

FALL 2018

THE MAGAZINE OF THE UNIVERSITY OF UTAH

CONTINUUM



BIOSCIENCE BOON

Medical innovations at the U continue to enhance patient care and pump new vitality into Utah's economy.

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University of Utah President Ruth V. Watkins



President Watkins is ready to take the university to the next level.

Cheers for President Ruth Watkins

The [Summer 2018] article stresses that President Watkins is ready to take the university to the next level of excellence in all areas. With her at the helm, I have no doubt it will happen.

*Cecelia H. Foxley
MA'65 PhD'68
(Former Utah
Commissioner of
Higher Education)*

Brooke Adams wrote a fabulous piece on Ruth Watkins. She created such a clear and inspiring picture of our wonderful new leader. Thank you.

*Pamela S. Perlich
PhD'92
(Gardner Policy
Institute, U of U)*

Phone-Free Driving

This was a great article! ["Hang Up and Drive," Summer 2018] I am going to share it with all of my adult kids. I am also going to pull over if I need to use my phone. This really made me think seriously about my phone and driving. Thank you so much.

*Liz Cowan
Salt Lake City*

Thanks and Congrats, Chris Hill

Dr. Hill, congratulations on an outstanding career. ["Chris Hill Calls it a Game," Summer 2018] Thank you for interacting with our

Dallas, Fort Worth, and Houston alumni chapters.... You were and are an inspiration to many people in our Texas communities, including myself. We know you and your family will enjoy your next "career."

*Davis Tubre MBA'73
Haltom City, Texas*

I would like to thank Dr. Chris Hill for his many years and accomplishments at the university.... I have always felt Utah athletics was in good hands with him at the helm and have been proud of the way he represented the University of Utah. Good luck and Godspeed, Dr. Hill.

*Marilyn Colombo
Halamarandis BA'59
Villa Park, Calif.*

From Books to Beakers

What a wonderful story of adaptive reuse of a remarkable building. ["Pop Quiz," Summer 2018] On a nostalgic note, I well remember the reading room pictured at the top of the article—but mostly from spending hours there reading history while in high school. I can even recall the ambient scent of that room, shades of Proust. I majored in English literature at the U, but eventually history returned to claim my postgraduate career interests, probably in part from the love of that reading room. Thanks for a fine and informative piece.

*David N. Wetzel
BA'65 MA'67
Kansas City, Mo.*

Note: In the Summer 2018 "Pop Quiz" article on the George Thomas Building, it was noted that 1968 was the year the transition from the library to the Utah Museum of Natural History took place. To clarify, the museum opened in 1969.

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Good to Grow

Jessica Kemper, coordinator of the U's Edible Campus Gardens, shows off produce from this season's abundant harvest at their garden east of Pioneer Memorial Theatre. Kemper helps organize more than 75 student volunteers, who work shifts year round composting, trellising, weeding, planting, and harvesting at both the Pioneer Garden and their plot by the Sill Center. Come fall, there is enough produce to donate to the Feed U Pantry, share with volunteers, and sell at the U's Farmers Market, which takes place Thursdays just west of the Union Building from mid-August to early October.



Photo by Dave Titensor



Visit continuum.utah.edu
to see more photos of the
Edible Campus Gardens.

NEW LEADER AT THE HELM OF HEALTH



This summer, Michael Good and his family packed up their lives in Florida after 34 years and traveled 2,200 miles across the country to start a new life in Utah. In August, Good assumed the position of University of Utah senior vice president for health sciences, CEO of U of U Health, and dean of the School of Medicine, replacing interim Senior Vice President Lorris Betz.

Good says that when he was offered the opportunity to come to U of U Health, there was no question in his mind that it was time to head west. “The University of Utah is one of the strongest and most collegial academic health science centers in the nation,” he says. “I look forward to adding my energy as we work together to achieve the high expectations the people of Utah have for their flagship university, which as President Watkins says, truly is ‘the University for Utah.’”

Good comes to the U from the University of Florida (UF), where he had served as dean of the College of Medicine since 2008. There, he also served as interim senior vice president

of health affairs and interim president of UF Health. He is well known in the anesthesiology community for his innovative, interdisciplinary work with physicians and engineers to develop the Human Patient Simulator, a sophisticated teaching technology used worldwide in health care education programs.

He joined the UF faculty in 1988 and previously served as senior associate dean for clinical affairs and chief of staff for what is now known as UF Health Shands Hospital. Good earned both his bachelor’s degree in computer and communication sciences and his medical degree from the University of Michigan. He completed his residency training in anesthesiology as well as a research fellowship at UF.

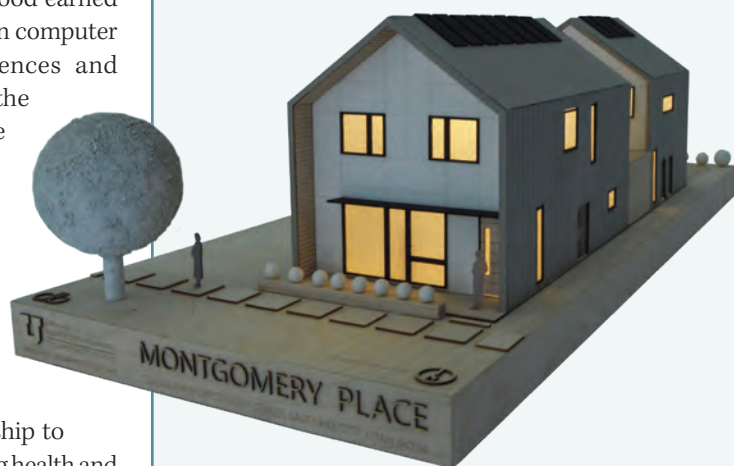
Looking forward, Good says he wants to continue to advance the national visibility and stature of the U, “while providing leadership to the nation for the challenging health and higher ed issues affecting all Americans.”

Students to Create Affordable Housing in SLC

U architecture students are the new kids on the block in Salt Lake City’s affordable housing market. A new partnership—Design+Build Salt Lake—brings the U’s School of Architecture, the city’s Housing and Neighborhood Development (HAND) division, and Salt Lake Valley Habitat for Humanity together to design, develop, and build affordable, energy-efficient houses in west Salt Lake City.

As part of their coursework, students have already completed the process of subdividing a city-owned piece of land—roughly 20,000 square feet—into three individual lots that will house 1,500-square-foot single family residences known as the “Montgomery Triplets.” Students are working to secure a building permit to begin construction next summer.

“Designing a building is one thing; transforming the design into a real and resilient building that is affordable is a very different challenge,” says Jörg Rügemer, director of the program and associate professor of architecture. “This program offers participants the opportunity to explore the consequences of their ideas in direct relation to the built environment, social equity, global climate change, and feasibility, where each step has to withstand the critical arguments of a real client.”



UTAH ATHLETICS ENTERS THE HARLAN ERA

Mark Harlan's expectations as the U's new athletic director are simple. Win in the classroom. Win in the community. Win in competition. "Everybody, including myself, will be evaluated on the 'Three Cs' going forward," Harlan said at his first U press conference. "I want everyone to know it's as simple as that."

Harlan joined the U in July after an impressive four-year run in the same role at the University of South Florida (USF). His appointment follows the retirement of longtime AD Chris Hill MEd'74 PhD'82.

"After an extensive national search, Mark emerged as our clear top choice," U President Ruth V. Watkins said. "Mark has a breadth of experience in athletics and in fundraising, an open and collaborative leadership style, and a track record of success that will enable him to lead our athletics department to greater heights."

Watkins also cited Harlan's "deep experience" with Pac-12 Conference peers, including serving as senior associate athletic director for external relations at the University of California, Los Angeles, and senior vice president for central development at the University of Arizona. Harlan earned bachelor's and master's degrees at Arizona.



Photo courtesy Utah Athletics

Under Harlan's leadership at USF, the Bulls won 12 American Athletic Conference championships, and they had nine sports programs ranked in the Top 25 during the 2017-18 academic year. The Bulls football program was one of 13 in the nation to win 20 or more games the past two seasons. Also, student-athletes achieved an 82 percent NCAA Graduation Success Rate in 2017, and

the department increased donations by 300 percent last year.

At Utah, Harlan will oversee 20 varsity sports, a staff of nearly 200, and an \$80 million budget. Among Harlan's tasks will be planning and fundraising for a potential expansion of Rice-Eccles Stadium.

"I am humbled to follow in the footsteps of Chris Hill," Harlan said, "and to build on the strong foundation already in place."

AirMed Celebrates 40 Years of Saving Lives

Since 1978, the U's AirMed program has been in flight, transporting a total of more than 75,000 patients and flying more than 7 million miles. With helipad bases on campus and across Utah in Layton, Tooele, Park City, and Nephi, as well as in Rock Springs, Wyoming, AirMed serves one of the largest geographical areas of any medical flight program in the country. Its helicopters have a range of 160 miles, and its airplanes can go as far as 1,700 miles to pick up patients and bring them to the U hospital.

AirMed crews typically include a pilot, flight nurse, and flight paramedic. In total, the program currently employs 49 flight medics, 32 flight nurses, 13 perinatal nurses, 14 flight coordinators, 37 pilots, and 13 mechanics.



Photo courtesy U of U Health

Don't Forget Your Clear Bag



Photo courtesy uredzone.com

It's time to be more transparent about what you're bringing to U athletic events. The clear-bag policy is now being enforced at both Rice-Eccles Stadium and the Huntsman Center to enhance security inside and outside of the venues and to speed up the security screening process.

Fans may bring one clear bag no larger than 12" x 6" x 12" or a one-gallon plastic storage bag. Guests are limited to one clear bag per person, along with a small clutch or purse for privacy.

Visit stadium.utah.edu/clearbag for more info.

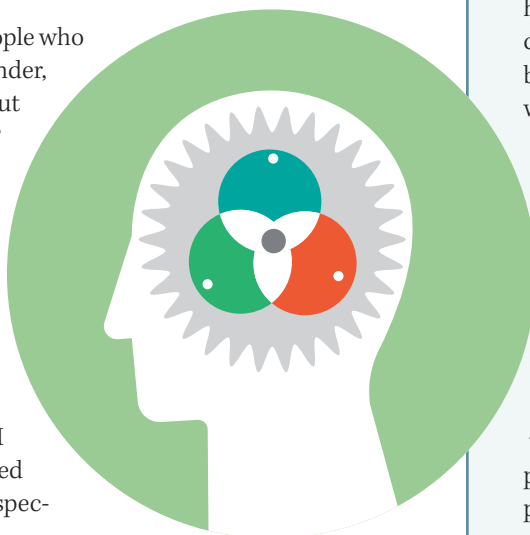
Tapping Talent of People Who Think Differently

Utah businesses are pushing to hire people who are diverse as far as race, ethnicity, gender, age, and physical ability. But what about people who are neurologically diverse? They're often an untapped pool of focused, creative thinkers who have a unique skill set and see the world—and problems—differently.

For the past year, the Utah Neurodiversity Workforce Program (UNWP) at the U has collaborated with students, faculty, and businesses to develop career pathways into STEM fields for students with differently abled minds, particularly those with autism spectrum disorder.

