<table>
<thead>
<tr>
<th>CONTENTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LETTER FROM THE SENIOR VICE PRESIDENT</td>
<td>2</td>
</tr>
<tr>
<td>UNIVERSITY OF UTAH HEALTH:</td>
<td></td>
</tr>
<tr>
<td>ADMINISTRATION &amp; LEADERSHIP</td>
<td>5</td>
</tr>
<tr>
<td>UNIVERSITY OF UTAH HEALTH:</td>
<td></td>
</tr>
<tr>
<td>OVERVIEW</td>
<td>13</td>
</tr>
<tr>
<td>UNIVERSITY OF UTAH HOSPITALS &amp; CLINICS:</td>
<td></td>
</tr>
<tr>
<td>CLINICAL ENTERPRISE &amp; LEADERSHIP</td>
<td>21</td>
</tr>
<tr>
<td>UNIVERSITY OF UTAH HEALTH:</td>
<td></td>
</tr>
<tr>
<td>RESEARCH ENTERPRISE</td>
<td>45</td>
</tr>
<tr>
<td>UNIVERSITY OF UTAH HEALTH:</td>
<td></td>
</tr>
<tr>
<td>SCHOOLS &amp; COLLEGES</td>
<td>55</td>
</tr>
<tr>
<td>UNIVERSITY OF UTAH HEALTH:</td>
<td></td>
</tr>
<tr>
<td>SCHOOL OF MEDICINE DEPARTMENTS</td>
<td>65</td>
</tr>
</tbody>
</table>
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.

We share a common and deep belief in our core missions of patient care, research, education, and service to our communities. Our position as one university, a university-integrated academic health sciences center, is the preferred means to achieve excellence and national stature in our missions.

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, research, and academia all report to a single office, U of U Health is nimbler than many of our peers. This gives us tremendous opportunity to innovate across our health system and advance health for society through state-of-the-art quality care, groundbreaking research discoveries, and 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 their success, a unique and powerful energy is unleashed that will drive 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, nation, and world.

Michael L. Good, MD

SVP, Health Sciences
CEO, University of Utah Health
Dean, School of Medicine
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
- Collaboration
- Innovation
- Responsibility
- Diversity
- Integrity
- Quality
- Trust

ORG CHART
LEADERSHIP

Michael L. Good, MD
Senior Vice President for Health Sciences
CEO, University of Utah Health
Dean, School of Medicine

A professor of anesthesiology, Michael Good joined University of Utah Health in August 2018, after more than three decades of teaching, innovation, and leadership at the University of Florida (UF).

Dr. Good held many leadership positions at UF and its clinical affiliates, including dean, interim dean, 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, Good 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 education programs worldwide.

He graduated with distinction from the University of Michigan with a bachelor’s degree in computer and communication sciences. Good also earned his medical degree from Michigan, completed his residency training and a research fellowship in anesthesiology at UF, and joined the UF College of Medicine faculty in 1988.
Grant Lasson, MBA  
*Associate Vice President, Strategy*  
*Chief Strategy Officer*

Grant 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 after CSC’s acquisition of APM. Lasson left CSC in 2001 and founded the Metis Consulting Group. Metis assisted 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 significant experience in strategic planning, business planning, and funds flow redesign within the academic, clinical, and teaching enterprise; service line planning for cardiac, cancer, and solid organ transplants; ambulatory care strategies; and joint venture development between academic centers and private care delivery partners. In the early years of his career at APM, he was a leader in health care operations performance improvement.

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.

*Associate Vice President, Finance*  
*Chief Financial Officer*  
*(To Be Hired)*

We are conducting a national search for this position.
Gordon Crabtree, CPA, MBA
Chief Executive Officer, Hospitals & Clinics
Chief Financial Officer, University of Utah Health Plans

Gordon Crabtree has served as CEO for University of Utah Hospitals & Clinics since 2016. He has an MBA from the University of Utah and a BS in accounting from Weber State College.

Prior to his current role, he was chief financial officer, responsible for all financial aspects of U of U Health for 14 years. Before joining the university, Crabtree was managing director of finance for the Salt Lake Olympic Committee. In this position, he was responsible for financial reporting, debt management, cash management, accounting payroll, revenue management, rate card services, dissolution/liquidation, taxes, financial audits, and internal audits. Prior to the Olympics, Crabtree worked for the state of Utah in the positions of director of finance, assistant director of finance, and audit manager.

Edward B. Clark, MD
Associate Vice President, Clinical Affairs
President, University of Utah Medical Group

Born and raised in New York City, Ed Clark received his BS degree with Honors in biology from Union College in Schenectady, NY, and MD magna cum laude from Albany Medical College. He trained in internal medicine at Mary Hitchcock Memorial Hospital at Dartmouth Medical School and in pediatrics and pediatric cardiology at the Johns Hopkins Medical Institutions.

Clark held faculty appointments at the University of Nebraska, University of Iowa, Johns Hopkins University, and the University of Rochester. He assumed his current positions in Utah in 1996.

Clark has outstanding achievements in biomechanics of the developing cardiovascular system, mechanistic classifications of congenital cardiovascular malformations, and the care of children with chronic illness. In addition to leadership roles in national and international organizations, he is a consultant to the EPA and NIH and principal investigator of the Utah Vanguard Site of the National Children’s Study and the Environmental influences on Children’s Health Outcome Program (ECHO), a 25-year longitudinal cohort study of genetics and environment in children’s health and disease.
MISSION LEADERS

Gordon Crabtree, CPA, MBA
Chief Executive Officer, Hospitals & Clinics
Chief Financial Officer, University of Utah Health Plans

(See bio on page 7.)

Edward B. Clark, MD
Associate Vice President, Clinical Affairs
President, University of Utah Medical Group

(See bio on page 7.)

Will Dere, MD, FACP
Associate Vice President, Research
Vice Dean for Research, School of Medicine (Interim)

Willard Dere has extensive experience in clinical research from his 25-year stint in the biopharmaceutical industry, including substantive proficiency in regulatory and drug safety affairs. Since coming to U of U Health in 2014, he has focused his efforts on clinical and translational research and improving resources available to investigators across the institution. Dere serves as the Executive Director of the Program in Personalized Health and as Co-Director of the Center for Clinical & Translational Science.

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

Rory Hume is an internationally acclaimed Australian scholar and leader who has served at the highest administrative levels in dental schools and universities worldwide. In addition to his service as the AVP, he also is 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 (UCSF). 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.

In each of these roles, Hume has shown himself to be a leader who understands that education, like health care itself, is rapidly changing.
DEANS, UNIVERSITY OF UTAH HEALTH SCHOOLS AND COLLEGES

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

(See bio on page 8.)

Michael L. Good, MD
Senior Vice President for Health Sciences
CEO, University of Utah Health
Dean, School of Medicine

(See bio on page 5.)

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.

Perrin received a BS in physical education from Castleton State College, an MA in athletic training from Indiana State University, and a PhD in exercise physiology from the University of Pittsburgh.

For 15 years, Perrin directed the graduate programs in athletic training (MEd) and sports medicine (PhD & EdD) at the University of Virginia. He has served on the Advisory Committee on Interdisciplinary, Community-Based Linkages for the Bureau of Health Professions of the US Department of Health and Human Services. Among his honors are distinguished alumni awards from Castleton State College, Indiana State University, and the University of Pittsburgh, including induction into the Legacy Laureate Society at the University of Pittsburgh in 2008. In 2009, he received an Honorary Doctor of Humane Letters from the Arizona School of Health Sciences at A.T. Still University.
Barbara L. Wilson, PhD, RNC-BC
Dean, College of Nursing (Interim)

In addition to her role as interim dean, Barbara Wilson is an associate professor and associate dean for academic programs within the College of Nursing. Her professional background includes many years in acute-care settings, where she assumed various clinical and administrative roles, primarily in women’s and newborn services.

Wilson’s research interests are focused on health care services; evaluating the influence of providers, hospitals, and the care delivery systems on patient outcomes; and on the use of human factors engineering in reducing clinical errors and promoting patient safety. As a nurse research consultant for six years, she also assisted in implementing evidence-based practice policies and guidelines.

Wilson is an active member of the community with involvement and leadership in committees and organizations both on and off campus. She earned a BS in nursing from the University of Utah, an MS in maternal–child nursing from Brigham Young University, and a PhD in health care systems from University of Arizona College of Nursing.

Randall T. Peterson, PhD
Dean, College of Pharmacy

Randall Peterson is a chemical biologist whose research utilizes high-throughput screening technologies to discover new drug candidates for cardiovascular and nervous system disorders. Unlike conventional drug discovery programs that utilize simplified, in-vitro assays, the Peterson Lab screens use living zebrafish, ensuring that the drug candidates discovered are active in vivo. Several of the compounds discovered by the Peterson laboratory have become widely used research tools or preclinical drug candidates.

Peterson received his PhD from Harvard University, where he studied as a Howard Hughes Medical Institute predoctoral fellow in the laboratory of Stuart Schreiber. He completed a postdoctoral fellowship with Mark Fishman at Massachusetts General Hospital. Peterson 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. In 2017, he moved to the University of Utah as L. S. Skaggs Presidential Endowed Professor and Dean of the College of Pharmacy.

Catherine B. Soehner, MLS, BSN
Executive Director,
Eccles Health Sciences Library (Interim)

Catherine Soehner is currently the acting executive director of the Spencer S. Eccles Health Sciences Library and the Associate Dean for Research and User Services 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.
HEALTH SCIENCES EXECUTIVE COMMITTEE

The Health Sciences Executive Committee oversees decisions about the clinical enterprise.

Dayle Benson, DHA  David Bjorkman, MD, MSPH, SM  Ed Clark, MD  Gordon Crabtree, CPA, MBA  Sam Finlayson, MD, MPH  Michael Good, MD (Chair)  Jim Haisley, JD  Grant Lasson, MBA

Dan Lundergan, MHA  Tom Miller, MD  Satoshi Minoshima, MD, PhD  Charlton Park, MBA, MHSM  Margaret Pearce, RN, MSN, MBA, PhD  Charlie Saltzman, MD  John Zone, MD

HEALTH SCIENCES RESEARCH COUNCIL

The newly formed 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.

Bradley Cairns, PhD  Alfred Cheung, MD  Mike Dean, MD, MBA  Will Dere, MD, FACP (Chair)  Rachel Hess, MD, MS  Sheri Holmen, PhD  Jennifer Majersik, MD, MS  Satoshi Minoshima, MD, PhD

Randall Peterson, PhD  Aaron Quinlan, PhD  Robert Silver, MD  Wes Sundquist, PhD
HEALTH SCIENCES ACADEMIC COUNCIL

Comprised of the deans and leaders of multiple interdisciplinary programs, the Health Sciences Academic Council meets to discuss areas of common interest in the academic mission and identify ways to strengthen collaborative relationships.

