
<td>#22</td>
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</table>

Education

The neurosurgery department runs a nationally competitive residency program and several research laboratories, which train graduate students, fellows, and residents. Fellowships are offered in pediatric, skull base, vascular, neuro-oncology, endovascular, and spinal neurosurgery.

Research

The research portfolio includes work in neuro-oncology, vascular disease, spine biomechanics, and clinical trials. Research faculty are located throughout the medical campus. Some current projects include hypoxia-induced tumor progression, genetic abnormalities causing pediatric brain tumors, rapid-stretch nerve injury, and brain tumor angiogenesis and biology. The department is also engaged in extensive clinical outcome research.

Clinical

Clinically, the neurosurgery department is a national leader in neurosurgical oncology, skull base surgery, and spine and pediatric neurosurgery. Department physicians offer an array of services including cerebrovascular, spinal, functional, traumatic, tumor, and pediatric neurosurgery at four hospitals and their affiliated clinics in the Salt Lake area.

Other

Several division leaders have been subspecialty leaders in their respective areas. Department faculty are responsible for editing several journals, and multiple faculty members have been appointed to specialty editorial boards.

Department Chair

William T. Couldwell, MD, PhD

Joseph J. Yager Presidential Endowed Chair in the Department of Neurosurgery • Professor, Neurosurgery • Adjunct Professor, Surgery • MD, McGill University (Canada) • PhD, McGill University • Residency: Neurosurgery, University of Southern California
NUTRITION AND INTEGRATIVE PHYSIOLOGY

The Department of Nutrition and Integrative Physiology is dedicated to understanding how maintaining metabolic health combats the development and progression of chronic disease. It engages other programs within U of U Health to translate new research findings into clinical procedures and community outreach programs that improve quality of life.

Departmental and Affiliated Research Units

- University of Utah Center for Community Nutrition
- Utah Center for Pacific Islander Health
- Diabetes and Metabolism Research Center
- Utah Vascular Research Lab
- Huntsman Cancer Institute

Academic Programs

- PhD in Nutrition and Integrative Physiology
- Coordinated Master’s Degree in Nutrition (RDN)
- MS in Nutrition and Integrative Physiology (Non-RDN)
- Undergraduate Minor in Nutrition

Research

Department scientists use a variety of research techniques and model systems to understand how nutrient metabolism influences health and disease, bridging virtually all of the sciences dealing with human biology. Research programs benefit from outstanding core facilities and a robust Center for Clinical and Translational Science.

Clinical and Community Engagement

The department’s University of Utah Center for Community Nutrition (UUCN) educates about diabetes and healthy lifestyle choices. Some UUCN programs are affiliated with the Driving Out Diabetes Initiative. Programs include evidence-based workshops, food demonstrations, and group discussions for school-aged youth, underserved lower-income families, and people experiencing homelessness. It also works to establish community partnerships to increase access to healthy foods for underserved communities. Since launching in 2017, the UUCN has reached 72,000 individuals across Utah, Idaho, and Arizona. UUCN also offers training opportunities for students throughout the College of Health.

Education

Nutrition and Integrative Physiology trains leaders in dietetics and nutrition and metabolism research. Programs impart knowledge in a culture that produces exceptional graduates. Students come from a broad variety of backgrounds and experiences and display academic excellence, community service, and leadership potential. The department’s diverse class of students experience a dynamic learning environment that prepares them to serve all community sectors.

Department Chair
Scott Summers, PhD
Professor, Nutrition and Integrative Physiology
Co-Director, Diabetes and Metabolism Research Center
PhD, Southern Illinois University
OBSTETRICS & GYNECOLOGY

The Department of Obstetrics & Gynecology (OB/GYN) is known internationally for excellence in clinical care, medical education, and research. Department faculty are devoted to improving the health of women and their families.

Departmental Divisions
- General Obstetrics & Gynecology
- Gynecological Medicine
- Maternal-Fetal Medicine
- Reproductive Endocrinology & Fertility
- Urogynecology
- Family Planning

DEPARTMENT STATISTICS

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Residents</th>
<th>Post-Doctoral Fellows</th>
<th>Advanced Practice Clinicians</th>
<th>Students</th>
<th>Research Expenditures (FY20)</th>
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<tr>
<td>179</td>
<td>24</td>
<td>11</td>
<td>14</td>
<td>3</td>
<td>$8.3M</td>
</tr>
</tbody>
</table>

Education

The department has a residency program, three accredited fellowships, and a six-week clerkship for all medical students. The department hosts weekly CME Grand Rounds and an annual postgraduate course. It also offers a graduate certificate in women’s health through the Center of Excellence in Women’s Health and holds four memorial lectureships annually.

Research

OB/GYN aims to be the best research program in obstetrics and gynecology anywhere. Clinical and translational research is integral to achieving this purpose. The Department’s portfolio includes an NIH Program Project, an institutional K12 award (WHRHR), multiple career development awards, two NIH R01s, a K24 and K01, multiple NIH contracts (DIPHR, CCTN), foundation grants, and industry studies, and continues to participate in the NICHD Maternal-Fetal Medicine Units Network (since 1996). In 2020, the department had 163 publications across all Divisions, including several in high-impact journals. This is an increase of 48 publications compared to 2019.

Clinical

OB/GYN provides nearly 108,000 patient encounters annually and performs an average of 4,400 deliveries per year. It strives to maintain common interdisciplinary goals for quality while serving the broad needs of women in the six-state Mountain West region. Providers give exceptional care to both patients with high-risk needs and those who desire low-intervention births. Collaborating with certified nurse midwives and family medicine physicians helps fulfill patient needs.

