

LIFE SCIENCES

IN UTAH



Personalized Medicine, Medical Devices, World Class Research

Industry

- Utah is proud to be home to companies like **Merit Medical Systems, BD (Becton Dickinson), Edwards Lifesciences, Varex Imaging, BioMérieux**, and many others. Utah is one of the top states in the nation for life science employment with an employee base of over 47,000 people.
- Utah's efforts to align education and industry include the **Medical Innovations Pathway**, which provides high school students with opportunities in life science career paths, and **BioHive** and **BioUtah**, two trade associations serving the life science industry to advance innovation for life science companies in Utah.
- Utah has a robust medical device manufacturing industry. Utah offers a world-class effort in arterial and vascular access devices, **producing 70% of all devices used worldwide**.



Business Climate

- US News ranked Utah the **#1 Best State Overall in 2023**. Utah also ranked 1st in Economy and Fiscal Stability.

ON THE COVER

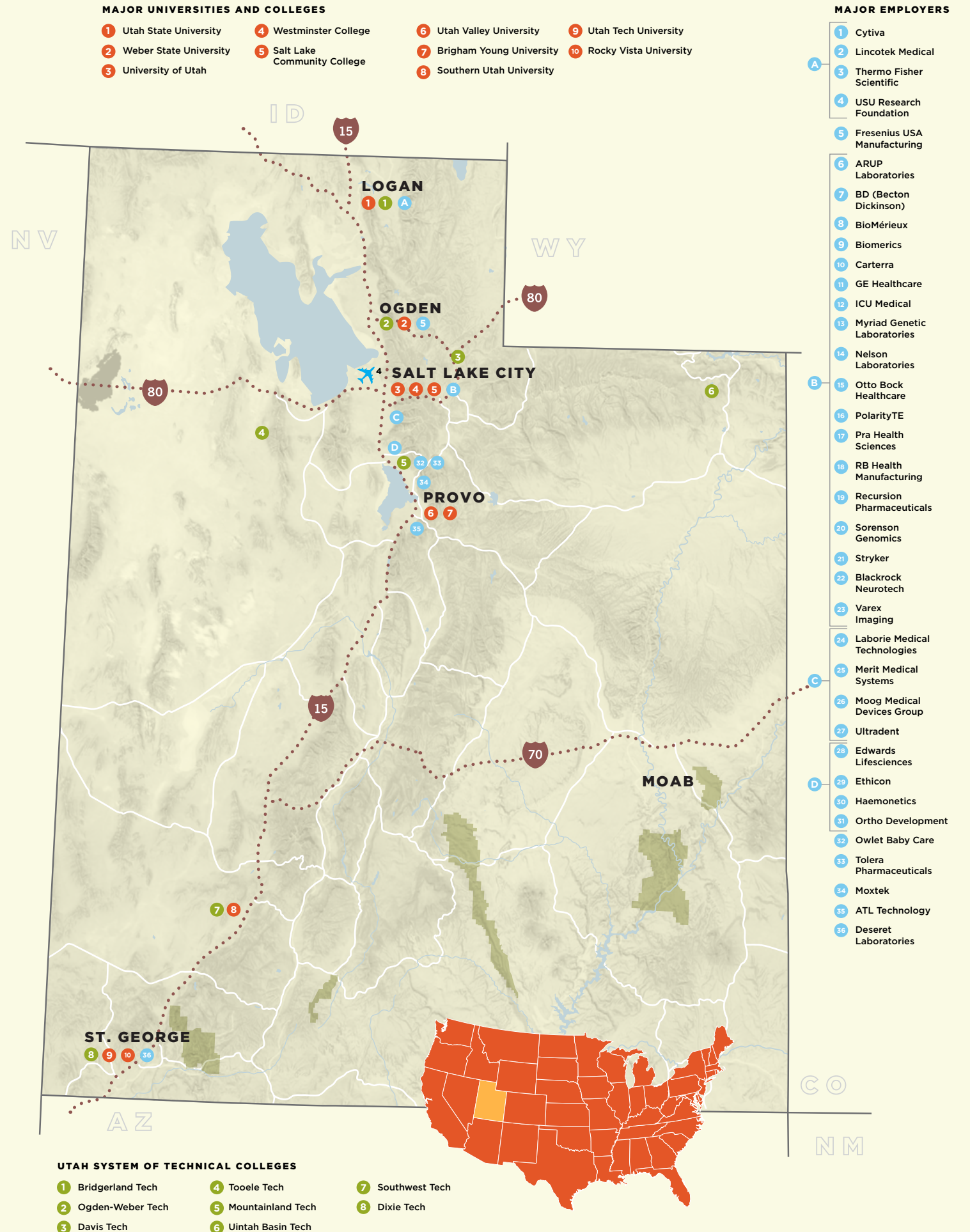
Edwards Lifesciences Sapien 3 Heart Valve

The Edwards Sapien 3 Transcatheter Heart Valve is changing the world of aortic stenosis therapy. In 2016 the Sapien 3 received FDA approval for expanded use in the treatment of intermediate-risk patients. The valve has the highest survival rate ever reported in a TAVI clinical trial.

