spring 14

Continuum

THE MAGAZINE OF THE UNIVERSITY OF UTAH

VOL. 23 NO. 4

Genetics and U

GROUNDBREAKING RESEARCH AND LEGAL ISSUES ARE CHANGING MEDICINE AND ACCESS TO DISCOVERIES

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U research professor and Utah Genome Project director Deborah Neklason looks over a genetic chart.

Photo by Tom Smart

Visit continuum.utah.edu *for additional photos, videos, and more.*

Your Comments

INTERNATIONAL PROGRESS

I believe this is a great step forward ["Global U," Winter 2013-14]. It builds on the international education experiences like the one I enjoyed in 1973 when I studied Arabic in Tunisia, with the assistance of an NDEA Fellowship. I also did my PhD dissertation research in Tunisia in 1973 with the assistance of a University of Utah Research Fellowship. I've worked with Dr. [Michael] Hardman, as a member of the College of Education Advancement Board, when he was dean of the College of Education. His leadership ability and international education experience make him a perfect choice.

Keith W. Martin BS'71 MEd'72 PhD'75
Bountiful, Utah

MEMORIES OF CARLSON HALL

A highlight of my freshman year at the U was living at Carlson Hall in 1949 ["Remembering Carlson Hall," Winter 2013-14]. It was a thriving hub of activity. I met so many friends there. There were strict rules in curfews, but some of the girls got around them by going out the windows to meet their boyfriends. We laughed about some of the meals we had. One entree was beef tongue, and another was parsley soup with not much else in it. I had a private room, so that I could get my studies done. Just loved the place!

Norene Rogers Emerson BA'53
Houston, Texas

I was renting a room two houses from the Institute of Religion. I was selected for the NROTC Program. During my 1952 junior year, I met this very attractive freshman [Diane] whose father was an Army colonel stationed in Germany. She came home to go to the U. She attended the LDS Institute. I asked her out, and when I found out she was living at Carlson Hall, this was perfect. I could date her on my $10 a week spending money. We went to all the U and the Institute's functions. Every night, I would walk down to Carlson Hall to see her. As I had to wait in the date room, I spent time playing "Old Buttermilk Sky," which was the only piano piece I could remember. Upon graduation, we got married. I went into the Navy and was stationed at the U.S. Naval Base in Sasebo, Japan. She came over, and the rest is history. August 30th will be our 60th. Thanks, Carlson Hall.

Earl Benedict BS'54
Boise, Idaho

A DIGITAL FUTURE

As much as I enjoy the present connectivity, it can never replace that I felt in the stacks in the basement of the U library back in 1953 ["A Pathway Through Books," Winter 2013-14]. Nothing will ever replace the feel of a good book in your hands.

Paul L. Hansen BS'53
San Clemente, California

I agree that the very nature of paper and binding, held between two hands, is not a transitory matter, but the attributes of a modern academic environment lend themselves to the digital realm. The digital library, in the hands of a visionary, becomes a leveling, bridging, and democratic environment that opens its collection to a wider community of users.

Tony Sams BFA'03
Salt Lake City, Utah

All comments submitted via continuum.utah.edu

We're eager to hear from you. Please go to continuum.utah.edu/contact-us/ *for our contact information.*