Department Chair
Robert M. Silver, MD
Chief of the Division of Maternal-Fetal Medicine and Co-Director of Labor and Delivery • Professor, Obstetrics and Gynecology • MD, Medical College of Pennsylvania • Residency: OB/GYN, University of Colorado at Denver and Health Sciences Center • Fellowship: University of Utah School of Medicine
The Department of Occupational and Recreational Therapies (OTRT) operates from the belief that healthy, meaningful activities enhance health and quality of life. University of Utah offers the only training programs for occupational and recreational therapies in the state.

**DEPARTMENT STATISTICS**

<table>
<thead>
<tr>
<th>Count</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>6</td>
<td>Occupational Therapy Clinicians</td>
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<tr>
<td>124</td>
<td>Undergraduate Students</td>
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<tr>
<td>112</td>
<td>Occupational Therapy and Recreational Therapy Master’s Students</td>
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<tr>
<td>33</td>
<td>Occupational Therapy Doctoral Students</td>
</tr>
<tr>
<td>8</td>
<td>PhD Students (Rehabilitation Science)</td>
</tr>
<tr>
<td>$95K</td>
<td>Research Expenditures (FY20)</td>
</tr>
</tbody>
</table>

**Education**

The department is internationally known for its unique clinical fieldwork program in which students from several universities provide therapy services to individuals with refugee and immigrant status.

The Bachelor’s in Recreational Therapy and Master’s of Occupational Therapy programs prepare students to work in a variety of practice settings and serve people across the lifespan.

The Master of Science in Recreational Therapy program provides advanced education and clinical training in thesis and non-thesis options. Potential students who are not yet recreational therapists may complete additional coursework to use this program as entry to the profession.

The online post-professional Occupational Therapy Doctorate program provides advanced education to practicing OTs.

In the Rehabilitation Science Doctoral program, students earn a PhD through advanced education in rehabilitation-related and health research. This program trains students as educators and researchers for future positions as faculty and industry researchers.

**Research**

OTRT emphasizes the promotion of health and participation in valued life activities using an interdisciplinary and collaborative approach. Scientific investigation topics include technological and behavioral interventions for improving health and quality of life for individuals with neurologic conditions, autism, sensory processing disorders, substance abuse disorders, and for older adults, as well as for care partners of these individuals.

**Clinical**

OTRT’s Life Skills Clinic assists clients in participating successfully in daily activities. Clinic therapists also provide occupational therapy services to several local charter and private schools. They are one of only two providers of Comprehensive Behavioral Intervention for Tics (CBIT) and one of three official providers for the state of Utah HB400 Pediatric Neuro-Rehab Fund.

**Department Chair**

Lorie Gage Richards, PhD

*Associate Professor, Occupational & Recreational Therapies*

*PhD, Syracuse University*
ONCOLOGICAL SCIENCES

The Department of Oncological Sciences seeks to understand cancer at its most fundamental levels and to provide rigorous cancer education and laboratory training opportunities to graduate students, medical students, post-doctoral fellows, and clinical fellows. This science will help improve cancer prevention, diagnostics, and therapeutics.

DEPARTMENT STATISTICS

| 42 | Faculty (16 primary, 26 adjunct) |
| 21 | Post-Doctoral Fellows |
| 60 | Students |
| $12.8M | Research Expenditures (FY20) |

Education

The oncological sciences department plays a leading role in cancer education for both graduate students and postdoctoral fellows. The vast majority of clinical faculty with laboratories in Huntsman Cancer Institute (HCI) have adjunct appointments in the department. Each year, the department oversees approximately 50–60 graduate students, including four from the MD-PhD program. Department faculty teach heavily in the molecular biology program and biological chemistry program curricula. They also support the medical school’s curriculum and offer a focused cancer curriculum. The department and partner faculty recently unveiled a new Cancer Training 360 program to provide transdisciplinary cancer training to graduate students, medical students, and post-doctoral fellows.

Research

Oncological Sciences is a mechanism-focused basic science department with a collaborative transdisciplinary approach to understanding cancer mechanisms. Particular strengths include cancer mechanisms, mouse and zebrafish modeling of cancer, chromatin-cancer connections, stem cell biology, and cancer genetics/genomics. Being housed within HCI gives faculty a unique and enabling environment to encourage translation of basic findings, with many notable examples of success. All department members participate in at least one cancer disease-oriented team, and many have collaborative grants with clinical faculty in HCI. Recent last/corresponding author papers from our faculty include reports in Science, Nature, Cancer Cell, Developmental Cell, eLife, Cancer Cell, Cancer Research, Molecular Cell, and Cell Stem Cell.

Other

Many Oncological Sciences faculty hold leadership roles at HCI and facilitate opportunities for SOM to conduct basic and translational cancer research and training. With HCI, the department also administers the Huntsman Alliance for Postdocs, which provides fellowship and career development opportunities.

Department Chair
Bradley R. Cairns, PhD
Jon and Karen Huntsman Presidential Professor • Chief Academic Officer, Huntsman Cancer Institute • Professor, Oncological Sciences • Adjunct Professor, Biochemistry • PhD, Stanford University
OPHTHALMOLOGY & VISUAL SCIENCES

The Department of Ophthalmology & Visual Sciences operates the John A. Moran Eye Center, the largest ophthalmic clinical care and research facility in the Mountain West and offers a wide range of clinical subspecialties. The department houses 15 innovative research labs and a highly competitive, Top 10 education program as measured by Doximity. Ophthalmology Times in 2020 ranked Moran No. 11 in the nation for Best Overall Program, and U.S. News and World Report ranked Moran No. 13 nationwide on its 2020-2021 Best Hospitals for Ophthalmology report. The Ophthalmologist in 2020 named Chair Randall J Olson, MD, to its Power List of the field’s 100 most influential leaders.

Education

Moran’s residency program has been recognized as a national model, and applications totaled 504 for four spots in 2020. The program offers extensive surgical experience.