- In 2022, Utah's post-performance tax incentives program facilitated over **9,600 new jobs and more than \$760M in new state revenues**.
- In 2023, the Tax Foundation ranked Utah's Total Tax Climate as the **8th best in the nation**. Since 2011, Utah has eliminated or modified over 400 business regulations to ease the burdens placed on businesses.

Workforce

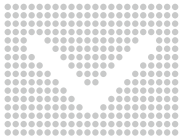
- Utah has high employee concentrations in **medical equipment and supplies manufacturing, pharmaceutical and medicine manufacturing, biomedical engineers**, and many other life science related industries and occupations.
- There are a wealth of life science education resources in Utah, with **11 institutions offering programs related to life science**. Additionally, Utah has a medical, dental, pharmacy, and nursing school at the University of Utah.
- Utah has an abundance of medical device manufacturing companies with more than **12,000 people employed in the industry**. Utah has industry recognized expertise in medical device manufacturing.



Major Life Sciences Employers

| COMPANY | EMPLOYEES* | DESCRIPTION |
|---------------------------------------|----------------------|--|
| ARUP Laboratories | 3000-3999 map #6 | ARUP Laboratories is a national clinical and anatomic pathology reference laboratory and is a nonprofit enterprise of the University of Utah. |
| ATL Technology | 100-249 map #35 | ATL Technology is a medical device engineering and manufacturing company that produces custom interconnect devices and single use medical devices. |
| BD (Becton Dickinson) | 1000-1999 map #7 | BD (Becton Dickinson) manufactures and sells a broad range of medical supplies, devices, laboratory equipment and diagnostic products. |
| BioMérieux | 1000-1999 map #8 | BioMérieux, formerly BioFire Diagnostics, provides infectious disease diagnostics and molecular solutions that lessen the time to medical results. |
| Biomerics | 250-499 map #9 | Biomerics is a contract manufacturer that specializes in the design, development, and production of medical devices for diagnostic and interventional procedures. |
| Blackrock Neurotech | 100-249 map #22 | Blackrock Microsystems engineers neural implants, including implantable brain-computer interface technology for those with neurological disorders. |
| Carterra | 50-99 map #10 | Carterra is a leading provider of innovative technologies designed to accelerate the discovery of novel therapeutic candidates. |
| Cytiva (A Danaher Company) | 500-999 map #1 | Cytiva, a Danaher company, is a global provider of technologies and services that advance and accelerate the development and manufacture of therapeutics. |
| Deseret Laboratories | 100-249 map #36 | Deseret Laboratories provides production facilities from which to deliver agglomeration, instatization, blending, tableting, hard shell encapsulation, coating, bottling, liquid filling, powder filling, packeting, vertical form, and fill pouching. |
| Edwards Lifesciences | 1000-1999 map #28 | Edwards Lifesciences is a global leader in the science of heart valves and hemodynamic monitoring. |
| Ethicon (A Johnson & Johnson Company) | 50-99 map #29 | Ethicon, a Johnson & Johnson company, has manufactured surgical sutures and wound closure devices since 1887, producing 70% of such devices worldwide. |
| Fresenius USA Manufacturing | 1000-1999 map #5 | Fresenius USA Manufacturing offers specialty pharmacy and laboratory services, as well as manufactures and distributes dialysis equipment, disposable products, and renal pharmaceuticals. |
| GE Healthcare | 250-499 map #11 | GE Healthcare provides expertise in medical imaging, medical diagnostics, patient monitoring systems, drug discovery, biopharmaceutical manufacturing technologies, and other services. |
| Haemonetics | 50-99 map #30 | Haemonetics portfolio of devices, information management, and consulting services offers blood management for each facet of the blood supply chain—from plasma and blood collectors to hospitals. |
| ICU Medical | 500-999 map #12 | ICU Medical offers needle-free vascular access devices, custom infusion sets, closed system hazardous drug handling devices and systems, and other products and services. |
| Laborie Medical Technologies | 100-249 map #24 | Laborie Medical Technologies is a global developer and manufacturer of medical technologies and consumables used in the Urology, Gynecology, and Colorectal fields. |
| Lincotek Medical | 50-99 map #2 | Lincotek Medical is a global contract manufacturer for various medical fields such as orthopedic, trauma, spine, and dental devices. |