"People on the autism spectrum have high unemployment rates even though they don't have cognitive impairments," explains Cheryl Wright, professor of Family and Consumer Studies and co-founder of UNWP. "Just getting through a job interview can be a challenge. If they get past the interview and land a job, they may have a hard time keeping it."

Funded by the Talent Ready Utah initiative, the UNWP works to enhance success of neurologically diverse students at the U through support services and awareness training for faculty and staff. The program also collaborates with businesses such as WorkFront, 3M, Innosys, and UTA to establish mentoring, internship, and apprenticeship opportunities. In its first year, UNWP placed 19 students with local businesses.

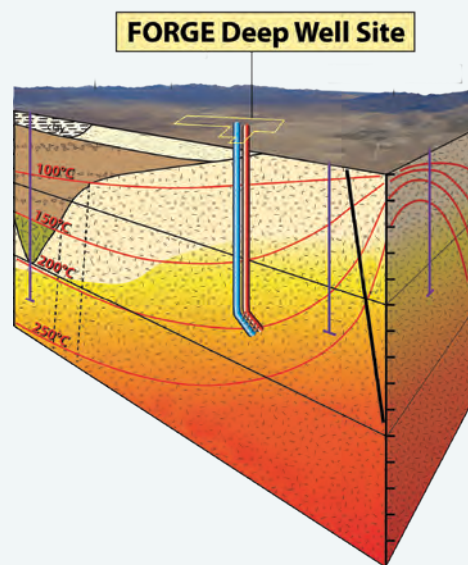


Utah Forges Ahead with Geothermal Energy

A research grant of \$140 million has put Utah on the map as a global leader for geothermal energy research. Following a very competitive process, the U.S. Department of Energy has selected the U's Energy and Geosciences Institute to develop a laboratory near Milford, Utah. The lab, called Frontier Observatory for Research in Geothermal Energy (FORGE) will focus on developing systems that could greatly expand the nation's capacity to produce commercial geothermal energy.

The FORGE project involves drilling two 8,000-foot-long wells in an area north of Milford. Cold water will be pumped into one well and heated by the rocks as it circulates, then will be pumped out of a second well. After the heat is extracted at the surface, the cooled, circulated water will be cycled back into the first well. The laboratory will use nonpotable groundwater that cannot be used for agriculture or human consumption.

A geothermal power plant needs two things: hot rocks at depth, which can be found practically anywhere on the planet, and hot groundwater that can be extracted at the surface. Enhanced geothermal systems like FORGE could create their own hot groundwater, making it possible to place a geothermal power plant nearly anywhere.



Visit unews.utah.edu for more on these stories and other campus news.

Students Support Sobriety

The U's student recovery program has done something no other collegiate recovery program has accomplished—receive annual funding from a state legislature. The Recover @ the U leadership team and faculty advisor Jason Castillo, along with Utah Rep. Mark Wheatley, lobbied for and were awarded \$100,000 in ongoing funds from the Utah State Legislature this past session. The program's first priorities are to establish a drop-in center, invest in more training and development, and provide scholarships for students in recovery.

Recover @ the U was started by students, supported by the College of Social Work, in 2015. The community has since grown from a handful of students to more than 100

students and allies, filling a critical need on campus. A big part of their work is challenging the narratives that surround what it means to be a person in recovery. In addition to two to three weekly meetings, the students host sober tailgate parties and socials,

present to student and faculty groups, host and lead education sessions at local treatment centers, and attend and present at conferences.

"They want the [recovery community] to know, 'You can go to the University of Utah and there is an environment there that will lend itself to recovery,'" says Castillo. "We have a mission here at the U of not just educating students but providing an environment committed to the health and well-being of our students."



WITNESS HISTORY

Inauguration of
President Ruth V. Watkins

16th President of the
University of Utah

Friday, Sept. 21, 2018

3 p.m., Kingsbury Hall

For ticket info or to watch it live, visit
president.utah.edu/inauguration



Driving Out Diabetes



Photo courtesy U of U Health

It may look like a bookmobile, but it's not lined with shelves and paperbacks. This bus has a different mission—to fight Type 2 diabetes in underserved Utah communities.

The Wellness Bus is part of the "Driving Out Diabetes: A Larry H. Miller Family Wellness Initiative," announced last November and established by a \$5.3 million gift from the Larry H. & Gail Miller Family Foundation. The initiative incorporates a novel approach to diabetes through prevention and outreach, clinical

care, and research and training. The bus allows specialists to deliver screening services and health coaching. The most common form of diabetes, Type 2, can often be prevented if caught early enough.

The Wellness Bus is a diesel-powered, 40-foot custom designed RV that has two private counseling rooms, two screening stations, and a waiting/education area. In June, the bus hit the road and began serving the communities of Kearns, South Salt Lake, Midvale, and Glendale.

BOOKS THAT SCORE POINTS WITH A COACH

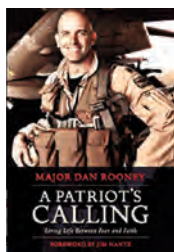
By Brooke Adams

Kyle Whittingham, the U's head football coach, has been immersed in the game since childhood. His father—Fred “Mad Dog” Whittingham—was a player and both a college and National Football League coach, and Kyle found himself either on the sidelines or on the field from an early age. In high school, Kyle began gravitating toward becoming a coach like his father. He settled on it as a goal midway through his career as a linebacker at Brigham Young University.

Coaching isn't easy. The hours are long, the commitment is total, and the family sacrifices—especially from a spouse—are many. Kyle knew the ins and outs from an early age, so he wasn't surprised by the demands. And thankfully neither was his wife, Jamie, his high school sweetheart.

No doubt about it: Kyle loves all things football—the talent it takes, the tactics, the teamwork, the trials and triumphs. Being a coach is one step removed from the competition on the field but just as exciting, Kyle says. And while winning is clearly a thrill, so is seeing student-athletes get their degrees. If a player comes through the U without finishing college, “I failed,” he says simply. “It's job No. 1 that each one gets his degree. It's not just lip service.”

Time on the field ends at some point, Kyle says, but the degree is what provides options. “It's their future.”

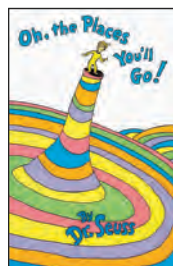


What are you reading now?

I'm reading *A Patriot's Calling: Living Life Between Fear and Faith* by Dan Rooney. Major Rooney served as a fighter pilot in Iraq and is currently assigned to Tyndall Air Force Base in Florida with the 301st Fighter Squadron. He also is a professional golfer and founder of the Folds of Honor Foundation, which

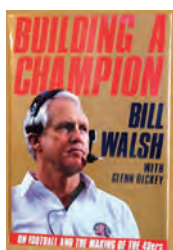
provides educational scholarships to spouses and children of fallen and disabled military service members.

I really enjoy his philosophies on life, leadership, and teamwork. I see a lot of parallels in this book to my life—how I work and how I think. Rooney gives really good insights in those areas and about living life to the fullest and being a leader. It is not a long book, but it is very insightful.



What book do you think everyone should read?

Oh, the Places You'll Go! by Dr. Seuss. It is simplistic but has such a powerful message. It's about life balance, dealing with adversity, determination, and dreaming big. There is a lot of depth and wisdom in that book, presented in a simple fashion.



Is there a book that influenced your coaching/leadership style?

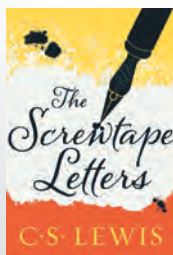
The coaching books that have influenced me the most are by or about the three Bills: Bill Belichick, Bill Walsh, and Bill Parcells.

The Education of a Coach by David Halberstam, which is about Bill Belichick

Building a Champion: On Football and the Making of the 49ers by Bill Walsh with Glenn Dickey

Parcells: A Football Life by Bill Parcells and Nunyo Demasio

I picked up different things from each of them, though they are not dramatically different in their approaches to coaching and leadership style. Each has a disciplined, structured approach to the job and the profession, and that is the way I operate. I could relate very well to what they preach and illustrate in their books. They are the top coaches of all time and did things the right way.



Is there a book you make a point of rereading from time to time?

The Screwtape Letters by C. S. Lewis. I first read it about 20 years ago. I have reread it about 15 times. In my estimation, it is one of the best books for teaching life lessons and the value of being a good person and trying to live your life the right way. I think

C. S. Lewis is just amazing. I also like *Mere Christianity* and *The Great Divorce*. They are remarkable and really struck a chord with me, opening my eyes and providing motivation. He is right on the money about life and character.

“C. S. Lewis is right on the money about life and character.”





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NEW 'SPIKY' DINO DISCOVERED IN UTAH

Illustration by Andrey Atuchin / DMNS 2017



Fossils of a new genus and species of an ankylosaurid dinosaur—*Akainacephalus johnsoni*—have been unearthed in Grand Staircase-Escalante National Monument in southern Utah. The discovery, led by the Natural History Museum of Utah (NHMU), reveals new details about the diversity and evolution of this group of armored dinosaurs.

The *Akainacephalus* specimen (the most complete Late Cretaceous ankylosaurid skeleton ever discovered in the southwestern U.S.) includes a complete skull, bones from the vertebral column, a tail club, several limb elements, and a distinguishing and unique bony body armor that covered it from head to tail, including neck rings and spiked armor plates. A medium-sized dinosaur, it roamed the area about 76 million years ago.

Expected to look like other North American Late Cretaceous ankylosaurid dinosaurs—with smooth bony armor on the skull—the new research shows that its defining features of bony armor in the shape of small, spiky cones and pyramids actually make it

more closely related to Asian ankylosaurids, possibly due to several brief intervals of lowered sea level that exposed the Bering land bridge, allowing dinosaurs and other animals to move between Asia and North America.

Akaina is Greek, indicating a spike or thorn; *cephalus* means head; and the epithet *johnsoni* honors Randy Johnson, a dedicated paleontology volunteer who skillfully prepared the specimen's skull. Jelle Wiersma MS'16 studied and described the species for his master's thesis with co-author Randall Irmis, NHMU chief curator and curator of paleontology, and associate professor in the U's Department of Geology and Geophysics.

The *Akainacephalus* fossil is now on permanent display at the museum.



Visit continuum.utah.edu to see video and images of the fossil excavation, preparation, and exhibit.

Black + White = A Racial Minority Gray Area

As the U.S. becomes increasingly multi-racial (one in five Americans is expected to identify as multiracial by 2050), social psychologists are just beginning to understand how these individuals are perceived and categorized.

Jacqueline M. Chen, a U psychology professor and lead author of a recent study, found that observers were most likely to categorize someone who is black-white multiracial as non-white—and further, to see racially ambiguous, multiracial people as specific racial minorities, such as Latinx, Middle Eastern, or South Asian.

The study is the first to document the minority bias as a guiding principle in multiracial categorization.

These findings may have implications for how people stereotype and behave toward multiracial individuals: minority bias may lead perceivers to be less motivated to pay attention to, get to know, or remember multiracial individuals because they categorize them as members of stigmatized racial groups. The implications of the research are important for understanding the multiracial experience, and for the future of race relations in America.