Research

The Sharon Eccles Steele Center for Translational Medicine is fast-tracking a new therapy for age-related macular degeneration, while top glaucoma researchers are turning their discoveries into new treatments. Physicians and companies worldwide use the Intermountain Ocular Research Center at Moran to vet artificial lens design and complications, and Moran consistently conducts groundbreaking research that improves cataract surgical techniques. The department has more than 90 active clinical trials and investigations.

Clinical

Moran is the most comprehensive ophthalmology center in the Mountain West, offering nearly all sub-specialties including neuro-ophthalmology, uveitis, and pediatrics. In a typical year, physicians perform more than 7,000 surgeries and more than 150,000 clinic visits. Specialists use the latest imaging techniques and cutting-edge equipment to inform their care. The Patient Support Program at Moran is one of a handful nationwide, offering support groups and rehabilitation services for patients and families adjusting to vision loss.

Other

Funded by donors, Moran’s Global Outreach Division is working to create sustainable eye care around the globe and is the largest of its kind at any U.S. academic institution. In Utah, the division provides free eye care and surgeries to thousands of uninsured, low-income, and former refugee residents, in addition to providing care for the Navajo Nation.

DEPARTMENT STATISTICS

163 Faculty (66 primary, 97 adjunct)
12 Residents; 4 Interns
13 Post-Doctoral Fellows
9.45M Research Expenditures (FY20)
#14 Dept. Funding Rank (NIH)

Education

Funded by donors, Moran’s Global Outreach Division is working to create sustainable eye care around the globe and is the largest of its kind at any U.S. academic institution. In Utah, the division provides free eye care and surgeries to thousands of uninsured, low-income, and former refugee residents, in addition to providing care for the Navajo Nation.

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Department Chair
Randall J Olson, MD
CEO, Moran Eye Center • Professor, Ophthalmology and Visual Sciences • MD, University of Utah School of Medicine • Residency: Ophthalmology, University of California, Los Angeles • Fellowships: University of Florida, International Eye Foundation, Louisiana State University
ORTHOPAEDICS
The Department of Orthopaedics strives to relieve pain, improve function, and restore quality of life to people with musculoskeletal injury or disease. Department physicians provide exceptional clinical and surgical care. The department’s patient-centered care enterprise integrates with continuous orthopaedic education and efforts to advance treatment through research.

Departmental Divisions
- Pediatrics
- Adult Reconstruction (Hip/Knee)
- Sports/Shoulder
- Sarcoma (musculoskeletal tumors)
- Foot and Ankle
- Trauma
- Hand and Upper Extremity
- Spine

Education
The orthopaedics department is dedicated to excellence in educating the next generation of musculoskeletal care providers and educators. In 2020, they trained 28 residents and 13 fellows. Additionally, department faculty serve on 36 PhD student committees and are primary advisors to nine PhD students and three PhD postdoctoral students across campus.

Research
Orthopaedics continually advances its field through scientific investigation. The department is currently ranked No. 10 nationally in total NIH funding ($3.3 million, FY20). The department published 250 peer-reviewed papers in FY20. External research awards included funding from the NIH, U.S. Department of Defense, Veterans Administration, the Agency for Health Care Research and Quality, and others.

Clinical
Providers in the department utilize leading-edge clinical and surgical care techniques. They are the official orthopaedic medical providers for University of Utah Athletics, the NBA’s Utah Jazz, United States Olympic Committee, and MLS’s Real Salt Lake.

DEPARTMENT STATISTICS

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<td>Post-Doctoral Fellows</td>
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<td>20</td>
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<td>$5.9M</td>
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<tr>
<td>#10</td>
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</table>

Department Chair
Charles L. Saltzman, MD
LS Peery Presidential Endowed Professor, Orthopaedics • MD, University of North Carolina • Residency: Orthopaedic Surgery, University of Michigan • Fellowship: Orthopaedic Surgery, Mayo Clinic
PARKS, RECREATION, & TOURISM

The Department of Parks, Recreation, & Tourism (PRT) is committed to the education of Utah’s student body and the citizenry at large regarding leisure’s role in enhancing the quality of life. Our primary contributions are improving human health and wellness through collaborative learning and teaching emanating from our graduate degree programs, placing of highly educated park, recreation, and tourism professionals into the workforce, and instilling in the University of Utah’s general student body and the public at large an understanding of, and appreciation for, the role of leisure and healthy ecosystems in enhancing quality of life.

DEPARTMENT STATISTICS

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<tbody>
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<tr>
<td>Professional Outdoor and Hospitality Instructors</td>
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<tr>
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<td>197</td>
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<td>Research Expenditures (FY20)</td>
<td>$452K</td>
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</table>

Undergraduate Education

PRT faculty and staff aspire to be globally recognized for excellence in advancing and mentoring future leaders. Students have multiple opportunities to engage in community, educational, and research initiatives. They may also customize their experience to best suit their professional goals. Areas of undergraduate study include community recreation and sport management; sustainable tourism and hospitality management; and outdoor recreation studies. A minor in parks, recreation, and tourism is also available.

Research and Graduate Studies

Scientific investigation is at the forefront of the department and falls under two innovative research pillars: Health and Human Development and Natural Resources and Nature Tourism Management. Masters and doctoral degrees are available within each of these pillars. Students engage in scientifically rigorous studies that advance understanding of the role of leisure in quality of life across the lifespan, and sustainability in natural resources management and tourism.

Department Chair (Interim)
Kelly Bricker, PhD
Professor, Parks, Recreation, & Tourism
PhD, Pennsylvania State University
The Department of Pathology is dedicated to understanding the basis of disease, teaching this knowledge to others, and applying it to improve medical diagnoses and treatment of patients locally and nationally.