*SOURCE: Utah Department of Workforce Services



Edwards Lifesciences delivery system for Intuity Elite Rapid Deployment Valve

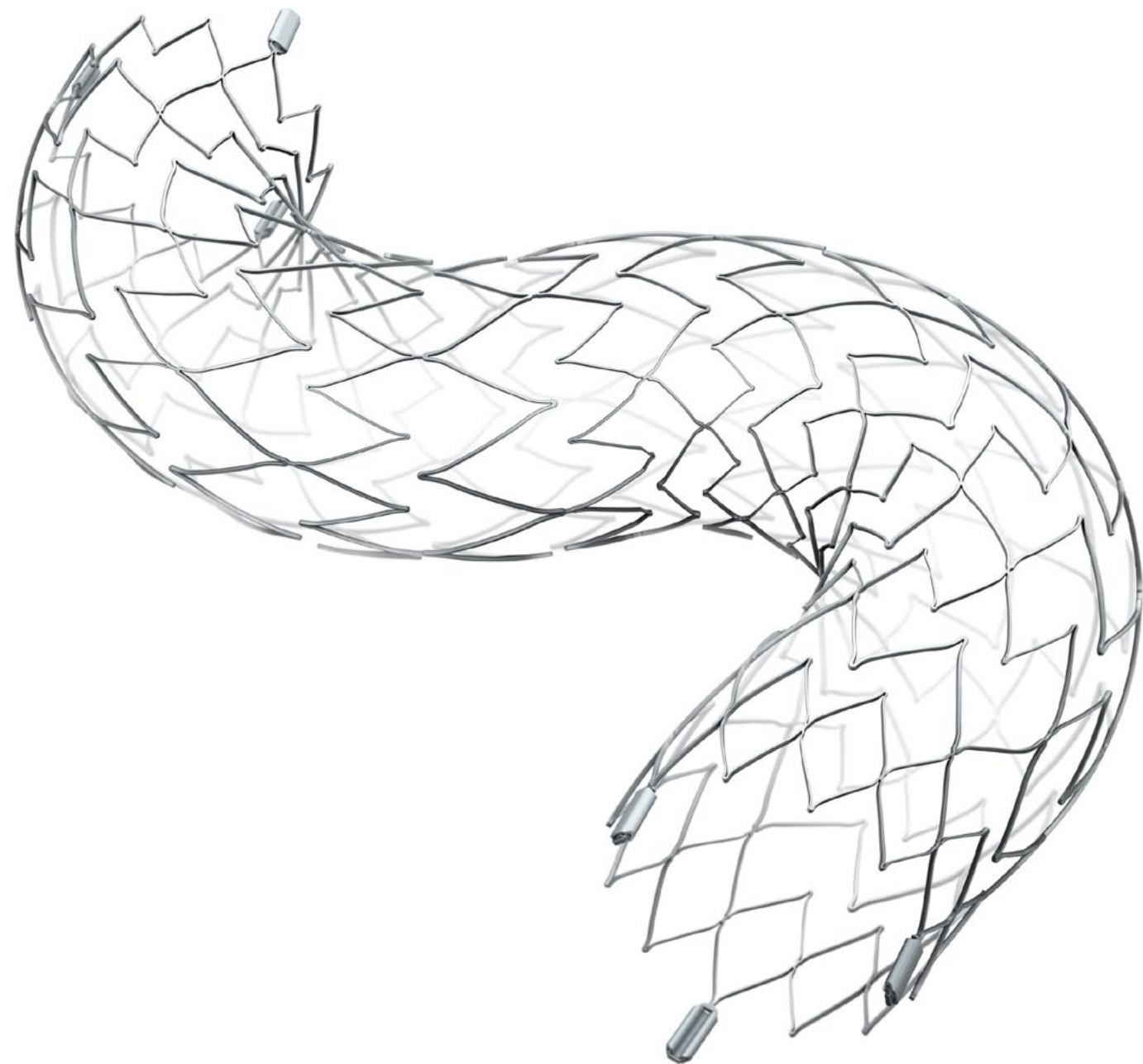


GE Healthcare PET / CT scanner



| COMPANY | EMPLOYEES* | DESCRIPTION |
|-----------------------------|----------------------|--|
| Merit Medical Systems | 1000-1999 map #25 | Merit Medical Systems is engaged in the development, manufacturing, and distribution of disposable medical devices used in interventional and diagnostic procedures. |
| Moog Medical Devices Group | 100-249 map #26 | Moog Medical Devices designs and develops advanced infusion systems that improve medication safety, optimize application performance, and reduce medical expenses. |
| Moxtek | 250-499 map #34 | Moxtek is a supplier of advanced nano-optical and X-ray components for display electronics, imaging and analytical instrumentation. |
| Myriad Genetic Laboratories | 500-999 map #13 | Myriad Genetic Laboratories develops and markets molecular diagnostic tests that address pressing clinical needs across multiple medical specialties. |
| Nelson Laboratories | 500-999 map #14 | Nelson Laboratories provides full, life-cycle microbiology testing services for the medical devices, pharmaceutical, tissue, and natural products industries. |
| Ortho Development | 100-249 map #31 | Ortho Development designs and manufactures implants and surgical instruments for knee and hip replacement, trauma fracture repair, and spine treatment. |
| Otto Bock Healthcare | 100-249 map #15 | Otto Bock Healthcare manufactures prostheses, braces and orthoses, children's wheelchairs, cushions, and accessories. |
| Owlet Baby Care | 50-99 map #32 | Owlet Baby Care is a health technology company. Their flagship product is the Smart Sock Baby Monitor which uses pulse oximetry technology to track heart rate and oxygen levels during sleep. |
| PolarityTE | 50-99 map #16 | PolarityTE is a commercial-stage biotechnology company that develops regenerative tissue products and biomaterials. |
| Pra Health Sciences | 100-249 map #17 | Pra Health Sciences specializes in clinical research, therapeutic expertise, biosimilars, bioanalytical laboratories, rare disease, and oncology. |
| RB Health Manufacturing | 250-499 map #18 | RB Health Manufacturing is a producer and manufacturer in the pharmaceutical manufacturing industry. |
| Recursion Pharmaceuticals | 250-499 map #19 | Recursion Pharmaceuticals combines artificial intelligence and automation to conduct experimental biology at scale. |
| Sorenson Genomics | 100-249 map #20 | Sorenson Genomics is an independent, nationally and internationally accredited Human Genomics DNA Testing Laboratory. |