ONE UNIVERSITY

At the University of Utah, we have a powerful opportunity to be more than our individual parts. The “One U” vision for the future inspires us to think and act as one university. We are united in serving the people of Utah and the nation as a flagship institution at the forefront of scientific research, interdisciplinary collaboration, and higher education innovation. U of U Health is leading a holistic and collaborative approach to health. This includes genetic science, medical care, and the social factors that keep people well, such as economics, environment, and education. We are actively working with partners across the university and throughout the community to address these factors.

DIVERSITY

Better solutions come from diverse research teams and stronger education occurs among peers from diverse backgrounds. The U 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 to promoting a culture of inclusion.

SAFETY

Our campus is committed to providing a safe campus for our students, faculty, staff, and visitors.
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

Advancing Health and Science

U of U Health is responsible for many medical firsts:

- Nation’s first wearable artificial kidney (Dr. Willem Kolff)
- World’s first total artificial heart transplant (Dr. William DeVries, ’70)
- World’s first comprehensive map of the retina’s neuron, aiding in treating retinitis pigmentosa and age-related macular degeneration (Moran Eye Center)
- Nation’s first biomedical informatics department, pioneering evidence-based clinical care (Dr. Homer Warner, ’49)
- Region’s first neonatal intensive care unit

1982

1979

1968
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 now is a recognized leader locally, regionally, and nationally.
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, and much of Nevada. It also serves as the training ground for most of the region’s physicians, nurses, pharmacists, therapists, and other health care professionals.

With an annual budget of $3.8 billion (FY18), U of U Health is comprised of:

- Four hospitals and 12 community health centers
- University of Utah Medical Group
- Highly-ranked $356 million research enterprise
- Six schools and colleges, including the Schools of Dentistry and Medicine, Colleges of Health, Nursing, and Pharmacy, and the Eccles Health Sciences Library
- 206,000-member health plan
- 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, and global health.

Excellence in patient care, education, and research—all in service of its community—is vital to the overall mission of the organization. Staffed by more than 20,000 employees, U of U Health has evolved to be recognized nationally as a highly innovative and transformative health care system.

Like many academic medical centers, U of U Health’s activities extend beyond its clinical delivery system. It also seeks to advance health through basic, translational, and clinical research, while training tomorrow’s health care professionals and interdisciplinary teams. Its work to integrate and align all three missions is largely responsible for its national reputation as a leader in transforming health care.
50% GROWTH IN 6 YEARS

ACCESS

4 HOSPITALS
12 COMMUNITY HEALTH CENTERS
23 REGIONAL PARTNERS
>10% OF THE CONTINENTAL US

>206,000 MEMBER HEALTH PLAN
>1,600 PHYSICIANS

DISCOVERY

$356 Million GRANTS IN FY2018
40+ DISEASE-CAUSING GENES IDENTIFIED
12 ALL-TIME MEMBERS OF NATIONAL ACADEMY OF SCIENCE OR MEDICINE
1 NCI COMPREHENSIVE CANCER CENTER
1 NOBEL LAUREATE

EDUCATION

1,250 HEALTH CARE PROVIDERS TRAINED ANNUALLY:
+ SCHOOL OF DENTISTRY
+ SCHOOL OF MEDICINE
+ COLLEGE OF HEALTH
+ COLLEGE OF NURSING
+ COLLEGE OF PHARMACY
+ ECCLES HEALTH SCIENCES LIBRARY
Health Care Transformation: Quality · Transparency · Value

University of Utah Health sees health care transformation as an opportunity to lead. With an unwavering commitment to patients and communities as lifelong partners in their own health, U of U Health leads the nation in compassionate, quality health care delivery by practicing transparency and cultivating a culture of value and collaboration.

For nine consecutive years, U of U Health has been 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. Only one other academic medical center, Mayo Clinic, has matched U of U Health’s nine-year quality record.

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, more than 50 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. She urged other hospitals to follow their lead.

### NATIONAL QUALITY RANKING FOR UNIVERSITY OF UTAH HEALTH

Out of 99 academic medical centers and 193 affiliated hospitals

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Vizient, Inc.
U of U Health also has led the way in health care transformation by seeking to **build a culture of value that can be modeled for its students and emulated by other health care systems**. The first step in creating a culture of value is 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. It clearly reveals the actual costs of care (to the system) and enables providers to examine the outcomes of their practices for continuous improvements in efficiency and effectiveness.

**U of U Health has proven that a cultural focus on value improves outcomes for patients, while also lowering costs.** For example, a multi-disciplinary team at U of U Health used the VDO tool to create a Perfect Care Index for joint replacement, comprising six defined quality indicators. A two-year implementation plan of new practices led to a 10 percent net decrease in costs for these operations. This was largely due to a reduction in the mean length of stay.

As a highly collaborative academic medical center, 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—it can innovate care delivery and model improvements for other health centers in the US.**
U of U Health Financial Summary

Summary of expenditures by revenue source (in millions)

FY 2018
$3,793.1

School of Dentistry        $19.3
School of Medicine        $1,108.8
College of Health         $27.3
College of Nursing        $25.7
College of Pharmacy          $30.3
Eccles Health Sciences Library          $6.3
University of Utah Hospitals & Clinics $1,885.5
ARUP $639.5
Other $50.4
$3,793.1
UNIVERSITY OF UTAH HOSPITALS AND CLINICS

University of Utah Hospitals and Clinics (UUHC) is staffed by more than 5,000 practicing clinicians, including 1,600 physicians who support four hospitals (University of Utah Hospital, Huntsman Cancer Institute, University of Utah Neuropsychiatric Institute, and University of Utah Orthopaedic Center); 12 community health centers; nine urgent care locations; and numerous specialty centers for cardiology, gastroenterology, cancer, men’s and women’s health, fertility services, orthopaedics, and surgery. U of U physicians also provide all the care for pediatric patients through a joint venture with the Intermountain Healthcare-operated Primary Children’s Hospital on the same campus.

UUHC’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 helicopter and airplane transportation to care facilities within a 1,700-mile radius (160 miles for helicopters). A growing network of 23 regional affiliates and 83 telehealth sites further extends that reach through urban, rural, and frontier populations of the five-state Mountain West.

UUHC care facilities handle more than 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. UUHC delivers care in more than 200 specialties and is a market leader in bone marrow transplants, burn care, dermatology, HIV, transplants, oncology, neurology, neurosurgery, ophthalmology, orthopaedics, otolaryngology, plastics, psychiatry, and physical rehabilitation.

UUHC 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 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 nine consecutive years and top five in ambulatory care for four consecutive years (Vizient, Inc.)
- 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

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

VALUE ROAD MAP 2019

TO ADVANCE HEALTH

PATIENT EXPERIENCE
SYSTEM GOAL
84th %ILE

SYSTEM QUALITY
VIZIENT
TOP 10 | 5 STAR

FINANCIAL STRENGTH
OPERATING MARGIN
OF 6.5%

OVERALL SYSTEM GOALS
EXCEPTIONAL INPATIENT EXPERIENCE
MAKE CARE MORE ACCESSIBLE
EXCEPTIONAL OUTPATIENT EXPERIENCE

GROWTH

EFFICIENCY / COST

FOUNDATION
PROVIDER & STAFF RESILIENCE
SUPPORT CAMPUS TRANSFORMATION INITIATIVES
U OF U HEALTH PHYSICIAN LEADERSHIP
(UNIVERSITY OF UTAH MEDICAL GROUP BOARD)

John Barrett | David Bjorkman | Karen Buchi | Ben Chortkoff | William Couldwell
Kristina Callis Duffin | Talmage Egan | Mark Eliason | Samuel Finlayson
Angelo Giardino | Rob Glasgow | Peter Jensen | Satoshi Minoshima | Kolawole Okuyemi
Randall Olson | Susan Pohl | Stefan Pulst | Charles Saltzman | Dennis Shrieve
Bob Silver | David Steinberg | Fred Welt | John Zone | Jon-Kar Zubieta

Edward B. Clark
President, Medical Group
Associate VP for Clinical Affairs

John Bohnsack
Executive Medical Officer

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

Blake Hamilton
Chair, Practice Management

Joe Vance
Director, CPG

Peter Weir
Executive Medical Director, Population Health

David Webber
Senior Director, Group Operations & Finance

Maia Hightower
Medical Director, Analytics

Ryan Morley
Director, Population Health

John Barrett
Executive Medical Director, CPG

Heidi Cozart
Director, Analytics

Mark Zenger
Sr. Director, Contracting & Payer Relations
LEADERSHIP—UNIVERSITY OF UTAH HOSPITALS & CLINICS

Gordon Crabtree, CPA, MBA

Chief Executive Officer
Chief Financial Officer, University of Utah Health Plans

Gordon Crabtree has served as CEO for University of Utah Hospitals & Clinics since 2016. He has an MBA from the University of Utah and a BS in accounting from Weber State College.

Prior to his current role, he was chief financial officer, responsible for all financial aspects of U of U Health for 14 years. Before joining the university, Crabtree was managing director of finance for the Salt Lake Olympic Committee. In this position, he was responsible for financial reporting, debt management, cash management, accounting payroll, revenue management, rate card services, dissolution/liquidation, taxes, financial audits, and internal audits. Prior to the Olympics, Crabtree worked for the state of Utah in the positions of director of finance, assistant director of finance, and audit manager.

Dan Lundergan, MHA

Chief Operating Officer

Dan Lundergan has worked for U of U Health for more than four decades, holding numerous positions within the organization. In Lundergan’s current role as COO, he works with the executive team developing strategies to ensure ongoing financial viability for the hospital and to fulfill its safety, patient satisfaction, and quality priorities. Lundergan’s key role is merging institutional strategies into operational accomplishments.

In this role, he coordinates with the senior vice president’s office in master space planning, strategic planning, and other initiatives impacting the hospital.

Lundergan received a BS in economics at the University of Utah and a master’s degree in hospital administration at the University of Minnesota.
Charlton Park, MBA, MHSM
Chief Financial Officer
Chief Analytics Officer

Charlton Park is the chief financial officer and chief analytics officer for University of Utah 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 a BS in Information System from the University of Utah and an MBA and Master of Health Sector Management from Arizona State University.

Thomas L. Miller, MD
Chief Medical Officer

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 a BA in chemistry from Colorado College and an MD from George Washington University in Washington, DC. He completed residency and chief residency in internal medicine at the University of Utah’s Department of Medicine in 1992.

Margaret Pearce, PhD, MSN, MBA
Chief Nursing Officer

Margaret Pearce provides clinical leadership for nursing across the hospital system. She joined U of U Health as a consultant for service excellence in 2005 and became the CNO in January of 2006. Pearce has served as VP of patient services/CNO at both for-profit and not-for-profit hospitals and systems across the country since 1994. She has been a national consultant for service excellence since 2004.

She received a BSN from the University of Southern Mississippi, an MSN from the University of Wisconsin-Oshkosh, and both an MBA and PhD in health administration from Kennedy Western University.
Jim Turnbull, MBA, DHA  
*Chief Information Officer*

Jim Turnbull’s career spans over 30 years in the health care industry, split between the Canadian and American health systems. Since March of 2008, he has served as chief information officer of U of U Health. Previously, Turnbull served for seven years as senior vice president and chief information officer of the Children’s Hospital in Denver, Colorado.