**Departmental Divisions**
- Anatomic Pathology & Molecular Oncology
- Clinical Pathology
- Medical Laboratory Sciences
- Microbiology & Immunology
- Pediatric Pathology

**DEPARTMENT STATISTICS**

| Faculty (129 primary, 73 adjunct) | 202 |
| Residents | 19 |
| Post-Doctoral Fellows (30 clinical, 24 research) | 54 |
| Students (46 PhD, 22 MS, 62 BS) | 130 |
| Advanced Practice Clinicians | 5 |
| Research Expenditures (FY20) | $15.6M |
| Dept. Funding Rank (NIH) | #13 |

**Education**
The Pathology Department hosts a PhD program in microbiology and immunology and MS and BS degree programs in clinical laboratory science. In addition to its pathology residency program, it hosts 15 clinical subspecialty fellowships and annual CME trainings, contributing substantially to both the medical and dental school curricula.

**Research**
The department’s broad research portfolio includes extensive clinical and translational scholarship in diagnostic medicine and basic and translational work in cancer pathogenesis. The Division of Microbiology and Immunology within the department serves as an anchor for the institutional initiative in Immunology, Inflammation, and Infectious diseases.

**Clinical**
Clinically, the department is a national leader in pathology and laboratory medicine. Many of the department’s faculty serve as leaders in various national organizations and are recognized as experts in their clinical subspecialties, providing consultation and sharing expertise locally and with hundreds of ARUP clients.

**Other**
The pathology department operates ARUP Laboratories, a national reference laboratory that provides services to hospitals in all 50 states, including a large number of academic medical centers. Pathology faculty and ARUP also support the department’s anatomic and clinical pathology services for University of Utah Health and Primary Children’s Hospital, including more than 75,000 surgical pathology and cytology cases at Huntsman Cancer Institute. The department has generated numerous startup companies.

**Department Chair**
Peter E. Jensen, MD
ARUP Presidential Endowed Chair • Chairman of the Board of Directors, ARUP Laboratories • Professor, Pathology • MD, Vanderbilt University • Residency: Pathology, Barnes-Jewish Hospital
The Department of Pediatrics is dedicated to improving the lives of children through excellence in advocacy, education, research, and clinical care. In addition to being the second largest department in the School of Medicine, with one of the highest number of tenured female faculty, it is one of the largest pediatrics departments in the United States. The department actively supports comprehensive specialty and subspecialty clinical care, and contributes to U of U Health’s research and education missions.

### Departmental Divisions
- Adolescent Medicine
- Allergy & Immunology
- Cardiology
- Child Protection & Family Health
- Clinical Pharmacology
- Comprehensive Care
- Critical Care
- Diabetes & Endocrinology
- Emergency Medicine
- Gastroenterology, Hepatology, & Nutrition
- General Pediatrics
- Hematology & Oncology
- Hospital Medicine
- Infectious Diseases
- Medical Ethics
- Medical Genetics
- Neonatology
- Nephrology & Hypertension
- Neurology
- Palliative Care
- Physical Medicine & Rehabilitation
- Psychiatry & Behavioral Health
- Pulmonary & Sleep Medicine
- Rheumatology

### DEPARTMENT STATISTICS

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty (324 primary, 261 adjunct)</td>
<td>585</td>
</tr>
<tr>
<td>Residents</td>
<td>92</td>
</tr>
<tr>
<td>Subspecialty Fellows</td>
<td>65</td>
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<tr>
<td>Post-Doctoral Fellows</td>
<td>2</td>
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<tr>
<td>Advanced Practice Clinicians</td>
<td>31</td>
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<tr>
<td>Research Expenditures (FY20)</td>
<td>$44.7M</td>
</tr>
<tr>
<td>Dept. Funding Rank (NIH)</td>
<td>#16</td>
</tr>
</tbody>
</table>

### Education

The department educates residents each year in pediatrics and child neurology, medicine-pediatrics, and triple board (pediatrics, child psychiatry, and general psychiatry). We also engage with the medical school to introduce medical students to issues in pediatric care. The Department of Pediatrics is one of only four sites nationally to participate in the AAMC-sponsored Education in Pediatrics Across the Continuum. This unique program matches medical students at the end of their second year with residencies and allows students to advance through medical school and residency contingent on competency-based performance instead of time-based education.

Finally, fellowship programs are available in 12 pediatric subspecialties, and we have established formal partnerships with Indian Health Services in Chinle, Arizona; the University Teaching Hospital in Rwanda; and Kamuzu Central Hospital in Malawi, Africa to create a Global, Rural, and Child Health fellowship. Our fellowship programs are nationally recognized for preparing outstanding pediatric clinician scientists.
Research

The strength of the department's research activities, which include discovery science, clinical-translational research, and health services investigation, is reflected by over $40 million in annual funding and a current total funded portfolio in excess of $120 million. Outstanding multi-institutional research programs include the NICHD-funded Neonatal Research Network, MCHB-funded Pediatric Emergency Care Applied Research Network (PECARN) and National EMSC Data Analysis Resource Center (NEDARC), and the NHTSA-funded National EMS Information System (NEMSIS).

The department is one of only two in the country participating in all three research components of the NHLBI-funded Bench-to-Bassinet (B2B) program and one of only four in the country participating in the American Heart Association Strategically Focused Children’s Research Network. We are also one of the three NCATS Trial Innovation Centers in the US, providing clinical research support to CTSA institutions across the country.

Clinical

The department serves more than two million children across the Mountain West through its partnership with Intermountain Primary Children’s Hospital (PCH), a 289-bed, non-profit children's hospital on the U of U Health campus. The hospital serves as the primary specialty teaching site for the department’s training programs. Department and PCH joint programs are consistently ranked among the nation’s top 50, with 8 outstanding clinical programs cited by U.S. News & World Report. The department’s South Main Clinic, University Developmental Assessment Center, and University Pediatric Clinic serve children with special health care needs and underserved children throughout the community.