Continuum

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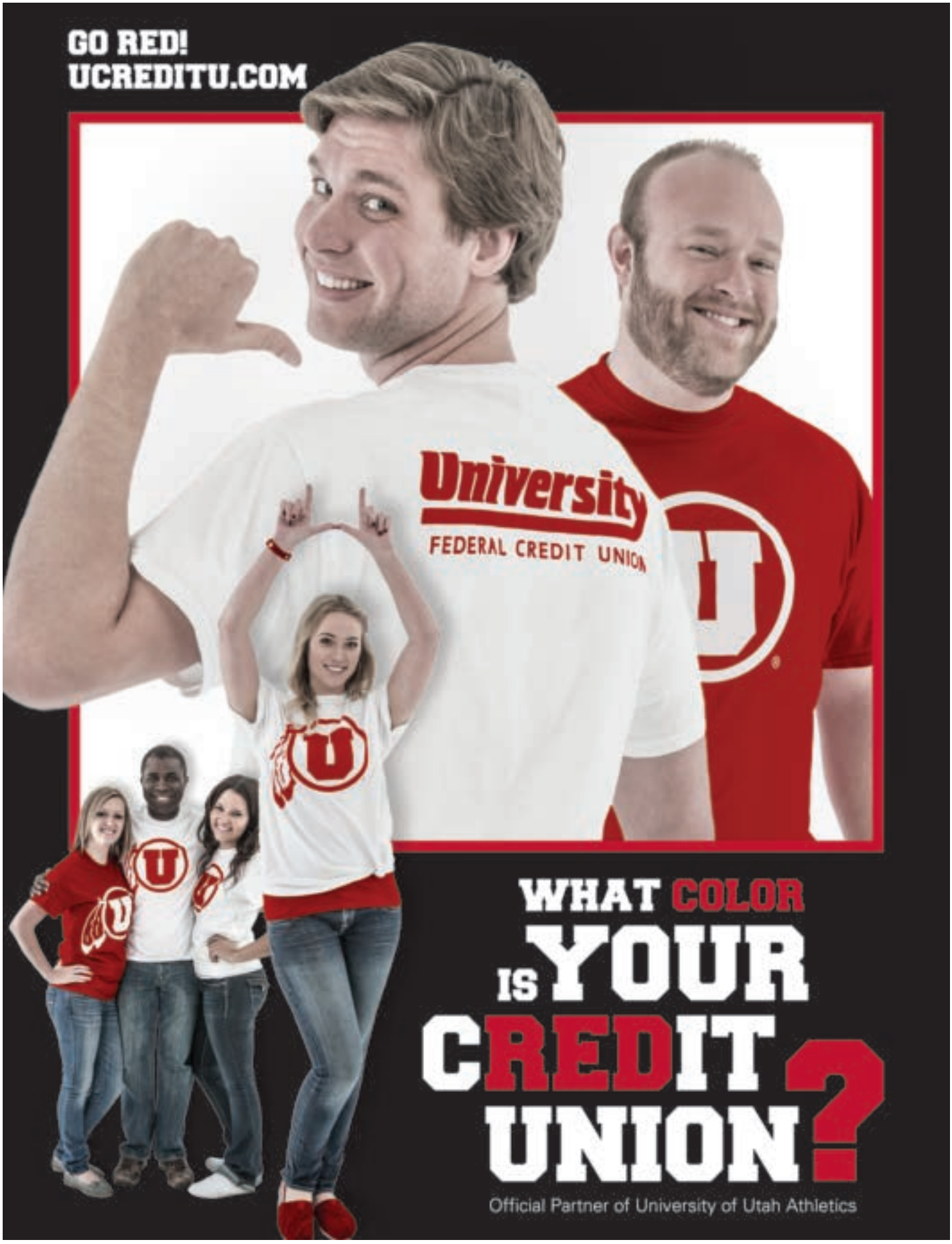
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Dance Companies with U Roots Celebrate 50 Years

Photo by Luke Isley, courtesy Ballet West. Choreography © George Balanchine Trust

Two Utah dance companies, Ballet West and Ririe-Woodbury Dance Company, had their beginnings at the University of Utah, and both are marking their 50th anniversaries during their 2013-14 performance seasons.

Ballet West was established in Salt Lake City in 1963 by Willam F. Christensen and Glenn Walker Wallace. In 1951, Christensen, the company's first artistic director, had established the first ballet department in an American university, at the University of Utah. Christensen, with his brothers Lew and Harold, had earlier made history in the early 1940s by establishing the oldest ballet company in the western United States, the San Francisco Ballet. In 1949, Willam returned to his native Utah to choreograph the summer festival productions held in the stadium at the U. After two more successful summer seasons, then U President A. Ray Olpin offered Christensen the position of professor of ballet, with the mission to begin a ballet school in the Department of Theatre and Speech. Christensen created the University Theatre Ballet to give students the opportunity to perform for the community. By 1955, the new ballet company had partnered with the Utah Symphony to present their first production of *The Nutcracker*.

In 1963, Christensen and Wallace received a Ford Foundation grant that helped the University Theatre Ballet become the Utah Civic Ballet, a fully professional company. The company was renamed Ballet West in 1968. Today, the thriving dance company has 37 members, 11 second members, and an academy that trains dancers of all ages, many of whom have gone on to professional careers with Ballet West and companies around the world. Since its inception, the company has had five artistic directors—Christensen, Bruce Marks, John Hart, Jonas Kåge, and currently, Adam Sklute. Ballet West is now considered among the top professional ballet companies in America.