His academic background includes a BA in organizational psychology, an MBA from the University of Western Ontario, and a DHA from the Medical University of South Carolina. He is a former board member and chairman of the College of Healthcare Information Management Executives (CHIME), and a fellow and former president of the Healthcare Information and Management Systems Society (HIMSS).

Turnbull was the recipient of the Computerworld Smithsonian Award in 1996 and 1998 and the recipient of the CHIME-HIMSS 2012 John E. Gall, Jr. CIO of the Year Award.

Linda Tyler, PharmD, FASHP  
*Chief Pharmacy Officer  
Associate Dean, College of Pharmacy*

Linda Tyler is responsible for the comprehensive pharmacy services of four 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 earned both her BS in pharmacy and PharmD degrees at the University of Utah. She completed a residency in pharmacy practice at University of Nebraska Medical Center.

Dale A. Spartz, PhD  
*Chief Hospital Human Resource Officer*

Dale Spartz provides executive oversight and leadership for all human resources functions at University of Utah Health Hospitals & Clinics, consisting of more than 12,000 medical personnel and staff. This includes talent acquisition, compensation, benefits, employee relations, organization development and leadership training, workforce planning, employee engagement, employee health, and employee recognition and communications. Before joining the University of Utah, Spartz held executive human resources leadership roles in health systems in Iowa, Illinois, Arizona, and at Stanford Health in California. He earned a BS in management and a BA in psychology from Minnesota State University; an MA in management and an MS in organizational psychology from the University of Nebraska; and a PhD in organization development from Benedictine University in Illinois.
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 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 takes pride in being 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. While Director of Utah’s CHIP program, Westover founded and chaired the National Alliance for State CHIP Directors to coordinate the operations and policy initiatives of this new program nationally. He began his career as a staffer in the US Congress, first as a research analyst for the Senate’s Committee on Labor and Human Resources and then as senior legislative assistant to Rep. Michael Huffington of California. 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.

University of Utah Medical Group and Physician Leadership

University of Utah Health is an institution driven by the principle that it needs to fix health care before health care is "fixed" by those further from the front lines of delivery and innovation. The faculty’s commitment to research and education distinguishes the institution from non-academic health care systems. Together, physicians, care teams, researchers, and students are leveraging institutional strengths to transform health care and health education, thereby improving overall health for everyone.

University of Utah Medical Group

The University of Utah Medical Group (UUMG) is one of the largest academic practices in the country, representing more than 1,600 physicians, as well as social workers, advanced practice clinicians, physical therapists, and others who staff the clinical practices of the academic faculty. These providers deliver clinical care across the spectrum of health in more than 200 specialties. UUMG is also largely responsible for training the clinical workforce of the Mountain West region and beyond.

Over the past two decades, UUMG has evolved into a strategic partner within U of U Health, providing tertiary care throughout the region, population health for the Wasatch Front, and care for underserved populations. Members and their care teams are transforming health care by implementing value-driven strategies, innovating new standards of practice, and integrating patient-centered care. UUMG partners closely with University of Utah Hospital to develop strategy and to manage clinical and business operations, contracting and payer relations, and advanced data analytics. Among its members are some of the world’s leading researchers, clinicians, and educators.
CHIEF VALUE OFFICERS

Chief Value Officers (CVO) are physician leaders embedded in departments and service lines throughout the School of Medicine. 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.

Yoshimi Anzai, MD, MPH
Quality

James Ashworth, MD
Psychiatry

Susan Baggaley, FNP-BC, MSN
Neurology

John Barrett, MD
CPG

Erica Bisson, MD, MPH
Neurosurgery

John Bohnsack, MD
Ambulatory Health/Medical Group

Karen Buchi, MD, FAAP
Pediatrics

Benjamin Chortkoff, MD
Anesthesiology

Mark Eliason, MD
Dermatology

Robert Glasgow, MD
Surgery

Patrick Greis, MD
Orthopaedics

Peter Hannon, MD
Neurology

Ying Hitchcock, MD
Radiation Oncology

Christy Hopkins, MD
Emergency Medicine

Troy Hutchins, MD
Radiology

Anne Kennedy, MB, BCh, BAO
Radiology

Bernadette Kiraly, MD
Fam & Prev Medicine

Christopher Lehman, MD
Pathology
Diane Liu, MD  
Pediatrics

Jeanmarie Mayer, MD  
Infection Prevention

Rachele McCarthey, MD  
Psychiatry

Tom Miller, MD  
Internal Medicine

Richard Orlandi, MD  
Ambulatory Health

Christopher Pelt, MD  
Orthopaedics

Bob Pendleton, MD  
Quality

Jeffrey Rosenbluth, MD  
Rehabilitation

Derek Sakata, MD  
Anesthesiology

Marybeth Scholand, MD  
Pulmonary Medicine

Howard Sharp, MD  
OBGYN

John Sweetenham, MD, FACP, FRCP  
Huntsman Cancer Institute

Philipp Taussky, MD  
Neurosurgery

Jennifer Van Horn, MD  
OBGYN

Tom Varghese, MD  
Huntsman Cancer Institute

Russell Vinik, MD  
Medical Utilization

Nathan Wanner, MD  
Internal Medicine

Maia Hightower, MD, MPH, MBA  
Medical Information

Norm Zabriskie, MD  
Ophthalmology
AWARDS AND RECOGNITION

Top 10 in Quality for 9 Years Running
For nine 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. In 2018, U of U Health ranked seventh in the nation, achieving the No. 1 ranking in 2010 and 2016.

Top 5 in Ambulatory Care for 4 Years Running
U of U Health has also ranked in the top five for ambulatory care for four consecutive years. The 2018 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.

Best Hospital Rankings
For the fifth consecutive year, University of Utah Hospital was ranked No. 1 in Utah and in the Salt Lake City metro area. U of U Health is nationally ranked in three adult specialties: ear, nose, & throat (No. 31), gynecology (No. 32), and cancer (No. 38).

Additionally, U of U Health is rated “High Performing” in the following areas:

- Pulmonology
- Orthopaedics
- Ophthalmology
- Nephrology
- Neurology & neurosurgery
- Heart failure
- Colon cancer surgery

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. Fewer than 10 percent of academic medical centers nationwide received this highest-possible designation. CMS’s Hospital Compare ranking says University of Utah Hospital performs above the national average when it comes to safety of care, readmission rates, patient experience, effectiveness of care, and efficient use of medical imaging.
Ranked No. 4 in the Nation for Customer Loyalty

In 2018, NRC Health ranked University of Utah Health fourth in the nation for customer loyalty. NRC is one of the nation’s largest health care performance improvement firms. The Consumer Loyalty Awards are the first and only loyalty-based hospital rankings in the US NRC Health uses the Loyalty Index to provide a 360-degree view of consumer loyalty and recognize top performers in the health care industry.

Advisory Board 2018 Workplace of the Year Award

University of Utah Health is one of only 20 hospitals and health systems nationwide to receive this annual award for outstanding levels of employee engagement. Employee engagement is directly linked to U of U Health’s national ranking as a top 10 academic medical center for quality and safety for eight consecutive years, and some of the highest patient satisfaction scores in the nation.

Most Wired Hospital for 4 Years Running

For the fourth consecutive year, University of Utah Hospital was recognized among the American Hospital Association’s Most Wired Hospitals for leveraging data and analytics to foster a culture of self-improvement, boosting patients’ ability to access their records securely, connecting patients to care through innovative channels, and taking cybersecurity seriously.

National Cancer Institute’s Comprehensive Cancer Center Status

The Huntsman Cancer Institute (HCI) at the University of Utah is the only cancer center in the region with this designation. 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.

Forbes Magazine List of Best Employers

University of Utah Health was ranked 35 out of 500 top employers, and fourth among health care systems, in the nation. It is the only health care system in Utah to receive this designation. A company’s score is determined by direct employee feedback and a public perception score.
Clinical Network

Since University of Utah Hospital opened its doors in Salt Lake City, Utah, in 1965, University of Utah Health has grown from a single county hospital to an exemplary regional health care system that includes four hospitals, 12 community health centers, several specialty centers, and an extensive network of affiliate partners throughout the Mountain West region. Additionally, 83 telehealth sites offer on-demand access for both referring providers and patients.

Serving 10% of the Continental US

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 US.
University of Utah Hospital
University of Utah Hospital includes a Level I trauma center and the region’s only 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 five 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 2015, the National Cancer Institute (NCI) awarded HCI its Comprehensive Cancer Center status, the highest designation. 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.


The Department of Orthopaedics is No. 1 in the nation for NIH research funding (2019 BRIMR rankings).

University Neuropsychiatric Institute
University Neuropsychiatric Institute (UNI) is a highly regarded hospital and behavioral health facility, offering patient-centered care to treat all aspects of the individual—biological, psychological, social, and spiritual—essential to achieving balance in mental health. Specialists treat conditions like anxiety, eating disorders, major depression, mood disorders, personality disorders, schizophrenia, and substance abuse/chemical dependency. UNI clinical services include addiction recovery services, child & adolescent services, crisis intervention & hospital diversion services, hospital services, nutrition care services, and outpatient services.

UNI received Press Ganey’s Guardian of Excellence Award for Patient Satisfaction in 2016 and 2017 for consistently scoring in the 95th percentile or above for patient experience.
Community Health Centers

To address the needs of our growing population and increased demand for health care, U of U Health is moving full speed ahead with efforts to make care more convenient and affordable. There are 12 University of Utah community health centers offering primary care and a variety of specialties throughout the Wasatch Front. The 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.

Construction is underway on a 170,000-square-foot, five-story health center in the heart of Sugar House, one of Salt Lake County’s most booming neighborhoods. The Sugar House Health Center will anchor a new three-building development project. The anticipated completion date is mid-2019. Additionally, plans are underway to build a health center in Saratoga Springs, another quickly developing area south of Salt Lake City in Utah County.
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 140,000 clinic visits each year, Moran ranks among the country’s top 15 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.

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.

New Facilities

As part of U of U Health’s campus transformation master plan, an Acute Care Center (ACC) and the Craig H. Neilsen Rehabilitation Hospital are currently under construction. The 350,000-square-foot ACC facility will provide access to seamless transitions of care and critically needed inpatient rooms and surgical suites. The anticipated completion date is fall of 2019. The Neilsen Rehabilitation Hospital will offer 75 private rooms, two indoor therapeutic gyms, and a mechanical and bioengineering lab that provides technology assistance for those with severely limited physical function. The anticipated completion date is spring of 2020.
Cardiovascular Center

Cardiovascular Center services include heart care, heart surgery, and treatment for all types of heart disease. Specialties include cardiology, cardiothoracic surgery, vascular surgery, and many others. 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. The division offers highly competitive ACGME-accredited fellowships in interventional cardiology, electrophysiology, and advanced heart failure and transplant cardiology, as well as training programs in advanced cardiovascular imaging and adult congenital heart disease.