Department Chair
Angelo P. Giardino, MD, PhD

Wilma T. Gibson Presidential Professor, Pediatrics • Chief Medical Officer, Intermountain Primary Children’s Hospital • MD, University of Pennsylvania School of Medicine • PhD, University of Pennsylvania • Residency: Pediatrics, The Children's Hospital of Philadelphia • Fellowship: Pediatrics, The Children's Hospital of Philadelphia
Focusing on biomedical research in biotherapeutics and the evolving field of drug delivery, the Department of Pharmaceutics and Pharmaceutical Chemistry (P&PC) prepares graduate students to work in a variety of settings. Graduates go on to academic, research, administrative, business management, legal, regulatory, and investment careers related to drug delivery and pharmaceutical chemistry.

**DEPARTMENT STATISTICS**

<table>
<thead>
<tr>
<th>55</th>
<th>Faculty (9 tenure track, 5 research track, 41 adjunct)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Students</td>
</tr>
<tr>
<td>8</td>
<td>Post-Doctoral Fellows</td>
</tr>
<tr>
<td>$1.6M</td>
<td>Research Expenditures (FY20)</td>
</tr>
</tbody>
</table>

**Education**

P&PC curriculum provides a strong background in modern-day, basic biomedical sciences and trains students in fundamental concepts of pharmaceutics and drug delivery. Department faculty have won three University of Utah Distinguished Postdoc and Graduate Student Mentor Awards, three Distinguished Teaching Awards in the College of Pharmacy, and seven College of Pharmacy Class Teaching Awards.

**Research**

Major research programs include drug targeting, biopolymers and nanoparticles for drug delivery, cancer immunotherapy, antibody–drug conjugates, gene therapy and gene delivery, peptide and protein delivery and therapies, biosensors, nanotoxicology, vaccines, cell-based therapies, and cell sheets for tissue regeneration. The department has been nationally ranked in the top 10 of pharmaceutics departments for two decades (Academic Analytics). The department has gained international research prominence in drug delivery, gene delivery, and polymeric materials. It is home to three University of Utah Distinguished Professors, faculty with two memberships in U.S. national academies, and editorship of major drug delivery journals.

**Other**

Other departmental strengths include interdisciplinary collaborations with more than 100 other scientists—locally, nationally, and internationally—success in research patents and commercialization, and formation of multiple viable companies. Academic Analytics ranks the department as No. 3 out of 65 departments in research impact at the University of Utah.

**Department Chair**

Hamid Ghandehari, PhD

*George S. and Dolores Doré Eccles Presidential Endowed Chair*

*Professor, Pharmaceutics and Pharmaceutical Chemistry and Biochemical Engineering*

*Director, Utah Center for Nanomedicine*

*PhD, University of Utah*
PHARMACOLOGY AND TOXICOLOGY

The Department of Pharmacology and Toxicology focuses on biomedical research in pharmacology and toxicology and prepares graduate students to work in a variety of settings. Graduates go on to academic, research, administrative, business management, legal, regulatory, and investment careers related to drug discovery and the basic mechanisms underlying disease.

DEPARTMENT STATISTICS

<table>
<thead>
<tr>
<th>30</th>
<th>Faculty (10 tenure track, 6 research track, 14 adjunct)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Students</td>
</tr>
<tr>
<td>15</td>
<td>Post-Doctoral Fellows</td>
</tr>
<tr>
<td>$9.3M</td>
<td>Research Expenditures (FY20)</td>
</tr>
</tbody>
</table>

Education

Department educational curriculum provides a strong background in modern-day, basic biomedical sciences and trains students in fundamental concepts of pharmacology and toxicology. Department faculty members have won University of Utah Distinguished Postdoc and Graduate Student Mentor Awards, University of Utah Distinguished Teaching Awards, and several College of Pharmacy Class Teaching Awards.

Research

Major research programs include drug discovery and chemical biology, epilepsy, cancer, addiction, mental health and aggression, and environmental toxicology as it relates to lung health. In addition, the department has considerable strength in analytical chemistry method development, and its funded research portfolio is the largest in the College of Pharmacy.

Other

Other departmental strengths include interdisciplinary collaborations locally, nationally, and internationally; publications in high-impact journals; service to the National Institutes of Health on study sections; and many of our faculty have received major research awards. Our trainees have gone on to successful careers in academia, government, and the pharmaceutical industry.

Department Chair
Karen Wilcox, PhD
Richard L. Stimson Presidential Endowed Professor, Pharmacology and Toxicology
PhD, University of Pennsylvania
PHARMACOTHERAPY

The Department of Pharmacotherapy has a rich and dynamic history, training high-quality pharmacists and researchers who work in a broad range of settings, including hospital pharmacy, retail pharmacy, academia, and industry.

DEPARTMENT STATISTICS

25 Faculty (14 clinical, 4 research, 7 tenure track)
6 PhD Students
9 Post-Doctoral Fellows
$4M Research Expenditures (FY20)

Education

The pharmacotherapy department offers a PhD in Pharmacotherapy Outcomes Research and a master’s of science in Health System Pharmacy Administration. It also supports the College of Pharmacy’s PharmD degree program. Department faculty have won three University of Utah Outstanding Mentor/Educator Awards for graduate education.

Research

Pharmacotherapy faculty are engaged in a broad range of research. Tenure track and research faculty explore critical issues such as medication adherence, drivers of value and harm in medication use, pharmacogenomics, and many others. The Medicaid Drug Regimen Review Center (DRRC) improves the safety and efficacy of drug use in Medicaid patients, reducing prescription quantity and drug costs. DRRC also supports and educates providers who prescribe to utilizers of the Medicaid drug program. The Pharmacotherapy Outcomes Research Center (PORC) uses expertise in health economics, modeling, various clinical subspecialties, drug information, technology, and psychometrics to answer important questions pertaining to quality of life, cost-effectiveness, and other drug therapy outcomes. The Data-driven Collaborative of Informatics, Pharmacoepidemiology, and Health Economics Researchers (DeCIPHER) conducts state-of-the-art pharmacoepidemiology and pharmacoconomics research in osteoporosis, HIV, hepatitis C, and other chronic conditions.