| Stryker | 500-999 map #21 | Stryker offers a diverse array of products and services in orthopaedics, medical, surgical, neurotechnology, and spine that help improve patient and hospital outcomes. |
| Thermo Fisher Scientific | 500-999 map #3 | Thermo Fisher Scientific provides innovative analytical instruments, lab equipment, and specialty diagnostics that provide rapid and accurate results. |
| Tolero Pharmaceuticals | 20-49 map #33 | Tolero Pharmaceuticals is a clinical stage biopharmaceutical company developing treatments for patients with oncological and hematological diseases. |
| Ultradent Products | 1000-1999 map #27 | Ultradent Products develops, manufactures, and markets a full range of dental products to meet the needs of the dental industry. |
| USU Research Foundation | 500-999 map #4 | USU Research Foundation is a nonprofit organization whose mission is to bridge the gap between conceptual research and its development and deployment. |
| Varex Imaging | 1000-1999 map #23 | Varex Imaging is the world's largest independent supplier of medical x-ray tubes and image processing products. |

*SOURCE: Utah Department of Workforce Services



Stryker's Neuroform EZ Stent System is engineered for consistent conformability, flexibility, and accessibility.



Merit Medical's Wrapsody endovascular stent graft system. In late 2019 the FDA granted a breakthrough device designation for the system, paving the way for faster development.



Recent Announcements



Dental Manufacturing Company Dandy Bringing Jobs to Utah (2023)
Claire Manufacturing I, Inc (Dandy) announced plans to to bring up to 200 new high-paying jobs and nearly \$11 million in capital investment in Utah over the next eight years. Claire Manufacturing I, Inc is a newly formed subsidiary of Zima International, Inc. doing business as Dandy. Its mission is to create best-in-class dental restorations at a brand new, state-of-the-art in-house dental lab manufacturing facility in Utah.

Cytiva Expands its Utah Office (2021)
Cytiva announced it will expand its manufacturing operations in Utah, creating up to 396 new high-paying jobs and \$231 million in capital investment over the next ten years. Cytiva is a global provider of technologies and services that advance and accelerate therapeutics’ development and manufacture. Its customers undertake life-saving activities ranging from fundamental biological research to developing innovative vaccines, biologic drugs, and novel cell and gene therapies. This is Cytiva’s third expansion in Utah in the last three years.