Altitude May Impact How Well an Antidepressant Works

The elevation where you live might matter more than you think when it comes to treating mental health. Research led by U scientists suggests that three common antidepressants—Paxil, Lexapro, and Prozac—could be less effective at moderate to high altitudes.

Lab rats were treated with these drugs in controlled test settings to simulate life at different elevations from sea level up to 10,000 feet. Researchers found that rats housed at altitudes as moderate as 4,500 feet (the elevation of Salt Lake City) did not respond to these common antidepressants. By contrast, the antidepressant Zoloft was shown to still be effective at elevation. Although all four antidepressants are serotonin reuptake inhibitors (SSRIs), individual SSRIs have different



pharmacological profiles, potentially explaining their varied effects.

If the findings hold true, they could have implications for individuals with diseases that affect breathing, such as asthma, sleep apnea, and chronic obstructive pulmonary disease, which lower the amounts of oxygen in the bloodstream, mimicking impacts of low oxygen environments at altitude. Interestingly, patients with these conditions are also susceptible to increased rates of depression and suicidal behavior. The next step is to design studies to determine if the effects from SSRIs in rats are also seen in people.

When Bottlenecks Are a Good Thing

It's not easy to catch an Egyptian vulture. U researchers know this firsthand. Yet they have managed to catch and tag nearly 50 over the past four years in deserts from Ethiopia to Armenia.

By tracking the birds, they have learned not only where these beautiful creatures eat and breed, but also where they migrate. The vultures travel along the Red Sea Flyway—a large area connecting the summer and winter ranges of birds in Eastern Europe, Central Asia, the Middle East, and Africa. Their routes reveal migratory bird corridors and bottlenecks (places where they concentrate in migration), critically important places for bird conservationists to work.

Unfortunately, many of the most important areas don't receive federal protection from the nations in which they are located and are poorly studied due to political instability and harsh desert environs. Recognizing the importance of migratory bottlenecks is vital to influence developments that may harm birds, such as wind turbines, illegal shooting,

poisoning, and risks of collision and electrocution from power structures.

Despite the dire concerns, researchers say there's hope. "The Africa side of the Bab-el-Mandeb Strait sits in the nation of Djibouti, a safe and stable country, and that's where the most critical bottleneck is," notes Evan Buechley PhD'17, now a postdoctoral scholar at the U. "This is actually a place where researchers and conservationists can work." He and his team hope to monitor raptor migration in the area because targeting research and conservation at this bottleneck could help conserve bird populations that span three continents. "It's a transition from identifying these places to researching in depth, and ultimately working to protect, the most critical ones," adds Buechley.



Evan Buechley releases an adult Egyptian vulture near Goris, Armenia.

That Sound Makes Me Dizzy

For some people, certain sounds such as a trumpet blowing a particular tone can make them dizzy, and it's not because they're giddy from a Wynton Marsalis melody.

It has been estimated that 1 in 100 people around the world have a congenital inner ear condition known as semicircular canal dehiscence, a thinning of the bone enclosing the inner ear that can lead to vertigo in response to certain sounds, changes in atmospheric pressure, or coughing. A person can feel the same imbalance effects of being drunk just by hearing certain tones.

Researchers from the U, Johns Hopkins School of Medicine, and the University of Mississippi have discovered how that happens. Normally, the balance and hearing organs of the inner ear are encased in solid bone, but a hole in that bony enclosure can cause the inner ear semicircular canals to become sensitive to sounds such as a sustained tone from a musical instrument or a higher-pitched conversation.

This condition causes the eyes to rotate through an automatic reflex that normally would stabilize an image in the eye during head movements. But if the signal from the ear is wrong, the eyes' movements are also wrong, causing the patient to feel dizzy. The effect can occur in just seconds and can render the person dizzy for tens of seconds after the tone has stopped. Fortunately, surgery to repair the dehiscence can help.



THE CRY CLOSET

By Marina Gomberg

BEHIND NEMO MILLER'S VIRAL SENSATION



Photo by Dave Titensor

University of Utah art student Nemo Miller's life changed on April 24, 2018, when her final project for her woodshop class became international news.

It took one tweet from a fellow U student and about 24 hours for word about Miller's work, *The Cry Closet*, to reach nearly every corner of the globe. The response was uniformly emphatic but ranged drastically in sentiment.

Some thought the three-foot-by-three-foot-wide "safe place" installed in the J. Willard Marriott Library during finals week was the perfect antidote for stressed students who needed to take a breath, regain composure, and get back in the action. Others, many of whom didn't realize the installation was an art piece and not an intervention devised by the university, deemed it an unnecessary measure to comfort an already overcoddled generation.

The response's magnitude was overwhelming, but the disagreement didn't bother Miller BFA'18. Success, for her, was gauged by the number of students helped and the discourse created. And the volume of both continued to rise for days and weeks. To learn more, I chatted with Miller and Kelsey Harrison, an assistant professor in the Department of Art & Art History, who assigned the project to the class.

GOMBERG: Kelsey, tell us about the assignment.

HARRISON: The project asked students to apply critical attention to a shared social space, to notice who uses the space, why, how, and to observe what and who is missing. I asked my students to design and fabricate an object that would solve a problem they identified. The assignment emphasized the role that the material world plays in shaping social reality, and therefore the role that those who make the material world (sculptors, architects, etc.) also play.

GOMBERG: Nemo, what was your process?

MILLER: The first iteration of *The Cry Closet* was born in conversation early in the semester. The idea was tongue-in-cheek because I thought it'd be funny to make a closet since I identify as a lesbian. The title was used to reinforce this humor, which led me to think of a more serious and genuine application. As the semester progressed, the closet actually became something I felt I needed to escape the very daunting reality that I was graduating soon and had no concrete plans*; I made the assumption that I wasn't the only person on campus to feel this way.

GOMBERG: Nemo, what was it like to watch your work get such an intense and far-reaching response?

MILLER: It was surreal. I was in class when a friend tagged me on the original tweet; at that time, it only had a few hundred likes and retweets. I went back to the art building and was so excited—I was "local Twitter famous." Then, I remember watching the likes and retweets grow exponentially, and I bounced back and forth between excited and overwhelmed.

The next day it was trending on Twitter, and after getting several media interview requests, I realized the magnitude, and it became a lot less exciting.

GOMBERG: Fans and critics alike questioned how the art project should have been graded. Kelsey, what criteria did you use to determine a grade?

HARRISON: Popularity is not a criterion. I don't even ask myself if I like the work when grading it. I am looking for complexity, consideration, and risk. I am looking for students to push themselves to the edge of their capacities and understandings. I grade from multiple perspectives since, to be successful in artmaking, we have to work within both the art discourse and the broader social context. Nemo's work engaged with the daily lives of U students and with art history simultaneously.

GOMBERG: *The Cry Closet* was covered by news outlets from *Teen Vogue* to the BBC to *USA Today*. What was your favorite coverage, and why?

HARRISON: My favorite was Tucker Carlson's April 27 "Liberal Sherpa" segment. I learned so much about his world because of how he interpreted a cultural object. Nemo's work showed us how different our cultural lenses can be. The object becomes a kind of Rorschach Inkblot Test that reveals us more than it reveals itself. Also, I love that the Internet generated the media attention and not the other way around. The public told the media what was culturally relevant. The piece was instrumentalized as a sign of millennial fragility, which surprised all of us since we weren't looking through the lens that made that interpretation possible.

MILLER: I have two favorites. The first was also the Tucker Carlson segment, for the same reasons Kelsey mentioned. The other was the *Slate* article "Let's Embrace Our Blubbering and Make Cry Closets Happen." I appreciated its slightly sarcastic tone, interpretations of society's rules around the display of emotions, and the way they talked about how some people were hysterical over people needing a break to have human feelings. The article states, "There's an unfortunately popular misconception that being a mature adult means taking all of life's gut punches with stoic silence and a stiff upper lip." That hits on the lack of emotional maturity and expression that I think is stunting our society. **U**

*Miller is now working at the Kimball Art Center in Park City and researching graduate schools.

—Marina Gomberg BS'06 is director of communications for the College of Fine Arts.



Visit continuum.utah.edu for an extended version of this Q&A and more photos.

FINDING REFUGE IN EDUCATION

**TWO U PROGRAMS HELP REFUGEES BRIDGE THE GAP
FROM HIGH SCHOOL TO UNIVERSITY.**

By Lisa Potter

On a balmy morning in May, 10 newly graduated high schoolers and their families filed into the Sorenson Arts & Education Complex on the University of Utah campus, greeting one another with excited chatter. The parents beamed with pride—many of their sons and daughters were the first in the family to attend college. Tino Nyawelo, assistant professor in the Department of Physics & Astronomy, smiled at the crowd, thinking of his own journey to the university against overwhelming odds. He cleared his throat and quickly won over the room.

Nyawelo was addressing the 2018 cohort of the Refugees Exploring the Foundations of Undergraduate Education In Science (REFUGES) Bridge Program. Based in the Center for Science and Math Education (CSME) at the U, the program aims to encourage underrepresented students to pursue science, technology,

engineering, and math (STEM) education at the university level. The seven-week bridge gives freshmen the opportunity to earn credits toward their degree and provides the funding for their tuition, meals, and housing.

Many of the undergraduates are recruited from the REFUGES Afterschool Program, which has provided tutoring, STEM workshops, and college prep and financial aid classes to more than 200 underrepresented students in Salt Lake City. Nyawelo and community partners founded REFUGES to address the challenges faced by refugee youth, minorities, women, and economically disadvantaged students in Utah schools.

Nyawelo, whose family fled violence at the outbreak of the Sudanese civil war, drew on his own experiences to help build REFUGES from the ground up. He fell in love with physics as a high school student in South Sudan, then left the unrest in

his country to pursue graduate studies in Europe. When Nyawelo joined the U faculty, he wanted to pay it forward.

“I see myself in those kids who are brought here as refugees, maybe haven’t had schooling in the camps, and have no English. It’s such a big transition,” explains Nyawelo, director of REFUGES and of diversity & recruitment for CSME. “I’m so passionate about this because I got a lot of help with my education along the way. Mentors and outreach programs in Sudan linked me to my PhD and post-doc studies, and I didn’t pay a penny for my education. Now, I want to give back.”

BRIDGING THE GAP

During the summer bridge program, the students live in the dorms, go on excursions, and tour research labs together to build a strong sense of community. Through the Department of Mathematics and the U’s LEAP learning community, they take



Tino Nyawelo

two courses that count toward general education credits. During the academic year, bridge students continue LEAP and engage in internship and research experiences. The small class sizes and supportive instructors and administrators help ease the transition.

“A freshman in college has so many things to keep track of, from general education requirements to registration deadlines, financial aid, etc. It can be pretty overwhelming,” says Allyson Rocks, academic coordinator for CSME, who runs logistics for the summer bridge. “The bridge program is a good way to get used to college life instead of getting it all dumped in one semester.”

Both the REFUGES summer bridge and after-school programs have been part of the CSME since 2013. The partnership was a perfect fit; one of the center’s core missions is to increase access to U STEM programming, says Jordan Gerton, director

of the CSME. Yet REFUGES is unique in that it sets nontraditional students up for success as undergraduates long before they begin college applications.