Other

Clinical faculty innovate their clinical practice site “laboratories” as members of interprofessional teams, discovering new ways to ensure optimal patient care. All department members are passionate about engaging students in understanding how to advance health care by improving drug therapy outcomes for everyone.

Department Chair
Daniel M. Witt, PharmD, FCCP, BCPS
Professor, Pharmacotherapy
Assistant Dean for Clinical Affairs
PharmD, University of Washington

College of Pharmacy
PHYSICAL MEDICINE & REHABILITATION
The Division of Physical Medicine and Rehabilitation (PM&R) combines the strengths of academic physiatry with the collaborative, integrated resources of the University of Utah to preserve, enhance, and restore quality of life for people with disabling conditions.

DEPARTMENT STATISTICS

| 59         | Faculty (40 primary, 19 adjunct) |
| 23         | Residents                         |
| 10         | Advanced Practice Clinicians      |
| $1.63M     | Research Expenditures (FY20)      |

Education
PM&R hosts a competitive residency program of 23 residents. Fellowships are offered in sports medicine, interventional spine, and spinal cord injury. Post-doctoral programs are offered in rehabilitation psychology and neuropsychology, and bariatric psychology.

Research
PM&R faculty participate in several research projects focusing on neurorehabilitation to improve fitness and function, prevent injury, reduce pain, and improve medical technology. Faculty members also participate in translational neurotrauma research and collaborate with various departments locally and nationally to design and conduct research. Residents have opportunities to collaborate with faculty to conduct their own research projects and present findings at local and national meetings. We are developing a Neuro Robotics Lab supported by the first-ever DP5 NIH award in the field of PM&R.

Clinical
In May 2020, the PM&R Division moved into the new state-of-the-art 75-bed Craig H. Neilsen Rehabilitation Hospital. PM&R provides specialized, individualized care for a variety of conditions including brain injury, stroke, spinal cord injury, cancer rehab, polytrauma, spasticity, and amputation. We are the only inpatient rehabilitation program in the Mountain West region with Hospital CARF certification for adults, children, and adolescents. We also hold subspecialty certification in spinal cord injury, stroke, traumatic brain injury, and comprehensive outpatient rehabilitation. The Craig H. Neilsen Rehabilitation Center is ranked among the nation’s Top 20 Rehabilitation Hospitals by U.S. News & World Report.

Other
PM&R enjoys a collaborative and integrated work environment. The spinal cord injury team has developed significant collaborations with the GApp Lab, Department of Mechanical Engineering, School of Business, and Lassonde Entrepreneur Institute to develop innovative technologies to enhance the quality of life for individuals with spinal cord injuries. We support life-changing adaptive sports and community re-entry through our internationally acclaimed TRAILS program.

Division Chair
David P. Steinberg, MD, MMM
Associate Professor, Physical Medicine & Rehabilitation • Executive Medical Director of the Craig H. Neilsen Rehabilitation Hospital • MD, University of Chicago, Pritzker School of Medicine • Residency: Physical Medicine & Rehabilitation, Northwestern University and the Rehabilitation Institute of Chicago • Subspecialty Boarded in Pain Management

School of Medicine
PHYSICAL THERAPY AND ATHLETIC TRAINING

The Department of Physical Therapy and Athletic Training provides opportunities for collaboration in education, research, and clinical practice across the disciplines of physical therapy, athletic training, and rehabilitation science. We share expertise in human movement and function to work toward better health for the communities we serve.

Department Programs

Residency Programs
- Orthopedic Physical Therapy
- Neurologic Physical Therapy
- Sports Physical Therapy

Clinical Programs
- Balance and Mobility Clinic
- Student Run Pro Bono Clinics
- L.S. Skaggs Patient Wellness Center
- Athletic Training Student Clinic

DEPARTMENT STATISTICS

<table>
<thead>
<tr>
<th>Faculty (25 primary, 86 adjunct)</th>
<th>111</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students (academic &amp; residency programs)</td>
<td>250</td>
</tr>
<tr>
<td>Research Expenditures (FY20)</td>
<td>$5M</td>
</tr>
</tbody>
</table>

Education

In the professional Master of Athletic Training (MAT) program, students learn core competencies related to health care and athletic training in a collaborative medical academic setting. The program offers unique clinical experiences with athletes at every level of competition and the performing arts.

The Doctor of Physical Therapy (DPT) program is currently ranked in the top 5 percent of all physical therapy programs nationally (No. 13 of more than 250 programs) and reflects the breadth, depth, and necessary rigor of the professional physical therapist education curriculum in response to the current and expected future health care environment.

The PhD in Rehabilitation Science program advances scientific knowledge underlying the clinical practice of rehabilitation by preparing students to conduct independent scientific research and function as an academic faculty member.

Research

Current overall funded research budget exceeds $12 million. Investigation spans cellular mechanisms of muscle function to clinical outcomes and health services research as we work to advance understanding of human function and apply discoveries to improving health. Motion Analysis core labs, muscle biology and function labs, a skeletal muscle exercise research facility, and a sports medicine research lab form the backbone of our research facilities.

Other

Physical therapy clinicians offer the most current, evidence-based approaches in our clinics. The University Balance and Mobility Clinic services individuals with vestibular, balance, pelvic floor, and neurologic disorders. The Athletic Training program provides preventative assessments, evaluations, and therapeutic guidance of sports medicine injuries.

Department Chair

R. Scott Ward, PhD, PT, FAPTA
Professor, Physical Therapy & Athletic Training
Adjunct Professor, Occupational Therapy & Recreational Therapies
PhD, University of Utah
POPOPULATION HEALTH SCIENCES
The University of Utah Intermountain Healthcare Department of Population Health Sciences (PHS) is a hub for education, investigation, and expertise in health services, cost, quality, outcomes, behavioral interventions, cancer epidemiology, and health delivery systems research. The department provides methodological expertise and infrastructure that advance capacity for population health scientists to pursue impact-driven research and allow clinicians to provide better patient-and population-oriented care in an increasingly complex health care delivery system.