Utah Diabetes & Endocrinology Center

The Utah Diabetes and Endocrinology Center (UDEC) was established to improve the quality of life for people with diabetes and other endocrinology disorders. 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 also provides tailored diabetes education to patients of all ages and is the only facility for comprehensive and continuous diabetes care and management in Utah and the Mountain West region. It is also a research facility consistently researching and applying the newest findings in the field of diabetes management and care.

The Larry H. and Gail Miller Family Foundation recently 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 diabetes screening and education with a focus on creating medical access to underserved communities that are vulnerable to developing the disease.
Affiliates and Teleservices

U of U Health has a long history of sharing knowledge and resources to provide quality care across the Mountain West. U of U Health’s Affiliate Network allows patients and their families to access clinical expertise, research, and resources from a top-ranked academic medical center without leaving their community, unless absolutely necessary.

Since launching in 2013, Utah Health Care Regional Network has grown to include 23 affiliate partners and more than 30 health care systems. Organizations continue to join the network, realizing its value for their patients, families, and communities.

U of U Health has 83 telehealth sites offering on-demand access to U of U Health providers through virtual visits. All telemedicine programs are designed to support our rural hospital partners’ care for patients closer to home, delivering similar, if not better, quality outcomes in a lower-cost environment. Patients and families like it because they can remain close to home and still get world-class care.
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. U of U Health Plans specializes in administration of medical, mental health, and pharmacy benefits for fully insured and self-funded employer groups, individuals, and families, as well as Medicare and Medicaid.

As a health care partner, U of U Health Plans seeks to improve population health and provide access to the highest quality of care. It also strives to deliver exceptional value to its members, client organizations, and the community.

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 3,500 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, Primary Children’s Medical Center, Huntsman Cancer Institute, and Shriner’s Hospital for Children.

With department faculty based at Huntsman Cancer Institute, ARUP evaluates more than 35,000 surgical pathology and 40,000 cytology cases annually. Its broad research portfolio includes extensive scholarship in diagnostic medicine and cancer pathogenesis.

In 2018, ARUP contributed $640 million in revenue and tested more than 22 million specimens, impacting the care of nearly 14 million patients. (www.aruplab.com)
Partnerships

As a member of the U.S. Olympic Committee’s National Medical Network, U of U Health is one of two national medical centers designated to provide care for U.S. Olympic and Paralympic athletes. U of U Health is also the Official Health Care Provider for University of Utah Athletics, the Utah Jazz NBA franchise, and the Salt Lake Bees minor league baseball team.

Serving the State of Utah and Beyond

University of Utah Health contributes significantly to our state, region, and nation:

- $171.5 million in uncompensated care (FY18)
- 407,199 meals donated to the Utah Food Bank (FY18)
- 24,471 participants in community health education programs (FY18)
- 22,720 patient visits by the College of Nursing to incarcerated youth (FY18)
- BirthCare HealthCare providers attended 547 births and 11,797 outpatient visits in fiscal year 2018, producing $2,264,586 in net payments (FY18)
- 130 people involved in global health work, including 128 active projects/programs in 69 countries, representing 53 specialties/departments (FY18)
- 2 extended campuses in South Korea and Ghana
- 1 extended Physician Assistant program at Dixie State University
- Expanded dental services through monthly on-site clinical rotations at Dixie State University’s dental hygiene clinic
Financial Strength—University of Utah Hospitals & Clinics
Summary of expenditures by revenue source (in millions)

FY 2018
$1,874.9

- University of Utah Hospital $996.1
- Huntsman Cancer Institute $344.7
- Moran Eye Center $37.5
- University Community Health Centers $199.9
- University Neuropsychiatric Institute $99.2
- University Orthopaedic Center $44.7
- University of Utah Health Plans $152.6

Total $1,874.9
Clinical Care Fast Facts

- **Only Academic Medical Center in 5 Mountain West States:** Serves patients in frontier, rural, and urban areas that cover 10 percent of the continental US, offering care in more than 200 specialties, with 83 telemedicine sites across the region and 4 hospitals, 12 community health centers, and 23 regional partners.

- **Affordable Health Care:** Utah comes out on top nationally for affordable health care (*Kaiser Family Foundation*). No other state spends less per capita on health care, and few register higher on the wellness meter (United Health Foundation).

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

- **Nationally Ranked:** Top 10 national ranking for nine years in a row for quality health care among leading academic medical centers (*Vizient, Inc. Quality Leadership Award*). Ranked No. 7 in quality and safety nationally in 2018. Only Mayo Clinic has been ranked in the top 10 as long. Also ranked top 5 for four years in a row for ambulatory care.

- **First to Post Online Physician Reviews:** Recognized by *The New York Times, Harvard Business Review*, and *The Economist* as the first health system in the nation to publish online physician reviews. More than 50 other systems have followed suit, including Stanford, Piedmont, Wake Forest, Geisinger, and Intermountain Healthcare, among others (Harvard Business Review).

- **Top in Patient Satisfaction:** Four out of 10 clinical providers rank in the top 10 percent in the nation for patient satisfaction. More than half of those (24 percent) rank in the top 1 percent in the nation according to Press Ganey rankings (Harvard Business Review).

- **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, a front-page story in *The New York Times* in 2015.

- **No. 1 in Utah:** For the fifth consecutive year, *U.S. News & World Report* ranked University of Utah Hospital the top hospital in Utah. Additionally, adult specialties such as cancer (No. 48) and ear, nose, & throat (No. 31) were ranked among the nation’s best.

- **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 2015, the Institute was awarded comprehensive status by the *National Cancer Institute*, the highest designation possible. HCI is the only cancer institute in the region with this designation.

- **Olympic/Paralympic Athlete Care:** As a member of the U.S. Olympic Committee’s National Medical Network, University of Utah Health is one of two national medical centers designated to provide care for U.S. Olympic and Paralympic athletes.
Clinical Service Line Integrations

As our patients journey through our health system, from department to department, provider to provider, and from sickness to health, our deeply interconnected service lines work to provide seamless transitions of care.
UNIVERSITY OF UTAH HEALTH
RESEARCH ENTERPRISE
Research at the University of Utah has unearthed knowledge that 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 a remarkably capable and responsive organization. Focused efforts to align our research enterprise with our education and health care delivery systems are generating remarkable momentum and attracting talent and resources to the institution.

U of U Health faculty are making exciting new discoveries that are transforming our understanding of health and disease. The first research grant in the history of the National Institutes for Health was awarded to Maxwell Wintrobe for research in hematology at the University of Utah in the 1940s. Since that time, there have been other notable successes. U of U Health faculty member Mario Capecchi, PhD, won the Nobel Prize in 2007 for his seminal work in the development of an important model for studying the biological implications of genes. Howard Hughes Medical Investigator Jared Rutter, PhD, and his team discovered that the mitochondrial pyruvate complex (MPC) is critical for converting carbohydrates to fuel, which is key to understanding how cancerous cells shift the use of energy to outpace healthy cells. This ongoing research continues to open up new avenues for cancer therapeutics.

As a truly integrated health system, U of U Health Sciences empowers providers, researchers, and students to be agents of innovation. Its competitive advantages are rooted in its talented workforce, unique resources, collaborative culture, and values. Together, these strengths are changing the way science and medicine are practiced and delivered.
Basic Science Departments

- Biochemistry
- Biomedical Informatics
- Human Genetics
- Neurobiology & Anatomy
- Oncological Sciences
- Population Health Sciences

Awards & Accolades

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

Brenda Bass, PhD,
Biochemistry: National Academy of Science

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

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

Dana Carroll, PhD,
Biochemistry: National Academy of Science

Wendy Chapman, PhD,
Biomedical Informatics: National Academy of Medicine

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

Sung Wan Kim, PhD,
Pharmaceutics and Pharmaceutical Chemistry: National Academy of Science and National Academy of Engineering

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 Science

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

Homer G. Warner, MD, PhD,
Biomedical Informatics: National Academy of Science (deceased)
Recent Breakthroughs

Innovative research continues, with breakthroughs regularly. The following are only a few examples of great work being done system-wide.

Research led by Jason Shepherd, PhD, assistant professor of neurobiology and anatomy, has demonstrated a surprising connection between viruses and human cognition and memory. The discovery could have implications for treating neurodegenerative conditions such as Alzheimer’s. This groundbreaking work earned Shepherd a prestigious $2.5 million Chan-Zuckerberg award to continue his research.

U of U Health faculty are also seeking alternatives to opioid medications and surgery for treating patients with chronic low back pain. With a $9.7 million grant from the Patient-Centered Outcomes Research Institute, Julie Fritz, PT, PhD, professor of physical therapy and athletic training, is leading a team of physical therapists, primary care providers, experts in cognitive behavioral therapy and mindfulness, and biostatisticians to uncover the most effective treatments.

Danny Chou, PhD, and Jared Rutter, PhD, from the Department of Biochemistry, are tackling one of health care’s biggest challenges through the new Driving Out Diabetes Initiative. Their research focuses on making life easier and safer for diabetics. Chou and his team are working on a faster-acting insulin and other novel ways to control blood sugar.

These and many other breakthroughs have come through external financial support. There has been a steady increase in research funding for U of U Health scientists, driven by an impressive increase in proposal submissions in recent years. The university achieved its most successful research funding year ever in 2018 with $515 million. Nearly 70 percent of that total—$356 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.

<table>
<thead>
<tr>
<th>FY18 Funding by Source</th>
<th>NIH</th>
<th>$163.6M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fed Government (Non-NIH)</td>
<td>$42.9M</td>
<td></td>
</tr>
<tr>
<td>Foundations/Associations</td>
<td>$31.6M</td>
<td></td>
</tr>
<tr>
<td>Other Academic Institutions</td>
<td>$22.3M</td>
<td></td>
</tr>
<tr>
<td>Local/State Government</td>
<td>$8.4M</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>$76.7M</td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>$5.1M</td>
<td></td>
</tr>
<tr>
<td>Institutions (Non-Academic)</td>
<td>$5.3M</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FY18 Funding by School/College</th>
<th>Dentistry</th>
<th>$2.9M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>$325.2M</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>$7.4M</td>
<td></td>
</tr>
<tr>
<td>Nursing</td>
<td>$4.1M</td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td>$13.4M</td>
<td></td>
</tr>
<tr>
<td>Library</td>
<td>$3.0M</td>
<td></td>
</tr>
</tbody>
</table>
MAJOR RESEARCH PROJECTS & INITIATIVES

Center for Genomic Medicine

The Center for Genomic Medicine (CGM) is harnessing the power of family-based genomics to prevent and cure disease in Utah and beyond. CGM continues the university’s strong history of genetic discovery. For more than 50 years, multidisciplinary 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 containing genealogical, public health, medical, and environmental exposure records for more than 11 million people. In 2017, an additional 90 million records of deceased individuals were provided by the Genealogical Society of Utah to expand the coverage of UPDB.

The Utah Genome Project (UGP), launched in 2012, unites scientists, statisticians, software engineers, healthcare professionals, community members, and participants working to unravel the genetic basis of human diseases through the genomic sequencing of Utah families.

The State of Utah Science Technology and Research Initiative’s (USTAR) 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 comprises one of the strongest computational genomics teams in the world. Their innovative software and data science solutions are enabling genomic discoveries worldwide.