“When students aren’t getting a lot of support at home—their family is working, doesn’t know English very well, doesn’t know the school system—they’re much more likely to fall behind, even if they have talent and determination,” says Gerton. “We can’t change the school system, so REFUGES went outside of school to provide that support to keep them moving forward.”

The summer bridge is funded by the Barbara L. Tanner Second Charitable Support Trust, and the CSME and the College of Science support the salaries of the REFUGES staff. The program’s tutors are mainly paid by grants, including from the Department of Workforce Services and the Sudanese Community in Utah. They also receive contributions from individual donors.

Being part of the U helps the students access an amazing team of undergraduate tutors, many of whom went through the REFUGES program themselves. “We hire those students because they look like the REFUGES students. In my experience, I was always unique in my field of theoretical physics. Most of the time, I was the only black person. That’s hard,” says Nyawelo. “Seeing someone who looks like them gives them confidence. They say, ‘If you made it to the U, and you came, like us, as a refugee, then we can make it, too.’”

THE AFTER-SCHOOL PROGRAM

Like many bridge participants, Jolly Karungi, a member of the 2017 bridge cohort, has had REFUGES in her life for years. Karungi began the after-school program in 2015, a year after moving to Utah following time in a refugee camp in Uganda. Originally from the Democratic Republic of



Congo, Karungi, her aunt, and her siblings lived in the camp for three years, then moved to Kampala, Uganda, for another three years before being resettled in Utah.

“When I came here, I didn’t speak any English. I didn’t understand what was going on,” she explains. “I had to catch up. This program helped me a lot.”

The after-school program provides homework tutoring three times per week and includes hands-on STEM workshops for grades 7 through 12. High schoolers take ACT prep courses and financial aid workshops. The program has become a family affair; Karungi’s three younger siblings are participating, and their older brother, Fiston Mwesige, couldn’t be prouder. “They have been through many, many things in the refugee camps. So, when they came here to a completely different system, they needed some guidance to find their way,” says Mwesige. “Now, they spend most of their time thinking about the future, what they can do, how they can help the community, and how they can make the world a better place.”

The years of hard work have already paid off—Karungi recently received a full-ride scholarship to the U from the Alumni Association, and she loved living on campus with her friends over the summer. REFUGES offers more than purely academic support. “People are not just helping you with math and science problems, they’re also helping you with your personal problems,” says Karungi, who is beginning her sophomore year this fall. “It’s the best thing about it. They really care about everyone.”

The REFUGES Afterschool Program helps nontraditional students at two locations: the U campus and the Salt Lake Center for Science Education. This year, all 10 REFUGES high school seniors from the U site were admitted to the U, and seven were offered full-ride scholarships to the U or Westminster College. In all, the group was also offered more than \$98,000 in FAFSA scholarships. From the Salt Lake Center for Science Education, 17 seniors were accepted to the U, and the 25 students who completed FAFSA received more than \$200,000 in scholarships.

BUILDING REFUGES

In 2016, more than 65 million people were forced to flee their homes worldwide, according to the United Nations Refugee Agency. Of those, nearly 22 million were considered refugees. Approximately 60,000 refugees live in Utah, the vast majority of whom live in Salt Lake County, according to the U’s Kem C. Gardner Policy Institute.

To Nyawelo, the numbers are more than just statistics—many of his friends have resettled in Utah, as well as his wife and her family. While pursuing graduate studies in Europe, he flew to Salt Lake City frequently, moving officially in 2007 to join the U faculty.

“I knew a lot of refugees in Utah. Some of them were my classmates in South Sudan. I was lucky—I got a scholarship, I went to university. Some of them decided to leave because of a lot of unrest, and they ended up here in Utah. I felt like I was home,” says Nyawelo.

In 2009, he and other members of the refugee community began noticing high rates of school dropouts. After visiting homes, hosting town hall meetings, and organizing a youth summit, a pattern emerged; many refugee youth come to Utah after being in camps for years with little English and intermittent formal schooling. When they arrive here, the school system places them in a grade based on their age, leaving many feeling left behind.

The partners came up with the REFUGES program to help. After winning a grant from the Refugee Services Office, the program expanded to help other communities experiencing similar problems, such as immigrant populations and economically disadvantaged students. There is nothing comparable to REFUGES, explains Gerton, because both Nyawelo and the Utah refugee community are one of a kind.

“This would not be at all possible without Tino.... He built this with his partners from scratch,” says Gerton. “He comes from one of the key refugee communities on Earth, South Sudan. He also happens to be a scientist who also happens to really want to help the community.” **U**

—Lisa Potter is a science writer for University Marketing & Communications.



Watch a short video featuring Tino Nyawelo and REFUGES students at continuum.utah.edu.

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A HARP PROGRESSION





TRUMPET SENSATION KRIS JOHNSON BRINGS HIS IMPROVISATIONAL INTENSITY TO THE CLASSROOM.

Story by Ellen Fagg Weist | Photography by Brent Rowland

O

ne note. That's all trumpet player Kris Johnson needed to announce his arrival on the Utah jazz scene.

That note launched the solo of "Donna Lee" that Johnson played at Gracie's Monday Jazz Jam on a spring night in 2015, causing a hush to fall over the loud Salt Lake City bar. "Everyone in the room shut up and turned their head and watched him and said 'What's going on?'" recalls Matt Lima BMu'16 MMu'18, a U-trained saxophonist.

Johnson jammed at Gracie's while interviewing for a position directing the University of Utah's Jazz Studies program. "He's larger than life in a sense," says saxophonist David Halliday MMu'09, director of Westminster College's Jazz Studies program and a U adjunct professor, who leads the weekly jam sessions. "People just had to take notice."

People have been taking notice ever since Johnson came to the U in 2015. In three years, he's helped university jazz students improve their performing skills, enhanced the program's community connections, and strengthened the focus on the African American history that inspired the music.

"To me, you can't teach jazz history without talking about civil rights, without talking about slavery," Johnson says. "What I've been aiming to do is to bring more empathy and more of an understanding of African American culture to the School of Music."

Beyond the classroom, the 34-year-old assistant professor keeps a busy performing schedule, touring, arranging, and recording with The Count Basie Orchestra and The Kris Johnson Group. He is always juggling five balls in the air, says Gordon Hanks, cofounder and producer of the GAM Foundation's JazzSLC series.

Two weekends a month (and every summer), Johnson commutes from Salt Lake City to Detroit to spend time with his sons, ages 6 and 8. He banks frequent flyer miles to finance the travel of his New York-based manager, Tiffany Ente-Jordan. She is helping launch the Jazz Village Project, educational outreach programs based at Salt Lake City's West and East high schools.

They're also launching an all-ages weekly jazz series at the Newman Center's Cate's Cafe, across the street from the U campus. Young musicians need "hang time," Johnson says, a chance to regularly perform and make mistakes and be uncomfortable in front of live audiences.

On campus, Johnson is an approachable role model at a time when the university is working to recruit and support students of diverse backgrounds. "He's had a big impact in a short time," says Miguel Chuaqui, director of the School of Music. "Our students are playing all over the valley, giving them more opportunities to become great musicians and understand the profession."



One note; one honk of a note. Back up and consider the first awkward sounds a 10-year-old kid might blow on a trumpet.

Johnson was in fifth grade when a friend of his father's offered him the chance to play his instrument. "I got a sound out right away," says Johnson, who thought he might have an affinity for the trumpet. Or that it would be easy to learn.

It wasn't. As a school band kid growing up in the northern suburbs of Detroit, Johnson certainly wasn't a

musical prodigy. Rather, he was a math nerd, obsessed with numbers and how they functioned. In fact, when it came to music, he was tone deaf. In his church choir, he was asked to not sing at performances because he couldn't keep the pitch.

And Johnson wasn't even interested in listening to jazz until his brother dragged him out to hear Dwight Adams, a trumpet player who toured with Stevie Wonder. That's when he first heard the possibilities in the notes. "I was completely blown away that you could do that on a trumpet," he says.

After that, he learned that music was in his blood. His father had played bass in a funk band, and his uncle, a keyboardist, had played with jazz greats including Quincy Jones and in rehearsal with Miles Davis.

The mastery Johnson achieved on his horn came through his own determination, says Damien Crutcher, his band teacher-turned-mentor. Johnson practiced for hours on his own before and after school, which helped tune his ears. He remembers practicing trumpet fingerings on his wrist in English class.

Older musicians took the teenage musician under their wing, inviting him to play open mics at Detroit clubs. He and a friend, a sax player, would be the only underage kids in the room, hanging out, getting



KRIS JOHNSON: OF NOTE

Johnson toured Europe for two weeks in spring 2018 with The Count Basie Orchestra. He has played with the big band for 10 years and performed on three recordings with them, including 2008's Grammy-nominated *A Swingin' Christmas*, by Tony Bennett.

In fall of 2017, he played on an eastern regional tour with The Kris Johnson Group to promote the release of *The Unpaved Road*, one of their four recordings, including *Jim Crow's Tears*, a jazz/orchestra musical that Johnson wrote.

Johnson's arrangements have also been performed or recorded by Karen Clark Sheard, Yolanda Adams, the Motor City Brass Band, and Detroit Symphony's Civic Jazz Ensemble.

He's performed at the world's most prestigious jazz venues, including the Apollo Theater, the Blue Note Jazz Club, and the Hollywood Bowl.

feedback, asking questions. “Most of my jazz education was informal,” Johnson says. “I’ve had the opportunity to see a lot of musicians authentically playing this music and living in the culture that is more true to where the music came from.”

As a high school senior, Johnson was the marching band’s drum major, demonstrating the leadership abilities he would later exhibit leading his own band. Crutcher recalls one concert that year when Johnson played a solo of “Nutville” that rocked the house at Detroit Symphony’s Orchestra Hall. The night was a blur for Johnson, who performed despite being ill with a fever. Crutcher remembers telling Johnson’s parents that their son was destined for a career as a musician: “You don’t have a choice.”

Johnson earned bachelor’s and master’s degrees in Jazz Studies at Michigan State University, and then taught at The Ohio State University. “Honestly, I think the reason I’ve been successful as an educator is because it didn’t come naturally to me,” says Johnson. He explains that he can see when students are struggling to hear the notes.

“He has a freaky ability to understand how a student learns and then alter his teaching style to that student,” says Lima, Johnson’s former U grad assistant. “He gets so excited about something as simple as a scale, and that makes me excited, too.”

Johnson helped Lima craft a career path as a videographer by hiring him to film his band’s tour last fall. In turn, watching the band perform changed Lima’s approach as a musician. “Instead of just trying to play really high and really fast on my horn, I’m trying to create moments with people,” Lima says. “It’s not about me anymore.”

Another collaborator explains Johnson’s talent this way: “He is really, really amazing at showing people their true potential,” says Marcus Elliot, a former student who now plays saxophone in Johnson’s band and directs the Detroit Symphony’s Civic Jazz Orchestra. “And it’s a really amazing gift.”



First, you have to fall in love with the notes. That’s how you begin to learn a jazz classic, Johnson says in a recent video interview. You binge listen to a lot of recordings. You build a relationship with the tune before you start checking out the charts.