Departmental Divisions
- Health Systems Innovation and Research
- Cancer Population Sciences
- Biostatistics

department also leads Population Health Pathways, a four-year program that provides medical students a longitudinal deep dive in population health.

Research
The department’s research portfolio is broad, with research focusing on behavioral interventions, the use of mobile interventions, health disparities, community prevention and outreach, cancer and molecular epidemiology, cancer etiology, pharmacogenetics, health care policy, quality of life, health economics, and outcomes research. The department’s research strengths come from the diverse methods and expertise of faculty members and by collaborating broadly across the health system and with external partnerships worldwide.

Other
The department is five years old and is ranked No. 18 nationally in total NIH funding.

Department Chair
Angie Fagerlin, PhD
Professor, Population Health Sciences
PhD, Experimental Psychology, Kent State University
PSYCHIATRY

The Department of Psychiatry’s mission is to improve mental health through education, research, clinical care, and collaboration with other disciplines and community partners. Department faculty are dedicated to academic excellence, collaborative research, and compassionate behavioral and mental health care, with the goal of giving patients healthier minds and better lives.

Departmental Divisions

- Adult Psychiatry
- Child & Adolescent Psychiatry

DEPARTMENT STATISTICS

325 Faculty (118 primary, 207 adjunct)
64 Residents
3 Post-Doctoral Fellows
27 Advanced Practice Clinicians
$9.3M Research Expenditures (FY20)

Education

The psychiatry department provides teaching for medical students and training for residents from around the country and the world. During the 2019 Utah State legislative session, two additional training slots were funded. Furthermore, the Idaho State Legislature funded three new slots for a joint training program with the department to provide much-needed psychiatric resources to the State of Idaho. This success was the result of several years of effort between our training department faculty and counterparts in Idaho. Combined, these additional training dollars will allow us to increase our training programs to a total number of 77 residents by 2024.

Research

The department’s research mission is growing quickly, with strong investments and research groups in psychiatry genetics, neuroimaging, autism, mood disorders, and clinical trials to propel new discoveries of the causes of and treatments for psychiatric illnesses. Current projects include the genetics of psychiatric disorders, along with the root causes and the search for more effective and personalized treatment of chronic illness such as schizophrenia, depression, and bipolar disorder. Research initiatives also examine illness co-occurrence with healthy and pathological aging or conditions such as chronic pain.

Clinical

The department supports mental and behavioral health services at the University of Utah, throughout the community, and within the Mountain West region. This includes providing inpatient and outpatient clinical expertise at the Huntsman Mental Health Institute as well as providing a continuum of compassionate and evidence-based outpatient services in outlying community health centers.

Other

Department faculty and U of U Health leaders worked closely with representatives from the Huntsman Family Foundation, laying the groundwork for the amazing $150 million grant for the Huntsman Mental Health Institute. This incredible collaboration will help usher in the future of mental and behavioral health care in the region.

Department Chair
Mark H. Rapaport, MD
CEO, Huntsman Mental Health Institute • Professor, Psychiatry • MD, University of California, San Diego, School of Medicine • Residency: Psychiatry, University of California, San Diego • Fellowships: University of California, San Diego, National Institute of Mental Health
RADIATION ONCOLOGY

The Department of Radiation Oncology is dedicated to providing the highest quality patient-centered cancer care and advancing the field through research, education, and service. The department’s multidisciplinary partnership with surgical, medical, and pediatric oncology, pathology, and radiology allows it to provide state-of-the-art conventional and experimental therapy to patients.

DEPARTMENT STATISTICS

| 37 | Faculty (27 primary, 10 adjunct) |
| 9 | Residents |
| $1.43M | Research Expenditures (FY20) |

Education

The department offers accredited Radiation Oncology and Medical Physics Residency Programs. Faculty support our programs through lectures, clinical instruction, and research mentorship. In addition, they assist the School of Medicine by volunteering in the Radiation Oncology Interest Group, mentoring students through research opportunities, participating in the annual career fair, and more. Fifty percent of our physician residents pursue academic careers.

Research

Radiation oncology faculty members currently have 25 funded investigations/grants including a K08 grant, are the principal investigator (PI) or co-PI on two National Cooperative Group Trials, lead seven investigator-initiated trials, and serve on more than 50 national committees including the National Institutes of Health, the Children’s Oncology Group, the FDA, and the National Comprehensive Cancer Network.

Clinical

Our team consists of 12 board-certified radiation oncologists and a full complement of physics, oncology-certified nurses, dosimetry, and radiation therapy personnel. We offer radiation therapy services with the most modern treatments available, including proton therapy starting in Spring 2021. Our department places a strong emphasis on multidisciplinary care and is a recognized leader in patient satisfaction within the institution and nationally.

Department Chair

Dennis C. Shrieve, MD, PhD
Rudolph S. and Edna Reese Research Professor, Radiation Oncology • MD, University of Miami School of Medicine • PhD, Radiation Biophysics, University of California, Berkeley • Residency: Radiation Oncology, University of California, San Francisco
RADIOLOGY & IMAGING SCIENCES

The Department of Radiology & Imaging Sciences offers subspecialty imaging and interventional services and provides advanced technology to diagnose and treat disease. Our highly skilled clinical team performs nearly half a million procedures and studies each year. Our physicians, scientists, and staff improve health care through imaging practice, research and innovation, and education.