The Center for Genomic Medicine is strengthening the partnerships between UGP, UCGD, and UPDB and collaborations with our clinical departments, the College of Pharmacy, and ARUP Laboratories. Together, they are translating genetic discoveries into accurate diagnoses, targeted treatments, prevention strategies, and cures. Additionally, CGM is training the next generation of researchers and healthcare professionals to make genomic medicine part of routine patient care. U of U Health has launched a major fundraising campaign to support the CGM.

Diabetes and Metabolism

U of U Health first established the Diabetes and Metabolism Research Center (DMRC) in 2014 as a way to promote research and clinical excellence in diabetes and metabolism. Since this initial investment, the DMRC has helped recruit 10 investigators into four departments. These researchers have already secured more than $33.5 million in extramural funding to support their research. The DMRC has also awarded more than 31 pilot grants and helped to secure three additional training/educational grants to jump-start new research activities and educate the next generation of outstanding diabetes and metabolism researchers. With efforts in faculty recruitment, seed grants, support of cores, and interdisciplinary community building, the DMRC established and maintains a strong foundation in diabetes, metabolism, and overall metabolic health research.
In 2017, in partnership with the Larry H. and Gail Miller Family Foundation, U of U Health expanded strategic diabetes efforts by launching Driving Out Diabetes, a three-year interdisciplinary initiative to battle diabetes in Utah and beyond through education and prevention outreach, innovations in clinical care, and cutting-edge research. The Driving Out Diabetes Initiative integrates and leverages strengths in the Office of Wellness and Integrative Health, School of Medicine, College of Health, and the DMRC. The future vision is to fully integrate the DMRC and Driving Out Diabetes initiative in a way that positions U of U Health to potentially establish an NIH-funded Utah Health and Wellness Institute.

Neuroscience Initiative
The U launched the Neuroscience Initiative to take steps to help alleviate the devastating effects of brain disorders. The initiative was created to deepen our understanding of the brain in disease and in health, and transform this knowledge into patient care solutions. Synergy between the Neuroscience Initiative and national efforts ensures that outcomes will impact not only Utahns, but patients worldwide. 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 20 departments. A central focus of the Neuroscience Initiative is building an integrated academic environment to foster collaboration across disciplines and between clinicians and researchers. Funding will support mechanisms to further these goals.

Huntsman Cancer Institute
Huntsman Cancer Institute (HCI) is a leader in the study of cancer genetics. HCI is the only National Cancer Institute-Designated Comprehensive Cancer Center in the Mountain West and serves the largest geographic region in the country. Following a “lab bench to patient bedside” research model, it is the only cancer center in the region that conducts basic, translational, and clinical research simultaneously—taking what’s learned in the laboratory through drug development into the clinic.

HCI’s research enterprise includes 200 teams led by faculty from more than 33 academic departments and nine colleges. More genes for inherited cancers have been discovered here than at any other cancer center in the world, including genes responsible for hereditary breast, ovarian, colon, head, and neck cancers, as well as melanoma. HCI manages the Utah Population Database, the largest genetic database in the world, with information on more than 11 million people linked to genealogies, health records, and vital statistics.

HCI opened the Primary Children’s and Families’ Cancer Research Center in 2017, and broke ground on the region's first proton therapy center in 2018. Another major expansion, the Kathryn F. Kirk Center for Comprehensive Cancer Care and Women’s Cancers, is scheduled to open in 2022.
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 to make fundamental discoveries that ultimately improve patient care.

It is built on a strong foundation of almost 180 faculty, who do research in related fields, at four colleges or schools and 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, their 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.

Population Health

Population Health Sciences (PHS) at the University of Utah School of Medicine 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 Plan—provide methodological expertise and infrastructure that advance capacity for population health scientists to pursue impact-driven research and allow clinical professionals to provide better patient- and population-oriented care in an increasingly complex health care delivery environment.
Technology Transfer and Commercialization

Commercialization also continues to be an avenue of success at U of U Health. A total of 173 spinoff companies have been founded through research projects that began here (four in FY18). Some notable examples include Myriad Genetics, Biofire, and ARUP, 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 FY18, 141 applications for new patents were filed and 32 patents were issued. Additionally, the University of Utah received $8.2 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. The institutional view is that supporting core facilities is the single best way to support the U’s research mission with institutional funds. This model allows grant funding to go to other, more vital expenditures. Expertise in these cores includes cell imaging, zebrafish husbandry, DNA sequencing, electron microscopy, metabolomics, proteomics, machine shop, flow cytometry, and small animal 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 and provides 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 then participate in 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 and vibrant array of research opportunities within the Salt Lake City Veterans Health Administration (VHA/VA). In 2018, the Salt Lake VHA had 362 funded projects from 144 investigators ($25.9 million). Research awards span a broad range of activities, with notable emphases on merit review and career development awards. They cross major research service lines of clinical science, health services, rehabilitation, and biomedical lab research and development. One exciting collaboration, drawing on U of U Health’s unique genealogical and genomic resources, is the Veterans Genealogy Project, which represents the world’s largest collection of veterans’ genealogy and medical data.
Other Centers
- AIDS Education & Training Center
- Center on Aging
- Center for Alzheimer’s Care, Imaging, and Research
- Center for Cell and Genome Sciences (Main Campus)
- Center for Excellence in Women’s Health
- Center for Extreme Data Management, Analysis, and Visualization (Main Campus)
- Center for Global Surgery
- Center for High Performance Computing (Main Campus)
- Center for Human Toxicology
- Center for Integrative Biomedical Computing (Main Campus)
- Center for Law and Biomedical Sciences (Main Campus)
- Center for Medical Innovation
- Center for Neural Interfaces (Main Campus)
- Clinical Neurosciences Center
- Center for Patient Simulation
- Clinical Research Compliance and Education Center
- Comprehensive Arrhythmia Research & Management Center
- Genetic Science Learning Center
- Hartford Center of Geriatric Nursing Excellence
- Informatics, Decision Enhancement, and Surveillance Center
- Intermountain Cystic Fibrosis Center
- John A. Moran Eye Center
- National Center for Voice and Speech
- Nursing Research Center
- Nursing Simulation Learning Center
- Pain Research Center
- Pharmacotherapy Outcomes Research Center
- Rehabilitation Center
- Resiliency Center
- Rocky Mountain Center for Occupational and Environmental Health
- Study Design and Biostatistics Center
- University of Utah Center for Community Nutrition
- Utah Addiction Center
- Utah Center for Advanced Imaging Research
- Utah Center for Excellence in ELSI Research
- Utah Center for Reproductive Medicine
- Utah Trial Innovation Center

Other Institutes
- Lassonde Entrepreneurship Institute (Main Campus)
- Nora Eccles Harrison Cardiovascular Research and Training Institute
- Scientific Computing and Imaging Institute (Main Campus)
- Utah Neuropsychiatric Institute

Other Programs
- Anticonvulsive Drug Development Program
- Clinical Research Compliance and Education
- Global Health
- Global Health Education
- Global Public Health
- Health Equity & Inclusion
- Health System Innovation Research
- Molecular Medicine Program
- Pedigree and Population Resource
- Games and Apps (GApp) Lab
- Utah Genome Project
- Utah Program for Inherited Neuromuscular Disorders
- Value & Epidemiology Research Using Casual Interference and Data Science
Research and Innovation Fast Facts

• **Grants and Publications:** U of U Health researchers were awarded more than $356 million in research grants (FY18) and published 3,753 papers in peer-reviewed journals in 2018.

• **Research Advances:** U of U Health researchers were the first to identify the breast and ovarian cancer gene and have identified more than 40 inherited disease-causing genes using the Utah Population Database (UPDB), the world’s largest population database. (Utah Genome Project).

• **Nobel Prize Winner:** Faculty member Mario Capecchi, PhD, won the Nobel Prize in 2007 for his seminal work in the development of an important model for studying the biological implications of genes.

• **Starving Cancer:** Howard Hughes Medical Investigator Jared Rutter, PhD, and his team discovered that the Micro Protein Complex is critical for converting carbohydrates to fuel, which is key to understanding how cancerous cells shift the use of energy to outpace healthy cells. This ongoing research is opening up new avenues for cancer therapeutics.

• **Genetic Science Learning Center:** Recorded 15.7 million visits in 2018 to learn.genetics.edu, ranking it as the nation’s most visited genetics education website.

• **Incubator for Innovation:** 173 spinoff companies have been founded, 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.

• **Leading Development of Innovation in Computational Genomics:** Developed an innovative set of software tools for genomic data analysis to uncover disease-causing genes. The tools are being used by many major national and international consortia including Genomics England (the U.K.’s 100,000 Genomes Project), the Pediatric Cardiac Genetics Consortium, and the Simon’s Foundation Autism Research Initiative.

• **Patent Applications:** In FY 2018, 32 patents were issued to U of U Health. That same year, 141 applications for new patents were filed.

• **National Academy Inductees:** Twelve current and former researchers have been inducted into the National Academies of Science, Medicine, and Engineering.

• **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.

• **Making Sense of Doctor’s Notes:** Biomedical informatics chair and National Academy of Medicine member Wendy Chapman, PhD, has developed easy-to-use informatics algorithms and tools for natural language processing (NLP), a means of using computational power to pull data from doctor’s notes and health records that are otherwise hidden from automated analyses.
University of Utah Health’s embrace of the principles of value-based health care are as visible outside the clinical system as they are within. Health sciences education runs a course parallel to and is integrated with clinical care. Both are undergoing rapid change to meet the increasing and ever-changing demands of the marketplace.

Increased integration among clinical, educational, and research enterprises allows the university to leverage institutional strengths to inspire and encourage student innovation. In every corner of this academic health system, an emphasis on value has great potential to transform health education, thereby improving overall health for everyone.

To prepare trainees to successfully navigate looming challenges, people across the university are examining the concept of “value” as it applies to health education. Just as the health system seeks exceptional quality, value, and satisfaction for patients, we seek to provide a valuable and transformative educational experience for students. Each of U of U Health’s educational partners does so in its own way. These partners include the Schools of Dentistry and Medicine, the Colleges of Health, Nursing, and Pharmacy, and the Spencer S. Eccles Health Sciences Library.
School of Dentistry

The School of Dentistry’s (SOD) four-year DDS program began in 2013 with an entering class of 20 students. Now with 175 students spread across four years and a 50-student entering class size, the SOD is housed in the stunning, leading-edge, 85,000-square-foot Ray and Tye Noorda Oral Health Sciences Building. The school and its mission compel faculty, students, and residents to work together, supporting excellence in research, clinical, educational, and outreach initiatives.

The SOD boasts a 62-chair clinic as well as separate pediatric dentistry and oral surgery suites. The SOD also is home to an ADA-approved dental residency program with 10 residents. In 2015, SOD supported legislation that, since passed, has allowed the school to provide free dental care for thousands of blind or otherwise disabled adults. SOD students have a 100 percent boards pass rate and the second-highest incoming GPA nationally. The school is enthusiastically committed to full integration of oral health services, education, and research into the broader enterprise of U of U Health.