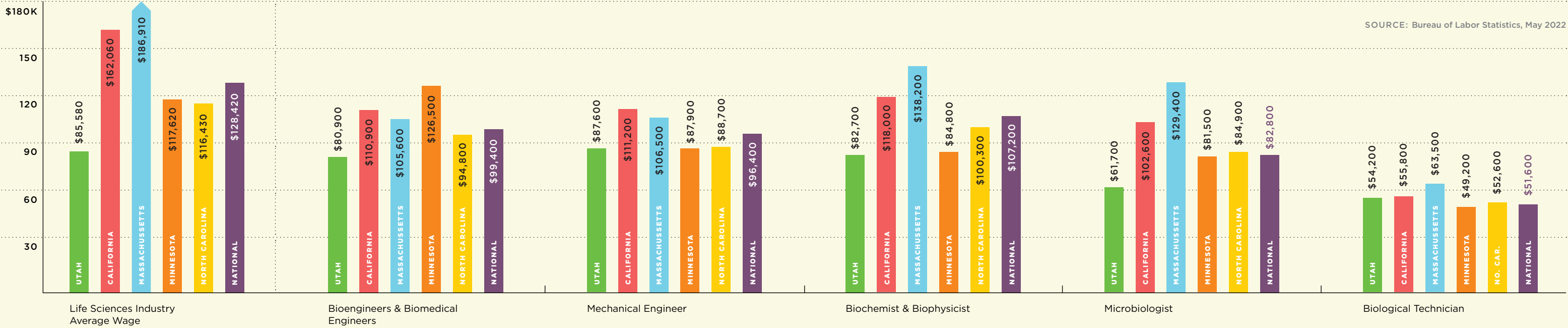
Denali Therapeutics Adding a Utah Office (2021)
Denali Therapeutics, Inc announced plans to open an office in Utah, potentially adding up to 100 new high-paying jobs and \$40 million in capital investment in the state over the next 10 years. Denali is a biotechnology company focused on discovering, developing, manufacturing, and ultimately commercializing medicines to treat neurodegenerative diseases such as Alzheimer’s, Parkinson’s, ALS, lysosomal storage diseases, and more. Denali has developed a proprietary drug technology platform to allow for the transportation of drugs across the blood-brain barrier and into the brain.

GE Healthcare Life Sciences Expands in Utah (2019)
GE Healthcare Life Sciences will expand its operations in Utah. GE Healthcare Life Sciences plans to create as many as 68 new jobs in the next five years. GE Healthcare manufactures and distributes diagnostic imaging agents and radiopharmaceuticals for imaging technologies used in medical imaging procedures. The company develops health technology for medical imaging, diagnostics, patient monitoring systems, disease research and biopharmaceutical manufacturing.

Merit Medical Expands in Utah (2018)
Merit Medical Systems, Inc will expand in Utah, adding up to 1,010 jobs, \$71 million in state revenue and an estimated \$505 million in capital investment. Merit Medical is a leading manufacturer and marketer of disposable medical devices used in intervention, diagnostic and therapeutic medical procedures. The company offers products in cardiac, intervention, peripheral intervention, interventional oncology and spine, cardiovascular, and critical care and endoscopy. The company has manufacturing and research and development facilities in seven countries around the world with their worldwide headquarters located in South Jordan.