In the video, Johnson is sitting at a keyboard in his office on campus. Artwork for his band’s recordings is posted on a bulletin board behind him, which also displays one of his mottoes: “Live. Work. Create.”

It’s that idea of working and creating together that demonstrates Johnson’s musical versatility—from his decade of performing and arranging for the

world’s most famous legacy jazz band to composing complex harmonies for his own band’s contemporary music.

There’s a soulfulness in Johnson’s sound. “It’s very black, and it’s also very methodical, which I think is a personality trait of his,” Elliot says. “You can see him kind of gathering information, building it up.”


That’s also a good description of the musical relationships on stage at a Salt Lake City production of *Jim Crow’s Tears*, a jazz/orchestra musical Johnson began writing for his master’s thesis. A performance of the musical, which explores the effects of minstrelsy and cultural racism, sold out the Rose Wagner Performing Arts Center’s Jeanne Wagner Theatre in March 2017. “Am I a darkie? Or am I man?” is the question of identity asked in one of Johnson’s songs, “Unbind My Eyes.”

The performance was a full-circle moment for Johnson, who brought his band to Salt Lake City for the concert. To conduct, he hired Crutcher, his former high school band teacher. It was like Johnson was “the king of Utah,” jokes Elliot about how the work was received.

There’s a direct progression linking “Unbind My Eyes” to “Pretty for a Dark Girl,” a powerful anthem from *The Unpaved Road*, a 2017 album that Johnson wrote with lyrics by his girlfriend Lulu Fall, a Broadway actor and jazz singer.

In a music video, the camera falls in love with the singer’s expressive face, framed by her cropped hair, dyed vibrant red. Her provocative lyrics about racial stereotypes are arrestingly mouthed by a handful of black women of all ages. “He says I’m pretty, pretty, pretty for a darkie,” Fall sings. “My ears burn to the sound of his lines.”

Those lyrics are searingly relevant, but Fall’s delivery is anchored by the band’s textured musicality. You might want to binge listen to the song. You might want to build a relationship with it.

“As an artist in 2018, how can I not talk about the things that are happening in 2018?” Johnson says. “I can’t separate those things. My art is always going to be a reflection of what’s going on.” 

—Ellen Fagg Weist is a Salt Lake City-based freelance writer and former Salt Lake Tribune reporter.



Hear Kris Johnson’s
expressive sound for yourself
at continuum.utah.edu

The background features a complex geometric design. A large, light pink triangle occupies the upper left and center. To its right, a white rectangular area contains several smaller, overlapping squares with vibrant, multi-colored patterns in shades of orange, pink, purple, and blue. The bottom half of the image is dominated by a large, dark reddish-brown triangle that points upwards towards the center. A thin, dark blue triangle is visible in the bottom left corner.

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**“We only
have three
minutes to
reestablish
oxygen
delivery to
the lungs...”**

— Sean Runnels

SCIENCE BOON

MEDICAL INNOVATIONS AT THE U CONTINUE TO ENHANCE PATIENT CARE AND PUMP NEW VITALITY INTO UTAH'S ECONOMY.

BY JENNIFER DOBNER



In the operating rooms of television medical dramas, it looks pretty easy. Just slip a tube down the patient's throat to keep her breathing and save her life. But in reality, intubation is often a lot harder than that, requiring a combination of both precision and chance.

For starters, medical technology only gives an anesthesiologist a partial view of the trachea, so getting it right is a bit of a guess. And it gets even tougher if there's an obstruction such as a tumor in the way. Go too far past the vocal cords and you can puncture a lung. Take too long and a patient can suffer dire consequences.

UTAH EMPLOYMENT IN THE LIFE SCIENCES SECTOR 2017

Research, testing, and medical laboratories:	37.6% = 16,120 jobs
Medical devices and equipment:	32.1% = 13,760 jobs
Drugs and pharmaceuticals:	16.6% = 7,127 jobs
Biosciences-related distribution:	13.6% = 5,824 jobs

Data provided by BioUtah, the Utah Department of Workforce Services, and the Biotechnology Innovation Organization, a national biotech trade association.

“We only have three minutes to reestablish oxygen delivery to the lungs,” explains Sean Runnels, a cardiothoracic anesthesiologist and assistant professor at the University of Utah. “If we don’t get it right, they are brain dead or have cardiac arrest.” With that in mind, Runnels set out to find a better way. His idea: Marry two existing pieces of technology into a single, slim color-coded device that makes the process easier for doctors and safer for patients.

In October, the intubation innovation will launch through Runnels’ new medical device company, Through the Cords. Built with a team assembled through the U’s Lassonde Entrepreneur Institute, the device is the first significant innovation in intubation technology in 40 years, Runnels says.

It’s also an example of the kind of U-based medical innovation that has been changing lives for the better since the 1950s—think plastic catheter, Jarvik heart, the first artificial arm—and is now driving Utah’s economy in a dramatic way. Last year alone, companies in what’s broadly known as the life sciences industry (also referred to as bioscience) reported \$10 billion in sales, pumped nearly \$500 million in tax dollars into state government, and added jobs at a faster rate than any other segment of Utah’s economy.

These companies are using next-generation technology to make medical devices and equipment, produce drugs and pharmaceuticals, or do medical research, diagnostics, biomedical distribution, and more. “There’s such a strong need for the technologies being developed,” says Clark Cahoon of the Governor’s Office of Economic Development (GOED), whose job exists to support the needs of the life sciences industry. “There’s so much going on, and it’s growing faster than anybody expected.”

So how fast is fast? When measured by job growth data from the industry trade association BioUtah, it’s pretty fast. Between 2012 and 2017, the number of life sciences jobs across the state grew by 25.4 percent, far faster than the national industry average of 5.9 percent, a recent California report shows.

One could chalk up the explosion in the sector to market forces or technology advancements that have helped flatten the path to discovery—and those things would be true. But it’s also something more: A sort of convergence of aptitude, opportunity, ingenuity, and institutional support that when combined with a Utah-born spirit of collaboration has people in education, government, and industry working toward common goals.

“The state is completely supportive and wants to work to decrease the number of barriers for the university, and the education system is evolving to provide the right environment for young people with ideas,” explains Keith Marmer, who runs the U’s Center for Technology & Venture Commercialization (TVC), which helps bring campus-driven invention to the marketplace. “It’s like a perfect storm.”

It’s no secret that Utah is a business-friendly place. Over the past decade, the state has been consistently named one of the best for business by *Forbes* magazine, and this year, it was ranked second best for startups by the financial website WalletHub. This climate has allowed Beehive State industries to flourish, and the life sciences sector is no exception. Over the past decade, its successes have grown into a bona-fide boon for Utah’s bottom line, pumping billions in taxes, private investment, grant funding, and higher-than-average wages into the economy.

It’s also drawing the attention of companies considering a relocation and adding additional value to Utah communities by fostering growth among indirect goods or services companies, including retailers and small manufacturing and construction firms. “We see a return on investment when we see these [life sciences] companies taking root here,” Cahoon adds. “There are no losers. When you draw this kind of industry and it’s successful economically, it makes for better jobs. It drives education programs. It helps the whole community.”

New data from a first-ever study of the industry by the U’s Kem C. Gardner Policy Institute shows the breadth of the life sciences boom. According to the data, in 2017, Utah’s 1,038 life sciences companies:

- made up about 7 percent of all state employment, 6 percent of all personal income, and 8 percent of Utah’s gross domestic product
- paid \$3.1 billion in employee wages and benefits, with an average compensation of

\$86,396—salaries 46 percent higher than the statewide average

- directly or indirectly employed 130,439 Utahns, putting \$7.6 billion in personal income into the pockets of workers
- drew \$188 million in research grant funding from the National Institutes of Health, of which 91 percent was distributed to universities, including the U

The report also shows that the industry's job growth rate has been consistently high over the past 15 years. From 2002 to 2007, it grew by 14 percent. The rate held steady during the recession that began in 2008 and then skyrocketed to 26 percent over the last five years.

"Utah already has the fastest pace of job growth in the nation, and then life sciences is growing at a rate even faster than that," says Juliette Tennert, the institute's director of economic and public policy analysis. "But I don't think you can have this result without the University of Utah being here."

University-based research and innovation is a key player in the growth seen in life sciences companies, Tennert says. "And now I think the labor force is so critical that we need to continue to invest in opportunities for students to become skilled, so that they can stay here and work, not go somewhere else," she adds.

Building a highly skilled workforce that is nimble and rooted in the kind of next-generation thinking that drives translational research is precisely what the university aims to do, explains Troy D'Ambrosio BA'82, executive director of the Lassonde Institute. The approach isn't really new. Innovative research and invention, along with entrepreneurial thinking, have long been valued on campus, where many life science industry leaders got their start. Myriad Genetics, Sorenson Genomics, and Merit Medical, for example, all spun out to the marketplace from ideas incubated here, which helped plant the early seeds of cooperation between industry and education that U administrators have sought to grow over the past decade.

That's happening through interdisciplinary initiatives like the Center for Medical Innovation and the Lassonde Studios that provide opportunities for students to launch startup business ventures, with seed money from the U, or join forces with faculty to work to find solutions to real world industry problems that improve health care and reduce costs.

And it works. Over the past seven years, the competitive Bench to Bedside program has awarded grant funds to teams that have developed more than 180 new technologies, filed 111 patents, started over 50 sustainable companies, and trained more than 1,000 students to be the next generation of entrepreneurial

leaders. "Traditionally, much of our education system has been focused on how things have been done, or what is being done, not on the new and the next," says D'Ambrosio, who works closely with GOED and the Economic Development Corporation of Utah. "Now we're building those kind of thinkers so that we can say to industry, we have people trained to do what you want to do."

The approach is attracting students and faculty who might not previously have considered the U. It's also drawing interest from corporations looking to partner with campus-based inventors and bringing in additional research dollars. "We've been a part of very large grants from the National Science Foundation, the



Troy D'Ambrosio confers with students at the Lassonde Institute.

THE CROSS-DISCIPLINARY IDEA
SHARING APPEARS TO BE INCREASING
THE NUMBER OF MEDICAL INNOVATIONS
PERCOLATING ON CAMPUS.

A SAMPLING OF U-LAUNCHED LIFE SCIENCES COMPANIES

The U's Technology & Venture Commercialization office has been helping push campus-based innovation into the marketplace since 1965. Here's a look at a few life sciences companies and their products and technologies that have the power to improve health care and change lives:

PEEL Therapeutics: A drug research company developing cancer treatments by harnessing the cancer-resistant proteins found in elephant blood.

Larada Sciences: Makers of the AirAllé device, which delivers a 30-minute single treatment that kills head lice and 99 percent of lice eggs.

XEnd Medical Systems: Creators of the patented XEnd Needle that is designed to reduce infections from hypodermic needle injections and speed up the identification of sepsis-causing bacteria.

Veritract: Developers of a feeding tube with integrated optics and a steering function that allows for the more precise placement of feeding tubes in patients to prevent complications that can lead to death.

National Institutes of Health, and the Department of Energy, because as we've gotten better at translating faculty technology ventures out into the world, we are able to say, 'We can do that commercialization piece,'" D'Ambrosio adds.