Points of Emphasis

- Improve the oral and overall health of the community through education, research, and service.
- Care for the underserved, integrated with other aspects of health care.

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

-number of students in each year:

- D1: 50
- D2: 47
- D3: 28
- D4: 23

-2nd highest incoming GPA in the nation

-Granted 1st DDS degrees in May 2017

-100% boards pass rate
The School of Medicine (SOM) houses 22 clinical and basic science departments and a faculty of more than 1,600, including physicians and researchers. The SOM has more than 400 students spread across four years and an annual entering class of 125. Among public medical schools, SOM ranks in the top 15 for research and primary care (U.S. News, 2020). It also ranks No. 18 among public medical schools for NIH research grants.

The SOM trains two-thirds of Utah physicians, offering an MD degree, several PhD programs, and the No. 2-ranked physician assistant program among public institutions. It also oversees more than 830 trainees in 26 residency and 79 fellowship specialties as well as degrees in public health and research. Thanks to a convenient co-location with University of Utah Hospital and relative proximity to the rest of the health system and its affiliates, the SOM provides students, residents, and fellows deep exposure to pioneering efforts in health care value and quality. As a research institution, the SOM is known for its work in genetics, cancer, biomedical informatics, neuroscience, cardiology, hematology, ophthalmology, orthopaedics, and obstetrics/gynecology, among other disciplines.

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.

### Rankings Among Public Medical Schools

- **#2** Physician Assistant Program
- **#14** School of Medicine—Primary Care
- **#18** medical school for NIH research grants
- **#15** School of Medicine—Research

Michael L. Good, MD
Dean, School of Medicine
College of Health

With more than 1,600 undergraduates and more than 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 five distinct 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, Kinesiology, and Recreation
- Nutrition and Integrative Physiology
- Occupational and Recreational Therapies
- 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.

Rankings Among Public Institutions

| #9  | Physical Therapy Program |
| #22 | Speech-Language Pathology Program |
| #26 | Occupational Therapy Program |
| #41 | Audiology Program |

$40M in new research grants and contracts
138 peer-reviewed journals published
Supports 30 laboratories and 3 rehabilitation clinics

David H. Perrin, PhD
Dean, College of Health

Number of Students
- GR 403
- GP 218
- UG 2,296
As Utah’s premier nursing education institution, the College of Nursing (CON) has an annual enrollment of 750+ graduate and undergraduate students. The college prepares nurses at all education levels. Its BS programs ranks No. 12 for best value nationwide (Value Colleges, 2019). In addition to a BS in Nursing, the College also offers programs for the transition from RN to BS. The college is the only nursing school in Utah offering Doctor of Nursing Practice (DNP) and Doctor of Philosophy (PhD) programs. The college is ranked No. 23 in the country for NIH research funding. Among public nursing schools, CON ranks No. 3 in the country for nursing informatics, No. 6 for nurse midwifery, No. 12 for DNP, and No. 18 for nursing MS graduate programs (U.S. News, 2020).

The CON excels in interdisciplinary gerontology education and works in collaboration with the Veterans Affairs Administration on an academic partnership for psychiatric/mental health nurse practitioner education through a five-year grant. Many of the college’s 100+ faculty members are also engaged in faculty practice. They provide health care services for a variety of populations, including incarcerated children through a contract with the Utah Juvenile Justice Services agency and childbearing families through the BirthCare HealthCare program at University of Utah Hospital.

### Points of Emphasis
- Serving the people of Utah and beyond by continually improving quality of life for individuals and communities.
- First recipient of the national New Era for Academic Nursing Award from the American Association of Colleges of Nursing.

<table>
<thead>
<tr>
<th>Rankings Among Public Nursing Schools</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>#3</strong></td>
<td>Nursing Informatics Specialty Track</td>
</tr>
<tr>
<td><strong>#6</strong></td>
<td>Nurse Midwifery Specialty Track</td>
</tr>
<tr>
<td><strong>#12</strong></td>
<td>Doctor of Nursing Practice</td>
</tr>
<tr>
<td><strong>#18</strong></td>
<td>Nursing MS graduate programs</td>
</tr>
</tbody>
</table>

**Number of Students**
- DNP 319
- PhD 52
- Master’s 47
- Undergraduate 357

Barbara Wilson, PhD, RNC-BC
Dean, College of Nursing (interim)
College of Pharmacy

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. 15 national ranking among public pharmacy schools (U.S. News, 2020).

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 funding.

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
- Pharmacology and Toxicology
- Pharmaceutics & Pharmaceutical Chemistry

Points of Emphasis

- 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

Ranking Among Public Pharmacy Schools

#15 PharmD Program

Among all Pharmacy Schools

#8 College of Pharmacy for NIH research grants

2/3 of the licensed pharmacists in Utah are educated at the U
Spencer S. Eccles Health Sciences Library

The Spencer S. Eccles Health Sciences Library (EHSL) advances U of U Health's mission through technology, research, and its partnerships with university, state, and regional entities. The EHSL leads campus efforts in research reproducibility awareness and training and offers a robust educational technology hub for the health sciences. It also uses evidence synthesis expertise to advance clinical practice and research and engages students as lifelong learners, teaching them to locate, appraise, and apply evidence.

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

Points of Emphasis

• Advance and transform education, research, and health care through technology, evidence application, and collaboration.
• Home to the National Library of Medicine National Training Center.

#1 academic medical library for web content use

19 million annual website visits

13 published papers authored by EHSL faculty and staff

Three First Place Medical Library Association Research Awards in the last five years.

8 national awards in FY18

14,364 requests provided through Interlibrary Loan

1 of 8 Regional Medical Libraries nationwide

Catherine B. Soehner, MLS, BSN
Executive Director (Interim), Eccles Health Sciences Library
Education Fast Facts

University of Utah Health has trained about two-thirds of all physicians practicing in the state. Since 1967, more than 37,000 doctors, nurses, dentists, mid-level specialists, scientists, health sciences educators, and other health professionals have graduated from the U of U.

Each of the schools and colleges is recognized for its own accomplishments and competencies.

- **School of Dentistry**
  - 100% Board pass rate

- **School of Medicine**
  - Ranked No. 18 among public medical schools for NIH research grants
    - No. 2 Physician Assistant Program
    - No. 14 Primary Care
    - No. 15 Research

- **College of Health**
    - No. 9 Physical Therapy Program
    - No. 22 Speech-Language Pathology
    - No. 26 Occupational Therapy

- **College of Nursing**
  - Ranked No. 18 in NIH research grants
    - No. 3 Nursing Informatics
    - No. 6 Nurse Midwifery
    - No. 12 Doctor of Nursing Practice
    - No. 18 Nursing MS Graduate Programs

- **College of Pharmacy**
  - Ranked No. 8 in NIH research grants
    - No. 15 PharmD Program
One University

The University of Utah provides a collaborative research environment for faculty and a broad, interdisciplinary educational experience for students. Our educational enterprise is focusing on even greater integration while leveraging new resources and technologies that are geared toward preparing a more collaborative workforce ready to deliver a future model of health care.
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

| 189  | Faculty (108 primary, 81 adjunct) |
| 42   | Residents                        |
| 9    | Post-Doctoral Fellows            |
| 6    | Advanced Practice Clinicians     |
| $2.7M | Research Funding (FY18)          |

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, acute pain management, 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. 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 half a 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, U of Utah; Anesthesiology, Stanford U. • Fellowship: Clinical Pharmacology, Stanford U.
**BIOCHEMISTRY**

The Department of Biochemistry is dedicated to conducting biochemical research at the forefront of current knowledge, training medical and graduate students and serving the institution and the larger community.

## Department Statistics

<table>
<thead>
<tr>
<th>53</th>
<th>Faculty (18 tenure, 15 research track, 20 adjunct)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>Post-Doctoral Fellows</td>
</tr>
<tr>
<td>41</td>
<td>Students</td>
</tr>
<tr>
<td>$17.3M</td>
<td>Research Funding (FY18)</td>
</tr>
<tr>
<td>#13</td>
<td>Dept. Funding Rank (NIH)</td>
</tr>
</tbody>
</table>

## 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.

## 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 13th nationally in total NIH funding ($17.3M in FY18), despite being the smallest department in the top 20. Current faculty research honors include five Pew/Searle Scholar Awards, four 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.

## 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.

---

**Department Co–chair**

**Christopher P. Hill, DPhil**

H.A. and Edna Benning Presidential Endowed Chair • Distinguished Professor, Biochemistry • DPhil, University of York, United Kingdom

---

**Department Co–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, 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>86</th>
<th>Faculty (18 primary, 68 adjunct)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Post-Doctoral Fellows</td>
</tr>
<tr>
<td>72</td>
<td>Students</td>
</tr>
<tr>
<td>$6.1M</td>
<td>Research Funding (FY18)</td>
</tr>
</tbody>
</table>

Education

DBMI offers a PhD, a professional track Master’s program, and a data science summer school. It also provides numerous CME activities annually and contributes to the medical school’s curriculum and teaching.

Research

DBMI’s strategy is to foster multidisciplinary team-science research programs that capitalize on synergy among all three missions of University of Utah Health. Two programs have been established: (1) ReimagineEHR, which is a part of four center grants, and (2) Translational Informatics, which reflects a large focus of DBMI over the last 10 years, providing informatics support to clinical translational research and research on translational informatics.

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 400 PhD and MS degrees and has alumni in key positions in academia, clinical medicine, government, and private industry.

Department Chair

Wendy W. Chapman, PhD
Professor, Biomedical Informatics
PhD, University of Utah
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

| 68 | Faculty (48 primary, 20 adjunct) |
| 11 | Residents                      |
| 9  | Advanced Practice Clinicians   |
| $3.0M | Research Funding (FY18) |

Education

The department’s residency program has 11 dermatology residents and ranks among the top 20 programs in the nation (Doximity).

Research

The department’s research portfolio includes clinical and translational research in melanoma, psoriasis, autoimmune blistering disease, and patient-reported outcomes. The department is currently ranked 20th nationally in total NIH funding.

Clinical

The department’s 48 faculty members provide care at 12 clinics 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 5 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 Co-Chair

John J. Zone, MD
Professor, Dermatology • MD, SUNY at Syracuse • Residency: Internal Medicine, SUNY at Syracuse; Dermatology, SUNY at Buffalo

Department Co-Chair

Kristina Callis Duffin, MD
Associate 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 wellbeing in homes, workplaces, and communities.

Departmental Divisions

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

Department Statistics

<table>
<thead>
<tr>
<th>624</th>
<th>Faculty (56 career line, 568 adjunct)</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>Residents</td>
</tr>
<tr>
<td>6</td>
<td>Post-Doctoral Fellows</td>
</tr>
<tr>
<td>14</td>
<td>Advanced Practice Clinicians</td>
</tr>
<tr>
<td>$8.6M</td>
<td>Research Funding (FY18)</td>
</tr>
<tr>
<td>#3</td>
<td>Dept. Funding Rank (NIH)</td>
</tr>
</tbody>
</table>

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 3rd nationally for total NIH funding ($8.6 million in FY18).