Ririe-Woodbury Dance Company was founded in 1964 by two U dance professors, Shirley Ririe BS'50 and Joan Woodbury. They are now professors emeritae, and their company is in residence at the Rose Wagner Performing Arts Center, a central hub for the arts in downtown Salt Lake City.

In 1951, Elizabeth "Betty" Hayes, director of modern dance at the University, recruited Woodbury to the faculty. Woodbury, a Utah native, had finished her graduate studies at the University of Wisconsin, and the vitality of the U's modern dance program led her to make the University her base. Ririe, raised in Salt Lake City, returned to Utah in 1952 after her graduate study at New York University and soon found herself teaching for Virginia Tanner's children's dance program. Hayes introduced Ririe and Woodbury, and they soon were choreographing works together. In 1956, they convinced President Olpin to allow them to job share Woodbury's full-time faculty position.

They decided to form the dance company as an outgrowth of their work at the U. By 1970, the U's dance programs were flourishing, and Ririe-Woodbury Dance Company was touring regionally. The company auditioned for and was accepted into the National Endowment for the Arts new Artists-in-Schools and Dance Touring Programs and became a full-time national touring company. The company has performed throughout the United States, as well as in Europe, South Africa, southeast Asia, and the Caribbean, and continues to expand its contemporary repertory.

Photo by Stuart Ruckman, courtesy Ririe-Woodbury Dance Company

U Forges New Partnership with Nankai University

The University of Utah has created a collaborative education program with Nankai University in Tianjin, China, that will expand global partnerships in Asia. Called the 3+X program, it will provide Chinese students the opportunity to attend both universities and receive a bachelor's degree from Nankai University and a master's degree from the U.

"We look forward to expanding this innovative partnership with Nankai University as a significant component of the reach of our Asia Center, Confucius Institute, Songdo campus, and our university's evolving focus on Asia," says Robert Newman, dean of the College of Humanities.

Students admitted to the 3+X program will attend Nankai University for three years of study, then enter the U to complete the program. At the end of their first year at the U, students will be awarded a bachelor's degree from Nankai University, then continue on toward their master's degree, which will be awarded by the U. Once students are admitted into the 3+X program at Nankai University, they are still required to apply to the U to be admitted under the standard graduate admission guidelines. Students can choose from a variety of majors, including finance, comparative literary and cultural studies, communication, and teaching English as a second language.

Photo by Garrett Anderson

"Given Asia's political and economic importance and the rapidly increasing number of students from Asian countries that come to Utah to study, the continent is a strong focus for global engagement at the U," says Janet Theiss, director of the Asia Center. "Programs like 3+X are designed to build sustainable academic partnerships to foster the international goals of both sides."

Gong Ke (shown at left in the photo), president of Nankai University, and David W. Pershing (at right), president of the U, signed the 3+X program agreement in November to finalize the understanding. Students from Nankai University are expected to arrive at the U in fall 2015.

U Hospital Becomes NIH Regional Stroke Center

The University of Utah Hospital has officially been named by the National Institutes of Health (NIH) as a member of a unique network of regional stroke centers across the country that will work with nearby satellite facilities, have teams of researchers representing every medical specialty needed for stroke care, and address the three prongs of stroke research: prevention, treatment, and recovery.

The new system is intended to streamline stroke research, by centralizing approval and review, lessening time and costs of clinical trials, and assembling a comprehensive data-sharing system. University of Utah Hospital, the first and only Comprehensive Stroke Center in the Intermountain West, is one of only 25 centers nationwide to be selected to participate in the network.

Two U Professors Win Governor's Science Medals

Two University of Utah faculty members—chemist Henry S. White and science educator Aloysius S. Church—are among seven winners of the 2013 Utah Governor's Medals for Science and Technology.

White, a Distinguished Professor at the U, recently spent six years chairing the University's highly ranked chemistry department. Church, who now works for the U, is known as the founder and first principal of AMES, the Academy for Math, Engineering and Science, based at Salt Lake City's Cottonwood High School.

A third winner—Larry Rigby ex'64 of Larada Sciences—has close ties to the University. Some of the eight companies he founded are spinoffs based on University technology. Larada, for example, commercialized the successful head-louse treatment device developed at the U as the LouseBuster and now sold as AireAllé.

"Advances in science and technology play a huge role in keeping Utah dynamic and competitive," says Governor Gary R. Herbert.

University Joins Capital City Education Partnership

The University of Utah is participating in a collaborative effort for fostering prenatal through postsecondary education, career pathways, and civic engagement opportunities for all youth and families in Salt Lake City. The partnership is called the Capital City Education initiative.