Cost Profile

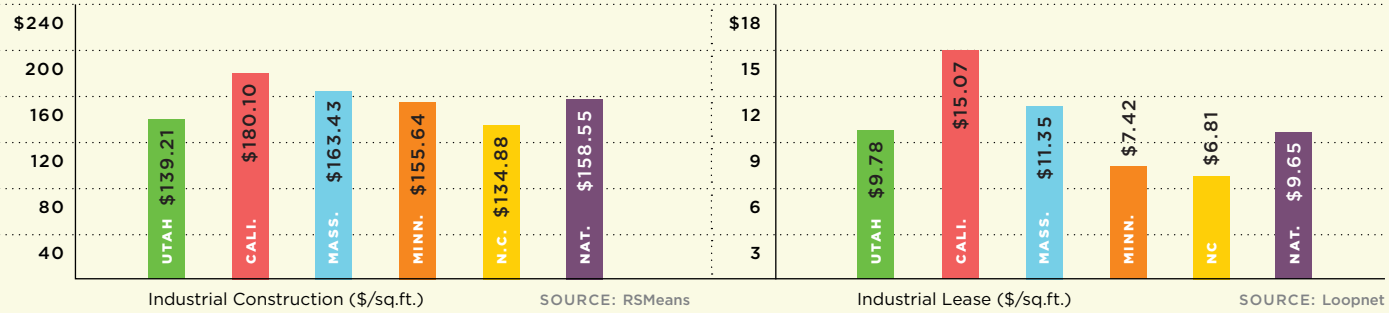
Occupational Wages in Life Sciences



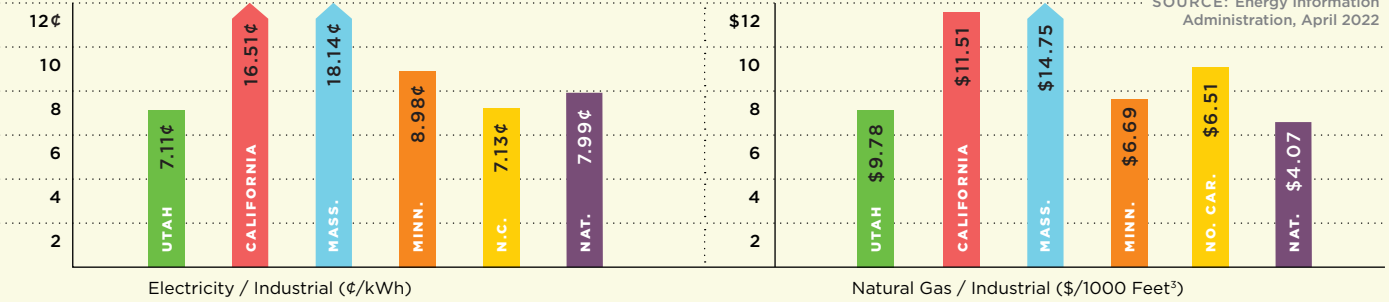
Other Comparative Wages in Life Sciences

| OCCUPATION | UTAH | CALIFORNIA | MASSACHUSETTS | MINNESOTA | NORTH CAROLINA | NATIONAL |
|--|-----------|------------|---------------|-----------|----------------|-----------|
| Industrial Production Manager | \$101,400 | \$120,300 | \$132,100 | \$108,300 | \$109,800 | \$113,300 |
| Chemical Engineers | \$80,400 | \$109,800 | \$112,400 | \$119,500 | \$107,200 | \$113,900 |
| Chemists | \$72,800 | \$88,200 | \$105,200 | \$86,800 | \$76,600 | \$86,200 |
| Chemical Technicians | \$46,900 | \$52,400 | \$60,300 | \$53,800 | \$50,000 | \$53,800 |
| Clinical Lab Technologists & Technicians | \$50,400 | \$67,800 | \$63,700 | \$61,400 | \$52,400 | \$59,300 |
| Chemical Equipment Operators & Tenders | \$40,200 | \$52,200 | \$53,200 | \$48,500 | \$50,300 | \$52,200 |
| Medical Appliance Technicians | \$40,400 | \$50,400 | \$60,100 | \$54,200 | \$43,500 | \$48,000 |