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 • Residency: Medicine, University of Ilorin Teaching Hospital; Family Medicine, University of Kansas • MD, University of Ilorin School of Medicine (Nigeria) • MPH, University of Kansas
**HUMAN GENETICS**

The Department of Human Genetics is dedicated to studying the genetic control and development of disease.

**Department Statistics**

<table>
<thead>
<tr>
<th></th>
<th>Faculty (21 primary, 22 adjunct)</th>
<th>Post-Doctoral Fellows</th>
<th>Students</th>
<th>Research Funding (FY18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td></td>
<td>37</td>
<td>30</td>
<td>$15M</td>
</tr>
</tbody>
</table>

**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.

**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**

The human genetics department is home to the Utah Genome Project and the USTAR Center for Genetic Discovery. 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 seven 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 Department of Internal Medicine advances health through excellence in each of its core domains: education, patient care, and discovery. It does this by inspiring engaged faculty, encouraging innovative thinking, and building collaborative partnerships.

Departmental Divisions
- Cardiovascular Medicine
- Endocrinology
- Epidemiology
- General Internal Medicine
- Geriatrics
- Gastroenterology
- Hematology and Hematologic Malignancies
- Infectious Diseases
- Nephrology
- Oncology
- Pulmonary
- Rheumatology

Department Statistics

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>625</td>
</tr>
<tr>
<td>Residents</td>
<td>132</td>
</tr>
<tr>
<td>Clinical Fellows</td>
<td>90</td>
</tr>
<tr>
<td>Advanced Practice Clinicians</td>
<td>157</td>
</tr>
<tr>
<td>Research Funding (FY18)</td>
<td>$79.4M</td>
</tr>
</tbody>
</table>

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 26 percent of teaching, 21 percent of faculty, 22 percent of residents, and 39 percent of fellows within the School of Medicine. The department trains more than 130 residents annually in its categorical, preliminary, and combined Internal Medicine-Pediatrics residency programs. 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 among focused trainings that include global health and academic hospitalist tracks. The program emphasizes strategic curricular growth with active initiatives in safe opioid prescribing and monitoring, burnout prevention and resilience training, and health care policy and advocacy. Mentoring and opportunities for research are high priorities for the department. While in residency training, the 2017-2018 categorical IM graduates (n=32) participated in scholarship projects that resulted in 52 presentations at national/regional conferences and 23 publications indexed in PubMed. In addition, our 19 fellowship programs train nearly 100 fellows annually.

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 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 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 37,000+ new patients, 900,000 wRVUs, ~400 MDs, and ~160 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, and vasculitis. Skilled clinicians provide both routine and lifesaving care to patients living in Utah and across the five-state Mountain West region. One out of four department providers ranks in the top 1 percent nationally of all providers for our exceptional patient care experience.

Other

With 12 divisions, 600+ faculty, and more than 200 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.

Department Chair (Interim)
David J. Bjorkman, MD, MSPH, SM
Clarence M. and Ruth N. Birrer Presidential Endowed Chair • Professor, Internal Medicine • Residency: Internal Medicine, Brigham & Women’s Hospital • Fellowship: Gastroenterology, Brigham & Women’s Hospital • MD, University of Utah School of Medicine
NEUROBIOLOGY & ANATOMY

The Department of Neurobiology & Anatomy is vibrant and growing. It has significant 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.

Department Statistics

<table>
<thead>
<tr>
<th>Faculty</th>
<th>41</th>
<th>Faculty (22 primary, 19 adjunct)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Students</td>
<td>23</td>
<td>Graduate Students</td>
</tr>
<tr>
<td>Post-Doctoral Fellows</td>
<td>14</td>
<td>Post-Doctoral Fellows</td>
</tr>
<tr>
<td>Research Funding (FY18)</td>
<td>$7.6M</td>
<td>Research Funding (FY18)</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 are active in curriculum development, education scholarship, and innovation. Department faculty are recipients of multiple teaching awards.

Research

With 18 distinct labs, the department is active in numerous research environments. It specializes particularly in the neural basis of behavior, molecular signaling and development, synapses and circuits, mechanisms of disease, and genes and epigenetics. Department faculty also have significant leadership in three T32 training grant programs.

Other

The department is a basic science anchor for the institutional Neuroscience Initiative, with faculty serving key leadership roles in the Initiative. It is also an integral part of campus-wide neuroscience and developmental biology communities.

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.

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

Department Statistics

<table>
<thead>
<tr>
<th></th>
<th>Faculty (56 primary, 67 adjunct)</th>
<th>Residents</th>
<th>Post-Doctoral Fellows</th>
<th>Advanced Practice Clinicians</th>
<th>Research Funding (FY18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>123</td>
<td>21</td>
<td>6</td>
<td>13</td>
<td>$10.7M</td>
</tr>
</tbody>
</table>

Education

The neurology department trains the next generation of academic neurologists in eight accredited fellowship programs. 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 is currently ranked 33 nationally for total NIH funding ($10.7 in FY18). The broad research portfolio includes federally funded projects by NIH, FDA, and CDC.

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 Disease, Ataxia, ALS, muscular dystrophy, Tourette syndrome, and Huntington's disease. It is home to one of the nation’s largest telesstroke 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 • Residency: Neurology, Medizinische Hochschule Hanover and Harvard Medical School • MD, Medizinische Hochschule Hanover (Germany)
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>Count</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>53</td>
<td>Faculty (29 primary, 24 adjunct)</td>
</tr>
<tr>
<td>16</td>
<td>Residents</td>
</tr>
<tr>
<td>4</td>
<td>Post-Doctoral Fellows</td>
</tr>
<tr>
<td>11</td>
<td>Advanced Practice Clinicians</td>
</tr>
<tr>
<td>$3.0M</td>
<td>Research Funding (FY18)</td>
</tr>
</tbody>
</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.

Clinical
Clinically, the neurosurgery department is a national leader in neurosurgical oncology, skull base surgery, 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 • Residency: Neurosurgery, University of Southern California • MD, McGill University (Canada) • PhD, McGill 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

|                | 
|----------------|-------|
| 149            | Faculty (68 primary, 81 adjunct) |
| 24             | Residents                          |
| 10             | Post-Doctoral Fellows              |
| 12             | Advanced Practice Clinicians       |
| 3              | Students                           |
| $8.1M          | Research Funding (FY18)            |
| #22            | Dept. Funding Rank (NIH)           |

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, two institutional K12 awards (WHRH and Birwch), two individual career development awards, NIH R01, K24, and continued participation in the NICHD Maternal-Fetal Medicine Units Network (since 1996). In 2016, the department had 171 publications, including several in high-impact journals.

Clinical

OB/GYN provides nearly 94,000 patient encounters annually and performs an average of 3,360 deliveries per year. It strives to maintain common interdisciplinary goals for quality, and to serve the broad needs of women in the seven-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
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, postdoctoral fellows, and clinical fellows. This science will help improve cancer prevention, diagnostics, and therapeutics.

Department Statistics

<table>
<thead>
<tr>
<th>Faculty (16 primary, 25 adjunct)</th>
<th>Post-Doctoral Fellows</th>
<th>Students</th>
<th>Research Funding (FY18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>16</td>
<td>50</td>
<td>$11M</td>
</tr>
</tbody>
</table>

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 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. In 2018, the department and partner faculty 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 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-author papers from faculty include: *Nature, Cancer Cell, Nature Genetics, Cell Stem Cell, Nature Cell Biology, Science Translational Medicine*, and others.

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.

Department Chair
Bradley R. Cairns, PhD
Jon and Karen Huntsman Presidential Professor • Senior Director of Basic Science, 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 between Michigan and California, and offers a wide range of clinical subspecialties. The department houses 15 innovative research labs and a highly competitive education program. Moran has ranked among the nation's top 10 ophthalmology departments for NIH funding. Residency program directors have also ranked its residency program in the top 10.

Department Statistics

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>159</td>
<td>Faculty (65 primary, 90 adjunct)</td>
</tr>
<tr>
<td>11</td>
<td>Residents</td>
</tr>
<tr>
<td>10</td>
<td>Post-Doctoral Fellows</td>
</tr>
<tr>
<td>$8.6M</td>
<td>Research Funding (FY18)</td>
</tr>
<tr>
<td>#13</td>
<td>Dept. Funding Rank (NIH)</td>
</tr>
</tbody>
</table>

Education

Moran’s residency program has been recognized as a national model, and applications increased to 501 for four spots in 2018. The program offers extensive surgical experience. Nationally, residents are required to perform 86 cataract surgeries—the average is 140. Moran residents perform more than 345 cataract and 300 subspecialty surgeries.

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 nearly 80 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. Performing more than 7,000 surgeries and more than 140,000 clinic visits each year, Moran ranks among the country’s top 15 hospitals for ophthalmic 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 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

Department Statistics

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>97</td>
<td>Faculty (56 primary, 41 adjunct)</td>
</tr>
<tr>
<td>26</td>
<td>Residents</td>
</tr>
<tr>
<td>13</td>
<td>Ortho Fellows</td>
</tr>
<tr>
<td>3</td>
<td>Post-Doctoral Fellows</td>
</tr>
<tr>
<td>14</td>
<td>Advanced Practice Clinicians</td>
</tr>
<tr>
<td>$3.6M</td>
<td>Research Funding (FY18)</td>
</tr>
<tr>
<td>#1</td>
<td>Dept. Funding Rank (NIH)</td>
</tr>
</tbody>
</table>

Additionally, department faculty serve on 36 PhD student committees and are primary advisors to seven PhD students and three PhD postdoctoral students across campus.

Research

Orthopaedics continually advances its field through scientific investigation. The department is currently ranked No. 1 nationally in total NIH funding ($3.6 million, FY18). The department published 208 peer-reviewed papers in 2018. External research awards included funding from the NIH, US 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, and the United States Olympic Committee.