The cross-disciplinary idea sharing also appears to be increasing the number of innovative technology ideas percolating on campus, particularly since the Lassonde Studios launched, D'Ambrosio says. In its first year, the \$45 million studios launched some 300 companies—many of them producing new medical devices.

Some Lassonde-based teams have been able to capitalize on collaboration in ways that have shortened the runway from prototype to product. At least one brought its invention—an inexpensive tool for cervical cancer screenings—to market in about 18 months. That's far faster than the industry standard of seven years, says John Langell MBA'13, an associate professor of surgery at the U and executive director of its Center for Medical Innovation.

For his part, Runnels says his Through the Cords endeavor would not likely have been possible were he living and working in any other place. At each step in the process—from the department chair who granted him a teaching sabbatical, to Lassonde, TVC, and the relationships the U has with state economic and

business leaders—Runnels says he found support and enthusiasm for his vision. "Most places, it's all window dressing, but here it's actually happening," he says. "This is such a privilege to be at an institution where I can do this. I just feel lucky."

Of course, not every U invention will make it to market like Through the Cords' tool. In reality, only a fraction—less than 10 percent—says Marmer. Still, the U manages to launch between 10 and 20 companies annually. "As a university and a single entity, that's probably more than anyplace else in Utah," Marmer adds. Not all are life science-related endeavors, but the medical school historically outpaces other U schools and colleges in the number of annual invention disclosures—977 since 2013—and those make up about two-thirds of TVC's total work.

U successes in the life sciences industry are also driving something that Marmer says might be just as important as funding: buzz. "Increasingly, there's a reputational value," he says. "There is a lot of importance to that, even if it's just that potential industry partners will want to work with us more because they see us doing the work."

That buzz is drawing visits from educational institutions worldwide who are looking to replicate U programs on their own campuses, as well as from venture capitalists like Victor Gatto of Tennessee, who routinely tracks innovation at universities, looking for his next investment.

Gatto says he was reluctant to visit Utah about two years ago after he was invited by an investor who was also a U grad. The school, he says, just wasn't on his radar screen. "I was really blown away," says Gatto. "Every other university I know is much more siloed. What's really unique about Utah is its partnerships and the willingness to work together, share creativity, and solve problems."

Such stories make D'Ambrosio nod his head. "We hear that from people time and time again who visit our programs," he says. "And usually they say, 'We'd never be able to do that at our campus, because we'd never get people to play along.'"

—Jennifer Dobner is a Salt Lake City-based freelance writer and former Salt Lake Tribune reporter.

THE CLIMB BEGINS.



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What Have We Here?

AS THE U'S LIBRARY TURNS 50, WE LOOK AT SOME OF ITS TREASURES COLLECTED OVER THE YEARS.

By Heidi Brett

On May 17, 1968, at the dedication of the new University of Utah campus library, Pulitzer Prize-winning author, historian, and professor Wallace Stegner BA'30 said in his keynote address, "It is profoundly right that this splendid library should arise in this city, to serve this community's spiritual and intellectual needs, for nowhere in the United States is the community spirit stronger or respect for tradition greater."

In the 50 years since Stegner's comments, the library has grown and changed enormously. One year after the dedication, J. Willard Marriott, Sr. BA'26 contributed \$1 million to build the library's collections, and the building

was named after him. That generous gift made possible not only the purchase of research journals and books but also the acquisition of rare books and papers that would become the foundation for a rich and extraordinary Special Collections division—one of the largest in the western U.S.

The items selected for this article represent just a few of the gems that are held in the J. Willard Marriott Library's Special Collections. The manuscripts, books, photographs, diaries, and films illuminate the development of this place called Utah and tell the story of the broader community. These items, and countless more, are open and accessible for all to see, study, and enjoy.



◀ STEGNER'S TOOL OF CHOICE

U alum Wallace Stegner, dubbed the "Dean of Western Writers," used this typewriter to write his Pulitzer Prize-winning novel *Angle of Repose* (1971). Special Collections contains Stegner's original manuscripts for each work of fiction and nonfiction that he wrote, along with many photos and other materials that comprise a traveling Wallace Stegner exhibit.



A SERIES OF ▲ AUDUBON PRINTS

The library houses 13 oversized, hand-colored prints of mammals created by naturalist John James Audubon (1785-1851). The prints, originally appearing in Audubon's book *The Quadrupeds of North America*, have a similar feel to the bird illustrations for which he is famous.



◀ AN ANTHOLOGY OF DARWIN'S BIRDS

The Zoology of the Voyage of the H.M.S. Beagle was first published as a five-volume unbound book in 19 parts as they were edited and printed between February 1838 and October 1843. The parts were written by various authors, directed and edited by Charles Darwin.

A FIRST EDITION BOOK OF MORMON ▶

The library holds one of only two known first edition copies of *The Book of Mormon* (1830) that are signed by Joseph Smith. In the first edition, Smith is identified on the title page as the author. In later editions he is named only as the translator. This copy belonged to John A. Widtsoe, president of the University of Utah from 1916-21 and an apostle of The Church of Jesus Christ of Latter-day Saints.



UPARALLELED SKI ▲ ARCHIVES

This photo catches Olympic skier Alf Engen competing in a race in 1945. The Engen Collection is one of many contained in the Joseph S. Quinney Recreational Ski Archives, the largest collection of photographs, films, manuscripts, and such dedicated to the history of winter sports and the ski industry.



IMAGES OF A ▲ VANISHING CULTURE

Edward Curtis' *The North American Indian* was intended to document every major tribe west of the Mississippi, portraying what he perceived to be a vanishing culture. The collection of 2,232 photo-gravures was taken between 1890 and 1930 and published between 1907 and 1930. Currently, there is an ongoing effort to locate all extant sets and volumes.

AN ANCIENT SUMERIAN CLAY TABLET ▼

This tablet is impressed with a complete eight lines of Sumerian cuneiform dated to King Amar-Suen of Ur, year 2 (circa 2045 B.C.) and was used as a receipt for the rulers' grain provisions. An official known as a "beer libator" received the grains and was responsible for performing libations (pouring drinks as an offering to Deity) during funerary banquets.



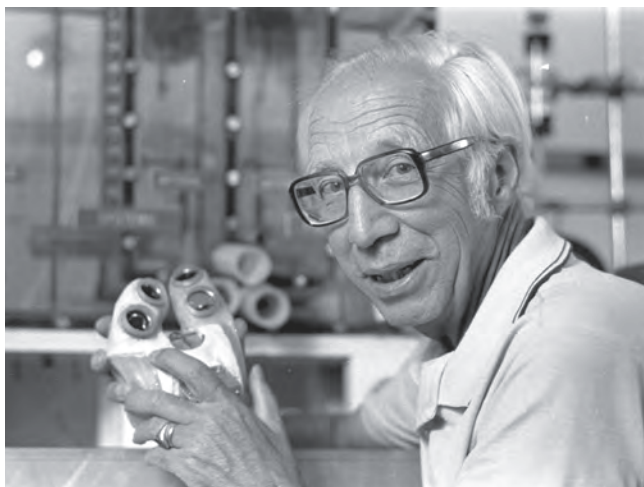
A FIRST EDITION ▲ FROM EUCLID

A first edition of Euclid's *Geometry* (1482) is one of the early science books in the Rare Book vault. Euclid was one of the most noted thinkers in early science and math.

A BOOK BY GALILEO HIMSELF ▼

Publication of *Dialogo di Galileo Galilei* in 1632 brought Galileo before the Inquisition in 1633, when he was forced to recant his support of Copernicus' heliocentric view of the universe.





THE ARTIFICIAL HEART DOCUMENTED ▲

Willem Kolff, a Dutch-born medical researcher, poses here with one of the artificial heart prototypes that he developed along with Robert Jarvik MD'76 and other researchers at the University of Utah. Kolff was also known for developing dialysis machines and other life-saving technologies.



A PHOTO COLLECTION ▲ OF JAPANESE RAILROAD WORKERS

Here, Tomojiro Asahara in front of Engine No. 190 in Helper, Utah, circa the early 1900s. This image is from the Tomojiro and Yasu Fukushima Asahara Photograph Collection in the Mitsugi M. Kasai Japanese American Archive in Special Collections. Asahara worked for the railroad in Helper, where he also owned and operated a photographic studio.



◀ THE STILL-WORKING ALLEN PRESS

In 1980, Lewis and Dorothy Allen donated an 1846 Columbian hand press to the Marriott Library. Red Butte Press faculty and staff continue the tradition of producing fine books on the hand press in the Book Arts Studio. Read more about the press at redbuttepress.org and the Book Arts Program at bookartsprogram.com.

ICONIC CONCERT POSTERS ►

The library's archive of concert posters has about 5,000 prints spanning more than 50 years of music from the multitude of music venues around the Salt Lake Valley such as The Terrace Ballroom, the Salt Palace arena, the Union Ballroom on campus, and Kilby Court. The posters feature acts large and small—ranging from The Who, Taj Mahal, Love, and Alice Cooper, to indie performers such as Built to Spill, The Decemberists, and Daniel Johnston, as well as many local bands.



◀ AN ORIGINAL EDISON PHONOGRAPH

Here, an Edison phonograph cylinder player circa 1913. Phonograph cylinders were one of the earliest media for recording and reproducing sound. As with today's flat records, sound information was engraved on the surface of the wax or plastic cylinder and played back using a needle connected to an amplifying system—in this case, a gramophone horn hidden in the speaker cabinet underneath the playback mechanism.

And at 100-plus years old, the phonograph still plays music! **U**

—Heidi Brett is the marketing and public relations director for the Marriott Library.



Visit continuum.utah.edu to watch a video of the phonograph playing and see additional photos of the various collections.

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A Place to Call Home

THE CLEONE PETERSON ECCLES ALUMNI HOUSE



Cleone Peterson Eccles





Spence Eccles, center, surrounded by family and U leaders at the ribbon cutting of the Cleone Peterson Eccles Alumni House in April.

"Named for someone so dear to our hearts, I know this 'house' will be far more a 'home' for the thousands of us who count the University of Utah as a treasured part of our lives."


*Ruth Watkins, President, University of Utah
Building Dedication, April 18, 2018*

Welcome home, U alumni and friends, to the Cleone Peterson Eccles Alumni House. The newly renovated space has been abuzz with special events ranging from graduation celebrations to retirement parties to alumni gatherings and board meetings. The 17,000-square-foot expansion more than doubles the size of the building, which serves as headquarters for the Alumni Association and provides event space serving the campus community, the public, and the U's more than 270,000 alumni throughout the world.

The building's design, furnishings, and natural light-infused interior reflect the gracious hospitality, warmth, and elegance of its namesake, the late Cleone Eccles BS'57, who dedicated countless hours as vice president of the Alumni Association Board and as a member of the U's Board of Trustees.

"Cleone's love for the U and interest in the success of the students were boundless," says Spencer F. Eccles BS'56. "Beginning with our student days when we first met, our family's affection for our alma mater has never wavered."

The building exterior is clad in native Utah stone, with balconies offering inspiring views of the mountains and Salt Lake Valley. Inside offers expanded conference and reception areas and a spacious ballroom accommodating dining for up to 400 guests (or theater seating for more than 500).