DEPARTMENT STATISTICS

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Residents</th>
<th>Residents</th>
<th>Post-Doctoral Fellows</th>
<th>Advanced Practice Clinicians</th>
<th>Research Expenditures (FY20)</th>
<th>Dept. Fund Ranking (NIH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>176</td>
<td>1</td>
<td>12</td>
<td>10</td>
<td>$8.15M</td>
<td>#27</td>
<td></td>
</tr>
<tr>
<td>(73 primary, 83 adjunct, 20 research)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Education

The department’s life-long educational efforts reach far beyond its trainees. In addition to having diagnostic and IR residency programs ranked highly for research and reputation in the nation, the department conducts two internationally attended conferences each year: the Utah Head and Neck and Utah Brain and Spine conferences. Additionally, department faculty have published seminal textbooks currently in use around the world and give lectures globally.

Research

The radiology department’s research enterprise stretches from clinical studies to math and physics research in imaging sciences. The Utah Center for Advanced Imaging Research (UCAIR) specializes in MRI and engineering research, while nuclear medicine has pioneered radiotracers. The research program boasts four 3T MRI machines. The department collaborates extensively with investigators from the health sciences and main campus. The department has translated research into unique clinical services such as MR-guided Focused Ultrasound (MRgFUS) treatment for essential tremor and the world’s first MRgFUS breast tumor ablation system undergoing clinical trials. The department is a leader at the University of Utah for generating and licensing intellectual property.

Clinical

The radiology department provides the full range of subspecialty radiologic expertise to our system: abdominal imaging, acute care imaging, breast imaging, cardiothoracic imaging, musculoskeletal imaging, neuroradiology, and nuclear medicine. They work in our award-winning “reading room of the future.” It also features a thriving group of interventional radiologists who pioneer new minimally invasive procedural techniques, some of which are unique to U of U Health.

Other

The radiology department has created internationally used internet-based education products like STATdx and RADPrime, and distributes research software worldwide.

Department Chair
Satoshi Minoshima MD, PhD
Professor, Radiology and Imaging Sciences • MD, Chiba University School of Medicine (Japan) • PhD, Radiological Science, Chiba University School of Medicine • Residency: Radiology, Chiba University Hospital • Fellowship: Nuclear Medicine, University of Michigan
SURGERY

The Department of Surgery is a nationally ranked academic surgical program that provides comprehensive, high-value patient care, leads in research and innovation, and inspires and educates tomorrow’s leaders in surgery.

Departmental Divisions

- Cardiothoracic Surgery
- Emergency Medicine
- General Surgery
- Otolaryngology
- Pediatric Surgery
- Plastic Surgery
- Transplantation & Advanced Hepatobiliary Surgery
- Urology
- Vascular Surgery

DEPARTMENT STATISTICS

| 350  | Faculty (174 primary, 176 adjunct) |
| 106  | Residents                        |
| 13   | Post-Doctoral Fellows            |
| 117  | Advanced Practice Clinicians     |
| $11.4M | Research Expenditures (FY20) |
| No. 22 | Dept. Fund Ranking (NIH)        |

Education

The Department of Surgery supports training programs across seven surgical specialties and emergency medicine, including several unique, highly specialized fellowship programs. A core of education-focused faculty in the department are recognized leaders, having garnered multiple local and national education awards.

Research

The department aims to increase the value of surgical care through an aggressive program of discovery and innovation. A focused strategy of research sponsorship has led to remarkable percent growth in external research revenue over the last five years, covering the areas of basic, translational, clinical, and health services research.

Clinical

The department continues to expand its clinical impact with new and growing programs, including fetal surgery, live-donor liver transplantation, men’s health, and minimally invasive cardiovascular surgery. Geographically, we provide surgical care beyond the local population through a multi-state referral network, telemedicine, and direct staffing in hospitals across the Mountain West.

Other

The department is home to the nation’s first Center for Global Surgery, which supports faculty-led academic programs in East Asia, West Africa, and South America.

Department Chair (Interim)
Robert E. Glasgow, MD, MBA
Professor, Surgery • MD, University of California, San Francisco • MBA, University of Utah David Eccles School of Business • Residency/Fellowship: General Surgery, University of California, San Francisco • Fellowship: Advanced Minimally Invasive and Gastrointestinal Surgery, Legacy Health System
VISION FOR THE FUTURE

Together as One U, we serve communities and the region, lead education and discovery, and innovate care accountable for outcomes.

Communities, partners, and people make us who we are, and we are fully invested in their health, wellness, and success.

These are the words that guide our work at University of Utah Health—work that we do in support of one another and our community. That is what makes our institution so unique.

Like our academic peers across the country, we are entering a period of transition and adjustment. The last year challenged us in ways we could never have imagined. We experienced a spectrum of emotions and a series of confrontations to the ways we do our work. We experienced losses and we experienced gains. And through it all, we stayed together, we remained dedicated to our missions, and we continued to innovate.

Even in the midst of a pandemic, U of U Health advanced strategic initiatives in so many areas including population health, mental health, dismantling systemic racism, increases in research funding, reforming medical education, and confronting health disparities across our community, to name a few. Among all these realms, we have an accelerating momentum, because we work to make one another successful.

U of U Health has a legacy of innovation that has benefitted patients not just here in Utah but around the world. A distinguishing feature on the national stage is our unmatched culture of collaboration—people working together to advance health and pioneering discoveries in science and medicine, all while training the next generation of health care professionals.

Our vision for the future is One U, united in serving the people of Utah as a University FOR Utah. The future of health care is interdisciplinary, collaborative, and innovative. With the patient at the center of everything we do, we are dedicated to caring for those who care for our communities. At U of U Health, we have a unique opportunity to extend this leadership into all areas of health, in turn helping both our populations and those beyond our borders.

We invite you all to join us on this journey.

Michael L. Good, MD
President (Interim), University of Utah
Chief Executive Officer, University of Utah Health
Executive Dean, University of Utah School of Medicine
A. Lorris Betz Senior Vice President for Health Science
Report prepared by University of Utah Health, Marketing and Communications:

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Special thanks to many others throughout U of U Health for their contributions to compile the information in this report.

Please contact a member of the Strategic Communications Team to report corrections or for printed copies.