Education

The orthopaedics department is dedicated to excellence in educating the next generation of musculoskeletal care providers and educators. In 2018, they trained 26 residents and 13 fellows.
PATHOLOGY

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

- 216 Faculty (122 primary, 94 adjunct)
- 19 Residents
- 39 Post-Doctoral Fellows (27 clinical, 12 research)
- 118 Students (34 PhD, 22 MS, 62 BS)
- 4 Advanced Practice Clinicians
- $13.1M Research Funding (FY18)
- #20 Dept. Funding Rank (NIH)

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 16 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 supports the department’s anatomic and clinical pathology services for University of Utah Health, including more than 75,000 surgical pathology and cytology cases at Huntsman Cancer Institute. The department has generated numerous spinoff 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
- Critical Care
- Diabetes & Endocrinology
- Emergency Medicine
- Gastroenterology, Hepatology, & Nutrition
- General Pediatrics
- Hematology & Oncology
- Infectious Diseases
- Inpatient Medicine
- Medical Ethics
- Medical Genetics
- Neonatology
- Nephrology & Hypertension
- Neurology
- Physical Medicine & Rehabilitation
- Psychiatry & Behavioral Health
- Pulmonary & Sleep Medicine
- Rheumatology

**Department Statistics**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>555</td>
<td>Faculty (310 primary, 245 adjunct)</td>
</tr>
<tr>
<td>83</td>
<td>Residents</td>
</tr>
<tr>
<td>63</td>
<td>Subspecialty Fellows</td>
</tr>
<tr>
<td>8</td>
<td>Post-Doctoral Fellows</td>
</tr>
<tr>
<td>26</td>
<td>Advanced Practice Clinicians</td>
</tr>
<tr>
<td>$39.4M</td>
<td>Research Funding (FY18)</td>
</tr>
<tr>
<td>#20</td>
<td>Dept. Funding Rank (NIH)</td>
</tr>
</tbody>
</table>

**Education**

The department educates 83 residents each year in categorical pediatrics, medicine-pediatrics, triple board (pediatrics, child psychiatry, and general psychiatry), and child neurology. Fellowship programs are available in 12 pediatric subspecialties that are nationally recognized for preparing outstanding pediatric clinician scientists. Department trainees have opportunities to participate in global and rural child health care through formal partnerships with Indian Health Services in Chinle, Arizona; the University Teaching Hospital in Rwanda; and Kamuzu Central Hospital in Malawi, Africa. These locations are included in the department’s Global, Rural, and Child Health fellowship. The Department of Pediatrics is one of only four sites nationally to participate in 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 based on competency-based performance instead of time-based education.

Research
The strength of the department's research activities is reflected by nearly $40 million in annual funding and a current total funded portfolio in excess of $120 million. Research involvement includes an integrated research cycle of discovery science, clinical-translational research, and health services investigation. 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), the NHTSA-funded National EMS Information System (NEMSIS), and data coordinating centers for 13 national networks funded by NIH and philanthropy.

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. These three research components include the Pediatric Cardiac Genomics Consortium (PCGC), the Cardiovascular Development Consortium (CvDC), and the Pediatric Heart Network (PHN). In addition, the department is one of only four in the country participating in the American Heart Association Strategically Focused Children's Research Network. The department also participates in the NCATS Trial Innovation Network as one of only three Trial Innovation Centers in the United States, providing clinical research support to CTSA institutions across the country. The department was one of the Vanguard centers in the National Children's Study and is currently a major site in the Environmental Influences on Child Health Outcomes (ECHO) study.

Clinical
The department serves over two million children across the Mountain West through its well-established partnership with Primary Children's Hospital (PCH), a 289-bed, non-profit children's hospital on the U of U Health campus. Over 300 faculty in 19 divisions provide patient care in all areas of general and subspecialty pediatrics, and the hospital serves as the primary inpatient and outpatient specialty-teaching site for the department's residency programs. Department and PCH joint programs are consistently ranked among the nation's top, with 10 outstanding clinical programs cited by U.S. News & World Report. Additionally, the Department of Pediatrics collaborates with the U of U Community Physicians Group, and its primary care clinics play a significant role in U of U Health. The department’s South Main Clinic 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, 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
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.

Division Statistics

<table>
<thead>
<tr>
<th>54</th>
<th>Faculty (33 primary, 21 adjunct)</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Residents</td>
</tr>
<tr>
<td>7</td>
<td>Advanced Practice Clinicians</td>
</tr>
<tr>
<td>$466,178</td>
<td>Research Funding (FY18)</td>
</tr>
</tbody>
</table>

Clinical

PM&R provides specialized, individualized care for a variety of conditions including brain injury, stroke, spinal cord injury, polytrauma, spasticity, and amputation. It is the only inpatient rehabilitation program in the Mountain West region with Hospital CARF certification for adults, children, and adolescents. It also holds subspecialty certification in spinal cord injury, stroke, traumatic brain injury, and comprehensive outpatient rehabilitation. The inpatient Rehabilitation Center is ranked among the nation’s Top 20 Rehabilitation Hospitals by U.S. News & World Report. In 2020, the division will move into the new 75-bed Craig H. Neilsen Rehabilitation Hospital being constructed on campus.

Research

PM&R faculty are currently participating in several research projects focusing on neurorehabilitation, to improve fitness and function, prevent sport injuries, reduce pain, and improve medical techniques. Faculty members also participate in translational neurotrauma research and collaborate with various departments locally as well as with medical centers 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.

Other

The division enjoys a collaborative and integrated work environment through close association with other departments including orthopaedics, neurosurgery, and radiology. 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.

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
POPULATION HEALTH SCIENCES

The 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 clinical professionals 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 Statistics

<table>
<thead>
<tr>
<th>Count</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>Faculty (18 primary, 36 adjunct)</td>
</tr>
<tr>
<td>10</td>
<td>Post-Doctoral Fellows</td>
</tr>
<tr>
<td>16</td>
<td>Students</td>
</tr>
<tr>
<td>$7M</td>
<td>Research Funding (FY18)</td>
</tr>
</tbody>
</table>

Education

There are very few PhD programs in Population Health Sciences that are housed in a medical school. The department joins the elite few nationwide to offer health systems research, clinical and translational epidemiology, and biostatistics. The 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, and outcomes. Its 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 four years old. Fewer than 10 Departments of Population Health exist in medical schools nationwide.

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

| Faculty (122 primary, 169 adjunct) | 291 |
| Residents                      | 46  |
| Post-Doctoral Fellows          | 9   |
| Advanced Practice Clinicians   | 10  |
| Research Funding (FY18)        | $8.7M |

Education

The psychiatry department provides teaching for medical students in psychiatry and provides high-quality training for residents and fellows from around the US and the world. The department has seen continued growth in its education and training mission with the recent expansion to 36 general psychiatry positions, six child psychiatry positions, 10 triple board positions, two addiction psychiatry fellowship positions, and a new addiction medicine fellowship.

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. Over the last three years, NIH funding has increased in the department by more than 300 percent. Current projects include the genetics of psychiatric disorders, 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 the illnesses’ co-occurrence with healthy and pathological aging or conditions such as chronic pain.

Clinical

The department supports mental and behavioral health services throughout U of U Health and the surrounding community. This includes providing clinical expertise at the University Neuropsychiatric Institute (UNI), University of Utah Hospital, and a continuum of outpatient services within UNI and outlying community health centers.

Other

UNI received the Press Ganey 2017 Guardian of Excellence Award. The psychiatry faculty are highly regarded for exceptional patient care and the vast majority of clinical faculty are rated nationally at or above the 90th percentile for exceptional patient experience.

Department Chair
Jon-Kar Zubieta, MD, PhD
William H. and Edna D. Stimson Presidential Endowed Chair • Psychiatrist in Chief, University of Utah Neuropsychiatric Institute • Professor, Psychiatry • MD, Universidad del Pais Vasco (Spain) • PhD, Universidad del Pais Vasco • Residency: Psychiatry, University of Michigan • Fellowship: Nuclear Medicine, University of Michigan, Johns Hopkins
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

<table>
<thead>
<tr>
<th>30</th>
<th>Faculty (22 primary, 8 adjunct)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Residents</td>
</tr>
<tr>
<td>$1.5M</td>
<td>Research Funding (FY18)</td>
</tr>
</tbody>
</table>

Education

The department hosts a medical residency program and a division of medical physics program that are highly competitive. Students in these programs have achieved a 100 percent Oral Board pass rate for 10 years. Research is emphasized, and all graduating residents have several published papers. Nearly half of graduating residents go into academic practice.

Research

The radiation oncology department participates in clinical trials with several national cooperative groups such as Southwest Oncology Group and has active leadership roles in NRG Oncology and the Children’s Oncology Group. It also has been awarded the prestigious U10 grant, along with R01 and R21 funding. Faculty are recognized experts in their respective subspecialties.

Clinical

With 10 board-certified radiation oncologists, as well as a full complement of physics, dosimetry, radiation therapy, and nursing support personnel, the department provides comprehensive radiation therapy services. Faculty includes nationally recognized leaders in all subspecialties of radiation oncology. The most modern treatments are available. A strong emphasis is placed on multidisciplinary care. The department 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 Services offers every clinical imaging subspecialty and provides advanced technology to diagnose and treat disease. Our highly skilled team of radiologists, nurses, and technologists perform nearly half a million procedures and studies each year. We improve health care through imaging practice, research investigation, and education.

Department Statistics

| 151 Faculty (64 primary, 87 adjunct) |
| 26 Residents |
| 13 Post-Doctoral Fellows |
| 7 Advanced Practice Clinicians |
| $5.7M Research Funding (FY18) |

Education

The department’s life-long educational efforts reach far beyond its trainees. In addition to having a residency program 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 for neuroradiology and OB/GYN imaging.

Research

The radiology department’s research enterprise stretches from clinical and translational studies to math and physics research in imaging sciences. The Utah Center for Advanced Imaging Research (UCAIR) specializes in MRI methods and image reconstruction research, while nuclear medicine researchers pioneer radiotracers and make them available to the world. The department collaborates widely with investigators from the health sciences and main campus. A particular research focus is to translate science and engineering developments into unique clinical services. 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, breast imaging, cardiothoracic imaging, musculoskeletal imaging, neuroradiology, and nuclear medicine. 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 anatomy and radiology products like STATdx, RADPrimer, ImmunoQuery, and AnatomyOne.

Department Chair
Satosh 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
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

| 315 | Faculty (170 primary, 145 adjunct) |
| 97  | Residents                        |
| 14  | Post-Doctoral Fellows            |
| 101 | Advanced Practice Clinicians     |
| $10.5M | Research Funding (FY18) |

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 more than 300 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 region.

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

Samuel R.G. Finlayson, MD, MPH

Professor, Surgery • MD, Harvard Medical School • MPH, International Health, Harvard School of Public Health • Residency: General Surgery, Massachusetts General Hospital
VISION FOR THE FUTURE
U of U Health has a legacy of innovation that has benefitted patients not just here in Utah but around the world. However, our most 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.

Utah is growing rapidly. With the rising costs of health care, it is now more important than ever to keep our communities healthy. While we at U of U Health envision ourselves as stewards of our community’s health, we know the overall health of our community is a shared responsibility.

At U of U Health, we also have a strong legacy and pervasive culture of innovation across our departments. With a variety of interdisciplinary programs in research, patient care, and education, faculty and staff continue to cross boundaries and create partnerships to advance health. Building upon programs in precision medicine, biomedical engineering, population health, global health, and more, we continue to discover and create new approaches to health care.

Best of all, we are One University—proximal to our academic peers. This enhances our ability to expand solutions to society’s most pressing problems. Partnering with our colleagues on the main campus, great minds at our institution are figuring out the best ways to address the health care and access the needs of the medically underserved. We’re learning to better manage issues such as homelessness and how to solve numerous environmental, economic, and social issues.

U of U Health is rare among our peers as our comprehensive research university and vibrant academic medical center are co-located, within short proximity of one another. This good fortune allows collaboration between health sciences and our academic peers across the university. 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 are moving the needle in the state and impacting national policy. 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.
If you note rankings or statistics that need to be updated, please contact a member of the Strategic Communications Team.