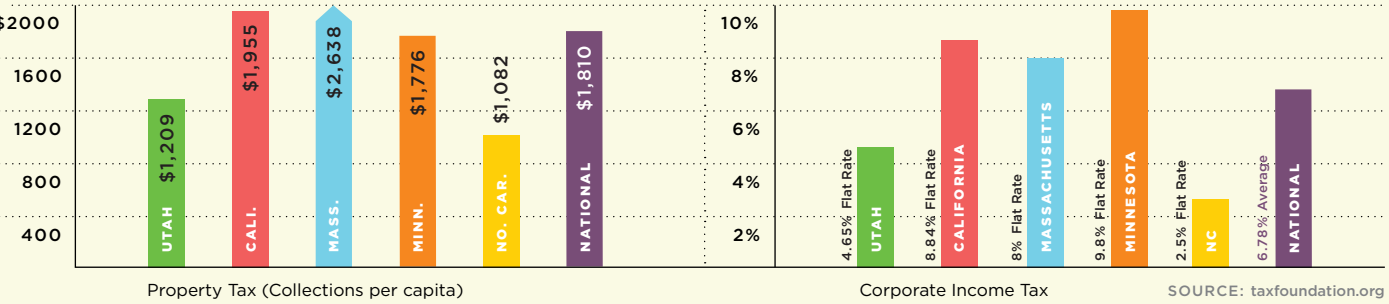
Real Estate



Utilities



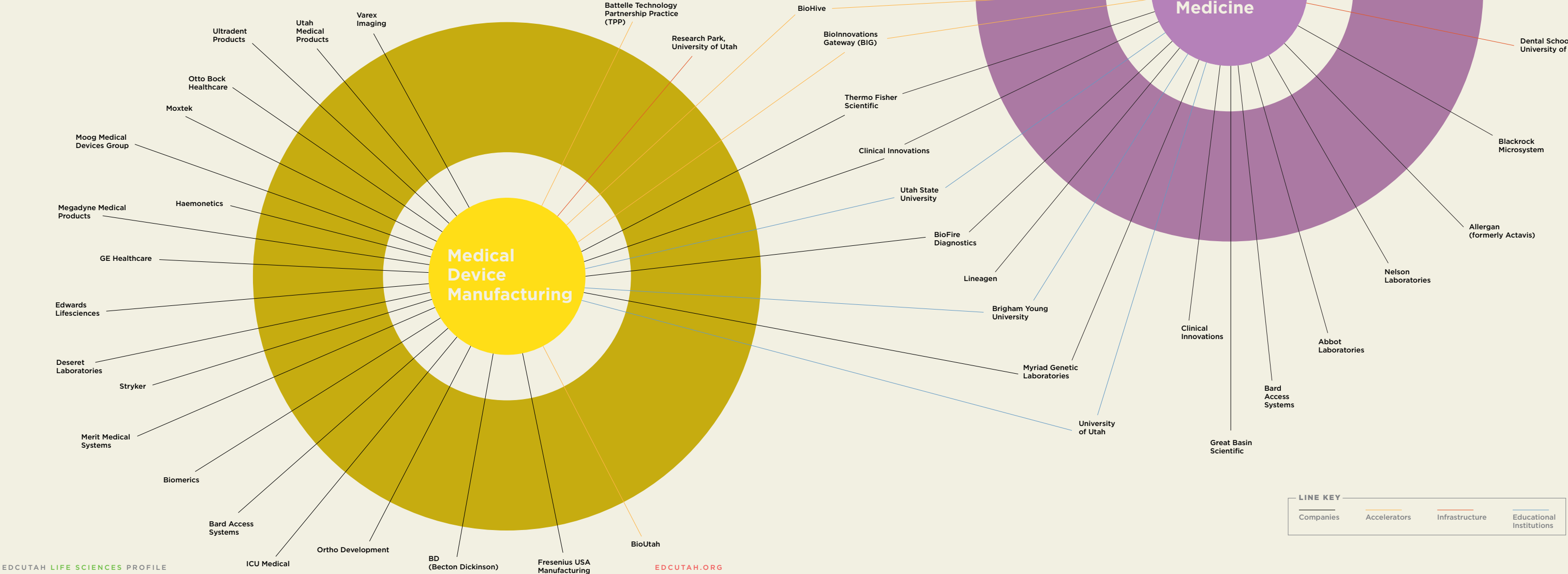
Taxes



Areas of Excellence

“Areas of Excellence” are industry sub-sectors in which Utah has a competitive advantage due to our infrastructure, trained workforce, historical expertise, and community support. The diagram below shows the collaboration and interrelationship of Utah’s business accelerators, educational institutions, government initiatives, and companies within the life science industry.

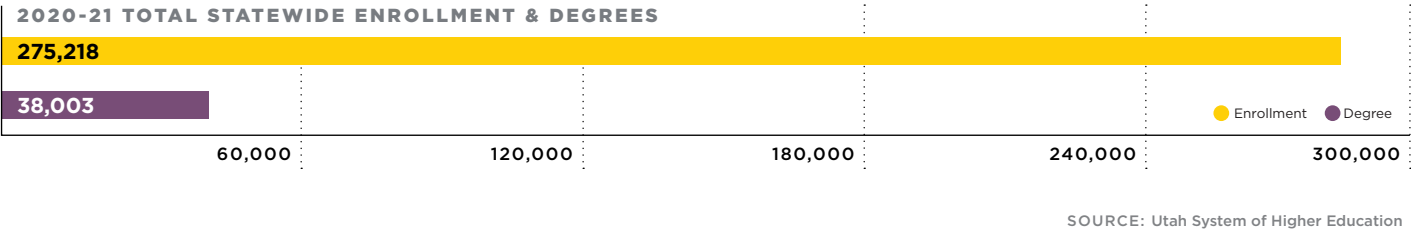
- 1 **BioUtah** is a trade association serving the life science industry to enable success and advance innovation for life science companies in Utah.
- 2 **BioHive** is an industry association representing more than 1,100 companies in the life science and healthcare innovation ecosystem in Utah. Their purpose is telling the story of the nation’s fastest growing life science hub to Utah, the nation, an the world.
- 3 **Battelle Technology Partnership Practice (TPP)** has been involved in analyzing Utah’s life science industry and research and development base to identify gaps in the state’s life science infrastructure and facilitate the development of strategies and actions.
- 4 **BioInnovations Gateway (BiG)** is an educational institution and workforce training facility that provides access to laboratories, machines, office space, and resources for high school students and entrepreneurs.
- 5 **University of Utah Therapeutics Accelerator Hub (U2TAH)** was created to enable innovative therapies emerging from discoveries made at the University of Utah to reach patients with unmet medical needs in a more efficient and timely manner.