The renovation was made possible by a \$4 million lead gift from the Spencer F. and Cleone P. Eccles Family and the added generosity of many alumni and friends. Additional major donors include the O.C. Tanner Charitable Trust, George S. and Dolores Doré Eccles Foundation, Kem and Carolyn Gardner, University Federal Credit Union, Jeff and Helen Cardon, Dr. Ezekiel R. and Edna Wattis Dumke Foundation, Kay and Zeke Dumke, Jr., Ronald E. Henriksen, Sorenson Legacy Foundation, U Alumni Association, and The MUSS. 



Visit continuum.utah.edu to see more photos of the Cleone Peterson Eccles Alumni House.

In Her Mother's Footsteps

BALLET SENIOR PERFORMS AN UNFORGETTABLE FINAL SHOWCASE.

By Julie Hirschi



Photo by Elizabeth Molak-Huebner

In April, Brooke Huebner BA'18 gave her final U student performance, which for her had a sentimental flair. She had been preparing for that night's School of Dance Ballet Senior Showcase for months after having received special permission from The Gerald Arpino Foundation to perform an excerpt from *Italian Suite*. She would be dancing the same choreography that was originally created for her mother, Elizabeth Molak-Huebner, a former dancer with the prestigious Joffrey Ballet.

Brooke grew up immersed in ballet. She spent her youth at her mother's ballet studio in California, the Classical Dance Center, which Elizabeth founded 24 years ago. As with her mother, ballet was virtually all Brooke ever knew and wanted to do. "My mom raised me and my sisters at the studio; we basically lived there," says Brooke.

She notes that her mother never pressured her into ballet and even encouraged her to try other activities and sports, but they just didn't have the same allure. Brooke wanted to dance, like her mother. Training with Elizabeth for the *Italian Suite* allowed her to do just that. "Learning this [dance] from my mom, I wanted to match every single body movement and pose in the piece, but that is just not possible. We are two different people, and yes, I danced the same movements as her, but I found a way to make them my own," Brooke explains.

Elizabeth received a full scholarship to the Joffrey Ballet School at the age of 15, then was accepted into the Joffrey II at 16 and promoted into the main dance company at 18. She promptly found herself called into private rehearsals with Gerald Arpino, the co-founder of Joffrey Ballet and its resident choreographer, creator of more than a third of the company's dances.

Elizabeth had also begun her training with her own mother, Brooke's grandmother Rosemary McCarter. Rosemary was a

classically trained ballet dancer and spent time abroad studying at the International School of Ballet. Both of her daughters, Elizabeth and Celeste, were eventually members of the Joffrey Ballet. Rosemary witnessed Elizabeth perform the original *Suite* in 1983 and was also in attendance for her granddaughter's senior performance. "Knowing my mom and my entire family were in the audience, including my aunt and my grandma, made me turn on so much extra energy onstage," Brooke recalls.

Brooke was able to obtain the rights to perform the *Italian Suite* as a way to honor the tenth anniversary of Arpino's death, and to continue her mother's legacy. "My mom has taught me everything I know about ballet and dance, and I have worked with her my whole life, but this is a very different experience for sure," says Brooke. "Learning this special piece from her, all the nuances in the choreography, and even some of the commentary Mr. Arpino would say in rehearsals, has been such a surreal experience."

After graduating from the U this spring, Brooke returned to California for the summer to train, teach, and choreograph at her mother's studio. In August she began training with the Nevada Ballet Theatre and choreographing for an upcoming ballet competition, though for her nothing can quite top the experience of dancing in her mother's footsteps.

"My final performance went how I could ever imagine it and more," says Brooke. "Honestly, performing this piece sort of made me fall in love with ballet all over again. That feeling of being on stage doing what you love, for someone you love, was something so special. I enjoyed every second of it and wish I could go back and do it again and again." **U**

—Julie Hirschi BA'17 is former editor of The Daily Utah Chronicle.



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'Dream Big'

ALUM MICKEY IBARRA RECEIVES HIGHEST HONORS FROM THE MEXICAN GOVERNMENT.

By Brooke Adams

Acting as an advocate for others has always come naturally to Mickey Ibarra MED'80.

That lifetime of advocacy has earned Ibarra the highest honor bestowed by the government of Mexico—the Ohtli Award—in recognition of his contributions to the well-being, prosperity, and empowerment of Latino communities. The Consulate of Mexico in Salt Lake City presented the award, named for an Aztec word that means “pathfinder,” to Ibarra in May.

“I accept this high honor, the Ohtli Award, for my father, Francisco Ibarra, a Zapotec from Oaxaca who came to Utah in 1945 as a bracero to pick fruit in Spanish Fork,” Ibarra said. “And while you can take the man out of Mexico, you can never take Mexico out of the man. It is his courage, pride, hard work, and love of Mexico and the United States that inspired my brother and me to always dream big.”

Francisco Ibarra came to Utah through the Bracero Program, which brought migrant laborers from Mexico to the U.S. to work in crop fields. He soon met and married a young woman from central Utah and landed a better job at Kennecott Copper. While working there, he was drafted into the U.S. Army and sent to Germany.

After struggling to care for their two sons, Francisco Ibarra's wife placed the boys in foster care, where they remained after their father's return. For Mickey and David, the experience of growing up in Utah County in the 1950s couldn't have been more different. Mickey thrived, but David, who was shy and angry about being separated from their parents, struggled. David also became the target of blatant racism.

“It was deeply embedded in me that we were together, and I felt responsible for assisting David in making it through that experience,” Mickey says. “By the time I was 15, it was really becoming serious.”

During a brief visit with their father, who had moved to Sacramento, David pushed to join him in California. Francisco Ibarra made it clear that the teenage brothers could not be separated. “After some thought, I reached the conclusion that it was the right decision,” Mickey recalls. “It was time to reunite, to leave Utah.”

The move allowed the brothers to discover their identity as Mexican American kids, Ibarra says. “That wasn't something we knew in Utah,” he recalls. “We knew we weren't the same, based on our ethnicity, our skin color.”



José Borjón, head consul of Mexico in Utah, presents the Ohtli Award to Mickey Ibarra on behalf of the government of Mexico.

Ibarra enlisted in the U.S. Army after high school. He used the G.I. Bill to get a bachelor's degree in education from Brigham Young University, which he followed with his master's degree from the University of Utah. Ibarra was named a U Alumnus of the Year in 2001 and a Hinckley Institute of Politics fellow in 2006. He received an honorary doctorate of humane letters from the U in 2007.

Ibarra taught at an at-risk high school in Utah County, which led to involvement in the Utah Education Association and then the National Education Association. From 1997-2001, he was director of Intergovernmental Affairs in the Clinton White House. Ibarra then opened his own consulting firm in Washington, D.C. This summer, the firm welcomed its 18th intern from the Hinckley Institute of Politics.

Mickey and his brother, who became a successful entrepreneur, are now focused on giving back. They created the Latino Leaders Network, which honors individuals who are making a positive impact in the U.S. The brothers also established the Ibarra Foundation Scholarship, which provides two-year and four-year college scholarships to Latinos in Utah. To date, the foundation has supported nearly 80 students. **U**

—Brooke Adams is a communications specialist at University Marketing & Communications.

PHILANTHROPY. FAMILY STYLE.



A YEAR AND A HALF AGO, Craig Judd, a financial advisor, created a Deseret Trust Company donor advised fund as a way to set aside some funds tax-free. But he says that what started off as just “a good tax play” turned into his family’s “most charitable year ever” and has blossomed into a charitable awakening.

Through their donor advised fund (DAF), Craig and his family have been able to receive immediate charitable-giving tax deductions on money invested while letting them decide later which charities to support.

“I can’t imagine any DAF that doesn’t make the world a better place. We’re all more compassionate if we engage in helping others. Take the step and open a DAF. You’ll never regret it.”

If you would like information on how to use a Deseret Trust donor advised fund to facilitate your charitable giving, contact LDS Philanthropies Gift Planning Services at 1-877-650-5377 or giftplanning@ldschurch.org.

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'70s

**Jeff Clawson**

MD'74, founder of the Salt Lake City-based International Academies of Emergency Dispatch®

(IAED™)—a nonprofit organization that sets emergency dispatching standards for training, dispatch protocols, and quality assurance, and which certifies emergency dispatchers throughout the world—was recognized this year by the Association for Talent Development with its Champion of Talent Award. Established in 1988, IAED includes more than 64,000 members in 46 countries handling some 80 million calls each year.

**Lori Frasier BS'77**

MD'83, director of the Center for the Protection of Children at Penn State Health Milton S. Hershey Medical Center, was honored

with the 2018 Helfer Society Award for her contributions to the field of child abuse prevention in pediatrics. Society past president Kent Hymel said, "I would argue that Dr. Frasier has done more than anyone among us to advance an understanding of child abuse pediatrics around the globe."



Reed Iwami BS'72, after a successful career in business, shifted his interest to humanitarian service to the people of Myanmar,

a country with ongoing political unrest. In 2008, he cofounded the nonprofit Love for Myanmar, with the goal to provide a safe environment in which the people can succeed, and to enhance their success by implementing programs to meet their physical, mental, and spiritual needs. Iwami is especially interested in building and financially sustaining shelters for orphaned children.

Road Tripping with the President: A Report from Our New Alumni Director



The southern Utah "Ruth 66" road tour crew pictured in Silver Reef (Andrews is far left).

This June, I joined the university from my previous position as vice president of alumni relations at Brown University in Providence, Rhode Island. Soon after, I had the opportunity to join President Ruth Watkins and other university officials on the southern leg of the U's "Ruth 66 University for Utah Road Tour" to connect with business leaders, public officials, and members of the Utah higher education community. At every stop, President Watkins asked "How can we help?" as she sought to discover what the U can do to support the success of Utah's businesses and local communities, as well as its other colleges and universities.

We stopped at Utah's Silicon Slopes area and visited with Adobe and IM Flash, where we learned how global companies are seeking to create the most diverse workforce possible to serve an international customer base. We learned that the Utah economy needs engineers to fuel the growth of the high-tech sector—engineers who have problem-solving skills that come only from a world-class education. We met with government leaders in Provo to discuss issues of higher education affordability. Stopping at Beaver Valley Hospital, we learned how telemedicine is making best-in-class health care more accessible by extending the U's medical expertise to rural areas. We visited the Cedar Livestock Market and discussed how drought conditions are forcing cattle to market earlier, a hardship in a state where agriculture represents 15 percent of the economy. We met with educators from Southern Utah University, Dixie State University, and Snow College, who talked with President Watkins about reducing student debt and increasing access to higher education for all Utahns.

One of our goals for the U's Alumni Association is to strengthen support of our local chapters. For me, then, the highlight of the trip was an alumni dinner organized by the incredibly welcoming St. George Chapter. Special guest Mark Harlan, our new athletic director, gave an inspiring talk about continuing the U's culture of winning in the competitive Pac-12 conference.

At every turn on our trip, I was struck by President Watkins's ability to listen and her desire to connect the U with the forces driving progress and increasing quality of life in Utah. I noticed her unwavering focus on students and creating affordable educational opportunity for all. On returning to Salt Lake City, I felt very fortunate to be working at such an amazing university, one focused on benefiting its home state, its alumni, and each new generation of students.