U President David W. Pershing this past fall joined a group that included Salt Lake City Mayor Ralph Becker JD'77 MS'82, Salt Lake City School District Superintendent McKell Withers BS'78 MEd'85 PhD'05, Salt Lake Community College President Cynthia Bioteau, Salt Lake Chamber President/CEO Lane Beattie, and Marjorie Cohen, National League of Cities principal associate for education, to sign a benchmark agreement formalizing collective efforts toward educational success. The agreement came about after the National League of Cities in 2011 selected Salt Lake City, along with University of Utah Neighborhood Partners and the Salt Lake City School District, to participate in the Lumina Foundation's leadership training for postsecondary access and success.

U Business School Now Offers Online MBA Program

The University of Utah's David Eccles School of Business has launched an online Masters of Business Administration degree. The MBA online program will give students the opportunity to pursue their degree in a convenient, interactive, and on-demand format.

The new program, which will begin enrolling students in fall 2014, will require the same demanding application standards and will be taught by the same

world-renowned faculty as the U's other highly ranked MBA programs.

The online program will provide a highly interactive learning experience for students. Each course will combine on-demand, multimedia enhanced lectures and team projects with in-depth discussions between students and faculty using video conferencing and other online multimedia forums.

"The introduction of our new online program shows that we understand how important choice is to our students," says Taylor Randall, dean of the David Eccles School of Business. "The incredible opportunities provided by evolving technology will allow our faculty to work and interact with students in a new way, no matter where they are in the world."

Continuum Now Has Responsive Web Design

No matter the size of your computer screen or handheld device, the online edition of *Continuum* can now automatically adjust and adapt to make for an optimal reading experience. Check out our new design and its ability to adapt to various screen sizes, from desktop computers to phones. Find it all at *continuum.utah.edu*.

Continuum Wins Regional Award for General Excellence

Continuum magazine and several other publications of the University of Utah have been honored with 2014 CASE regional awards. The Council for Advancement and Support of Education each year recognizes excellence by colleges and universities in several categories, including alumni relations, fundraising, public and government relations, and communications.

In all, the University received six Awards of Excellence this year from CASE District VII, which represents higher education professionals and institutions in Utah, Arizona, California, Guam, Hawaii, Nevada, and the Northern Mariana Islands. The winners were selected from more than 400 entries and were announced in February.

Continuum received a silver award in the General Interest category for magazines with a circulation of 75,000 or more, recognizing general excellence in multiple issues during the past year. *Alumni Connection*, the U Alumni Association's monthly online newsletter, was recognized with a bronze award.

The John A. Moran Eye Center received two first-place honors for the publication design of "Hope in Sight Campaign Materials" and for its fundraising video *See the Need*. University of Utah Health Sciences also won gold in the Annual Magazines category for *Algorithms for Innovation*, and the Moran Eye Center won bronze in that category for *FOCUS 2013*.

University's Volleyball Team Reaches NCAA Tournament

The University of Utah volleyball team returned to the NCAA Tournament

in December for the first time since 2008 and earned a 3-1 first-round victory over Yale University. The Utes fell in the second round to No. 2 national seed Penn State. This was Utah's 11th NCAA Tournament appearance in school history.

The Utes finished 26th in the NCAA's final RPI rankings and ended with a 21-13 overall record.

It was Utah's first season since 2008 with 20 or more wins.

U Team Creates Outdoor Fun for Quadriplegics

Photos courtesy Jeffrey Rosenbluth

Dr. Jeffrey Rosenbluth, left, helped develop the kayak (above) and the bike (shown in the photo below).

University of Utah researchers and physicians have collaborated to create new outdoor recreation equipment, including kayaks and bicycles, designed to get spinal cord injury patients back into the great outdoors. The equipment is the product of a unique collaboration between University rehabilitation physicians and the U's Department of Mechanical Engineering.