Education & Labor

A State of Education

Utah is home to **12 major colleges and universities** and has an excellent talent pipeline of over **275,000** students. Bachelor's and graduate awards grew by **17% over the last five years**. Utah has an educated workforce, with over 93% of the population 25 or over with a high school diploma and over **36.8%** with a bachelor's degree.



TOP THREE INSTITUTIONS WITH LIFE SCIENCE-RELATED DEGREES

State of Utah
DEGREE: Medical Innovations Pathway

The Medical Innovations Pathway program provides high school students with the skills required to create career opportunities within Utah's life science industry. Students receive certifications in programs related to medical devices and equipment as well as research, testing, and medical labs.

Brigham Young University
DEGREE: Genetics, Genomics, and Biotechnology

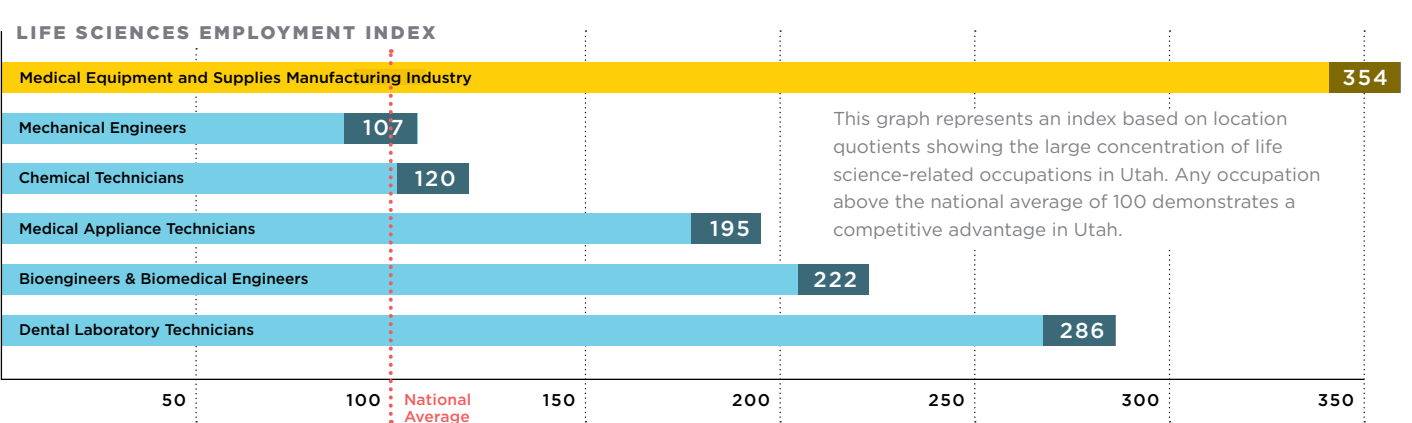
Students who major in Genetics, Genomics, and Biotechnology follow one of four tracks. Each track includes a comprehensive core of genetics, biology, and chemistry courses. The tracks include Biomedical Genetics, Bio-Business, Plant Genetics & Biotechnology, and Microbial Genetics & Biotechnology.

University of Utah
DEGREE: Medical Laboratory Science

The Medical Laboratory Sciences division includes two baccalaureate and one master of science degree programs, including a BS in Medical Laboratory Sciences, BS in Cytotechnology, and Master of Science in Laboratory Medicine and Biomedical Science.

The Labor Picture

Utah's labor force is well educated, growing, and affordable. Utah **created over 60,000 jobs in 2022**, and maintained one of the highest job growth rates in the nation throughout the year. Utah is the youngest state in the nation with a median age of 31.8, and has an average wage of \$57,300, which is **7% lower than the national average**.



University of Utah Health Care is the Intermountain West's only academic health care system, combining excellence in patient care, the latest in medical research and teaching to provide leading-edge medicine in a caring and personal setting. The system provides care for Utahns and residents of five surrounding states in a referral area encompassing more than 10% of the continental United States.



EDCUtah questions?
Call Scott Cuthbertson,
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Project questions?
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Vice President of
Business Development:
801-323-4243



Research questions?
Call Michael Stachitus,
Director of Research:
801-323-4253

Have questions about the life science industry in Utah?
Call us at 1-800-574-8824.