Todd Andrews, Alumni Association Executive Director

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HOMECOMING 18

Visit alumni.utah.edu/homecoming for more.

Homecoming 5K—Pull Out Your Running Shoes



On your mark, get set, run! The U's annual Homecoming 5K and Kids 1K are right around the corner. Join the fun at 8:30 a.m. on Oct. 20 at the recently renovated Cleone Peterson Eccles Alumni House just east of the Olpin Union.

Last fall, more than 800 people registered for the Homecoming Scholarship 5K & Kids 1K. It was an incredible day of running, camaraderie, and U pride. The U5K, which is organized by the Alumni Association's Young Alumni Board, raised more than \$60,000 last year for student scholarships and hopes to break that record this fall with your help.

If you live outside of Utah or can't attend that day, you can still sign up for the virtual U5K, which you can run, stroll, or walk anywhere, from the trail to the treadmill. Click the "Virtual Racer" button at registration. For more information and to register, visit U5K.fun.

'80s



Klea Blackhurst

BFA'85 headlined *Jubilate* in June at San Francisco's Palace of Fine Arts for the 25th anniversary gala of 42nd Street Moon, a professional

theater company dedicated to preserving American musical theater. Blackhurst has delighted audiences in musicals including *Everything the Traffic Will Allow*, her tribute to Ethel Merman, which earned her a Special Achievement Award from *Time Out New York* magazine. Blackhurst received a Distinguished Alumna Award from the U's College of Fine Arts in 2012.

'90s



Steven K.

Andersen BA'95, vice president of the American Arbitration Association's International Centre for Dispute Resolution®

(ICDR®), was honored this year by the Silicon Valley Arbitration & Mediation Center with its first Outstanding Contribution to Technology Dispute Resolution Award. Andersen directs the ICDR in Canada, Mexico, and the United States and is responsible for its cross-border arbitration and mediation in the region, and for providing executive oversight of large cases.



Marilyn Brown

MFA'92 and her husband and creative partner Bill were recognized with a Lifetime Achievement Award this year at the SCERA

Center for the Arts in Orem, Utah. The award acknowledges their achievement in enriching the communities and citizens of Utah. With master's degrees from Brigham Young University and the U (both in creative writing), Marilyn Brown has published more than 20 books, co-developed more than 96 plays, and received numerous awards for her novels, short stories, and poetry.

**Jan-Ruth Mills**

BA'92, a doctoral candidate at Florida State University, received a Fulbright U.S. Student Program award from the U.S.

Department of State and the J. William Fulbright Foreign Scholarship Board. Mills will conduct research in Germany at University of Regensburg to investigate the use of slave labor by the Third Reich to construct the *Messerschmitt Me 262*, the first operational jet fighter. Fulbright recipients are chosen based on academic and professional achievement as well as service record and leadership potential.

**Edward Morrison**

HBS'94 BS'94, the Charles Evans Gerber Professor of Law at Columbia Law School and an expert in

law and economics and bankruptcy law, was awarded the 2018 Willis L.M. Reese Prize for Excellence in Teaching and chosen as Professor of the Year by members of the Class of 2018 at their commencement ceremony in May. Morrison was recognized by the U Alumni Association's Young Alumni Board as an outstanding young alum in 2009.

'10s

**Johanna Varner**

PhD'15 received the 2018 Early Career Award for Public Engagement with Science from the American

Association for the Advancement of Science. An assistant professor of biology at Colorado Mesa University, she is cofounder of Cascades Pika Watch in Oregon, a citizen science program she developed in part with middle school students, wherein volunteers study the response of pikas (small rabbit relatives) to environmental change by conducting field research, analyzing data, and presenting results to local agencies.

Alumni Association Welcomes New Board Members

Six new members recently joined the Alumni Association Board of Directors. These volunteers help support the association and serve on committees ranging from scholarships to community service. We're pleased to introduce each of the new members to you.



Andrew Cooley BA'92 is chief executive officer at Kenetics, a division of Garff Enterprises. Most of his career has been spent serving in the public, education, and technology sectors. At the U, Cooley served with the Bennion Center and was elected ASUU president. He earned his bachelor's degree in English from the U and a master's degree from Harvard University.



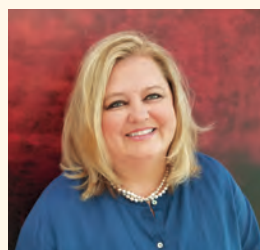
Jonette Mangum BA'78 is the owner of Sugar House Realty. She has served in many volunteer roles and on a number of community boards. Mangum is a member of the executive committee on the Educational Resource Development Council. She received her bachelor's degree in English literature *cum laude* and also attended American College in Paris.



Mark Hardy BS'89 BA'89, a partner at Aurora Capital, has spent his career in the private equity market, where he focuses on developing and implementing growth strategies. He graduated *magna cum laude* with bachelor's degrees in economics and political science from the U and earned an MBA from Harvard Business School in 1993.



Angie Matinkhah MA'87 graduated at the top of her class at the University of the Philippines College of Architecture. At the U, she received a Rotary Foundation scholarship, a research fellowship, and the American Institute of Architects award. Matinkhah co-founded ARCOM, an architectural computer services company.



Tiffany Romney BS'88 JD'91 is a judicial law clerk for U.S. District Judge Dee Benson and has been a pro bono attorney for the U. She received her bachelor's degree in political science *summa cum laude* and was president of Delta Gamma sorority, and she was also involved in ASUU. She served as a Hinckley Institute intern in the U.S. Senate as well as the Utah Legislature.



Todd Smith BA'88 is senior vice president at Moreton & Company, a Salt Lake City-based insurance broker. He has been with the firm for more than 20 years and previously spent eight years with a large national manufacturing company. Smith's community service has included being a Winter Olympics volunteer at Snow Basin. He graduated from the U with a bachelor's degree in business finance.

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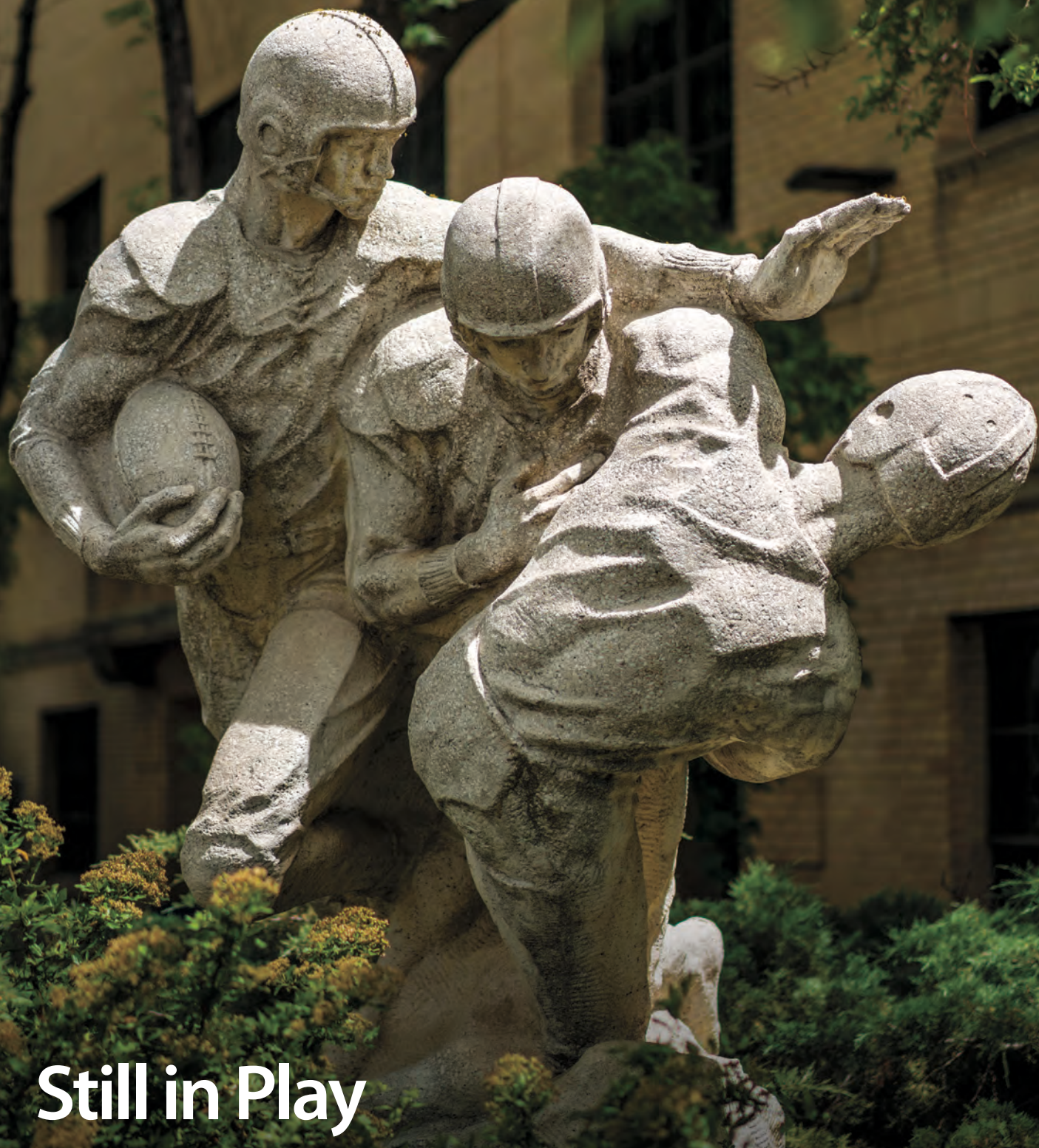
DATE	OPPONENT	LOCATION
AUG 30	WEBER STATE	SALT LAKE CITY, UT
SEPT 8	NORTHERN ILLINOIS	DEKALB, IL
SEPT 15	WASHINGTON	SALT LAKE CITY, UT
SEPT 29	WASHINGTON STATE	PULLMAN, WA
OCT 6	STANFORD	STANFORD, CA
OCT 12	ARIZONA	SALT LAKE CITY, UT
OCT 20	USC	SALT LAKE CITY, UT
OCT 26	UCLA	PASADENA, CA
NOV 3	ARIZONA STATE	TEMPE, AZ
NOV 10	OREGON	SALT LAKE CITY, UT
NOV 17	COLORADO	BOULDER, CO
NOV 24	BYU	SALT LAKE CITY, UT



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Still in Play

The classic sculpture *Teamwork*, set in front of Einar Nielsen Fieldhouse, provides a timely reminder that this fall commemorates 125 years of Utah football. Using media including iron, wood, wire, plaster, and concrete, U fine arts student David Orton Maxfield BA'50 MA'51 created the statue as part of his master's thesis. To make the seven-foot players look as authentic as possible, Maxfield consulted football coach Jack Curtice for technical advice and uniforms. Now, as we celebrate this major milestone for U football, be sure to check out the commemorative patch on this season's team jerseys. Go Utes!



Visit continuum.utah.edu for an exclusive web extra video series celebrating 125 years of Utah football.

Photo by Dave Titensor



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—Kristin Case, Technical Supervisor, Parasitology

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