"These pieces are fresh out of the engineering lab," says Dr. Jeffrey Rosenbluth, medical director of University of Utah Health Care's Spinal Cord Injury Acute Rehabilitation Program. "We're really concentrating on the hardest people to get into active living and sports. When coming up with these design plans, we asked, 'How can we give these individuals the ultimate experience?' "

Rosenbluth coordinated with mechanical engineering professor Andrew Merryweather to make his vision a reality, and the Craig H. Neilsen Foundation financially backed the projects. (The late Neilsen MBA'64 JD'67, a casino executive who became a quadriplegic after a 1985 automobile accident, established the foundation in 2002 to fund spinal cord injury research and rehabilitation.) Describing some of the innovative features of the team's new hand-cycle, Rosenbluth notes that typical handbikes are close to the ground, so getting into them from a wheelchair is simple, but it's almost impossible to get back in the wheelchair from that position. The U design features a seat that adjusts up and down, allowing users to get back into wheelchairs with relative ease. Rosenbluth also pointed out revolutionary features like electronic gear shifts located near the elbows, a chest piece braking system that is much more reliable and easy to use, and a power assist hub that measures the torque applied, then adds up to 300 percent.

For the kayak, the team fashioned a sip and puff system to steer, giving virtually anyone the ability to captain the vessel. "Being able to paddle traditionally is a difficult thing if you don't have much in terms of hand function or grip," he says. "We took this device and made it fully accessible and usable by someone with really no hand function whatsoever. If you can move your head and mouth a little bit, you can actually sail and kayak with this device."

Last summer, quadriplegic patients at the University of Utah got the chance to sail the vessel on a reservoir near Salt Lake City. Both Rosenbluth and Merryweather were on hand to see how the equipment worked and hear how it was received. "First of all, most people don't believe they can do it… and they don't believe it will work as advertised," Rosenbluth says. "But there's something therapeutic about being on the water. When people think they'll never get back on the water again and they do, I think you see their old personality come back. It's amazing."

Visit continuum.utah.edu *to watch a video of a patient sailing the kayak and to view a gallery with more photos.*

No 'Left-brained' or 'Right-brained,' U study finds

Chances are, you've heard of being a "right-brained" or "left-brained" thinker. Logical, detail-oriented, and analytical? That's left-brained behavior. Creative, thoughtful, and subjective? Your brain's right side functions stronger—or so long-held assumptions have suggested. But University of Utah neuroscientists have found that there is no evidence within brain imaging to indicate some people are right-brained or left-brained.

The terms left-brained and right-brained have come to refer to personality types, with an assumption that some people use the right side of their brain more, while some favor the left. Following a two-year study, U researchers have debunked that myth through identifying specific networks in the left and right brain that process lateralized functions.

Lateralization of brain function means that there are certain mental processes that are mainly specialized to one of the brain's left or right hemispheres. During the course of the study, researchers analyzed resting brain scans of 1,011 people between the ages of seven and 29. In each person, they studied functional lateralization of the brain measured for thousands of brain regions—finding no relationship that individuals preferentially use their left-brain network or right-brain network more often.

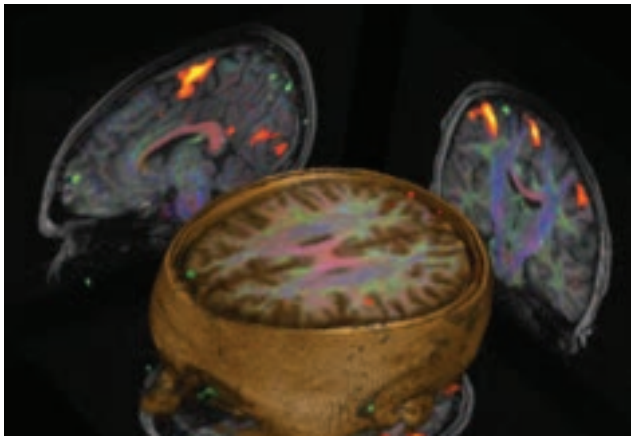


Photo courtesy Jeffrey S. Anderson

"It's absolutely true that some brain functions occur in one or the other side of the brain. Language tends to be on the left, attention more on the right. But people don't tend to have a stronger left- or right-sided brain network. It seems to be determined more connection by connection," says Dr. Jeffrey S. Anderson, U associate professor of radiology and lead author of the study.

"Everyone should understand the personality types associated with the terminology 'left-brained' and 'right-brained' and how they relate to him or her personally," says Jared Nielsen, a graduate student in neuroscience who carried out the study as part of his coursework.

"However, we just don't see patterns where the whole left-brain network is more connected or the whole right-brain network is more connected in some people. It may be that personality types have nothing to do with one hemisphere being more active, stronger, or more connected."

Visit continuum.utah.edu *to watch a video of Anderson telling more about the research.*

Immunodeficiency Disorder Mutation Identified

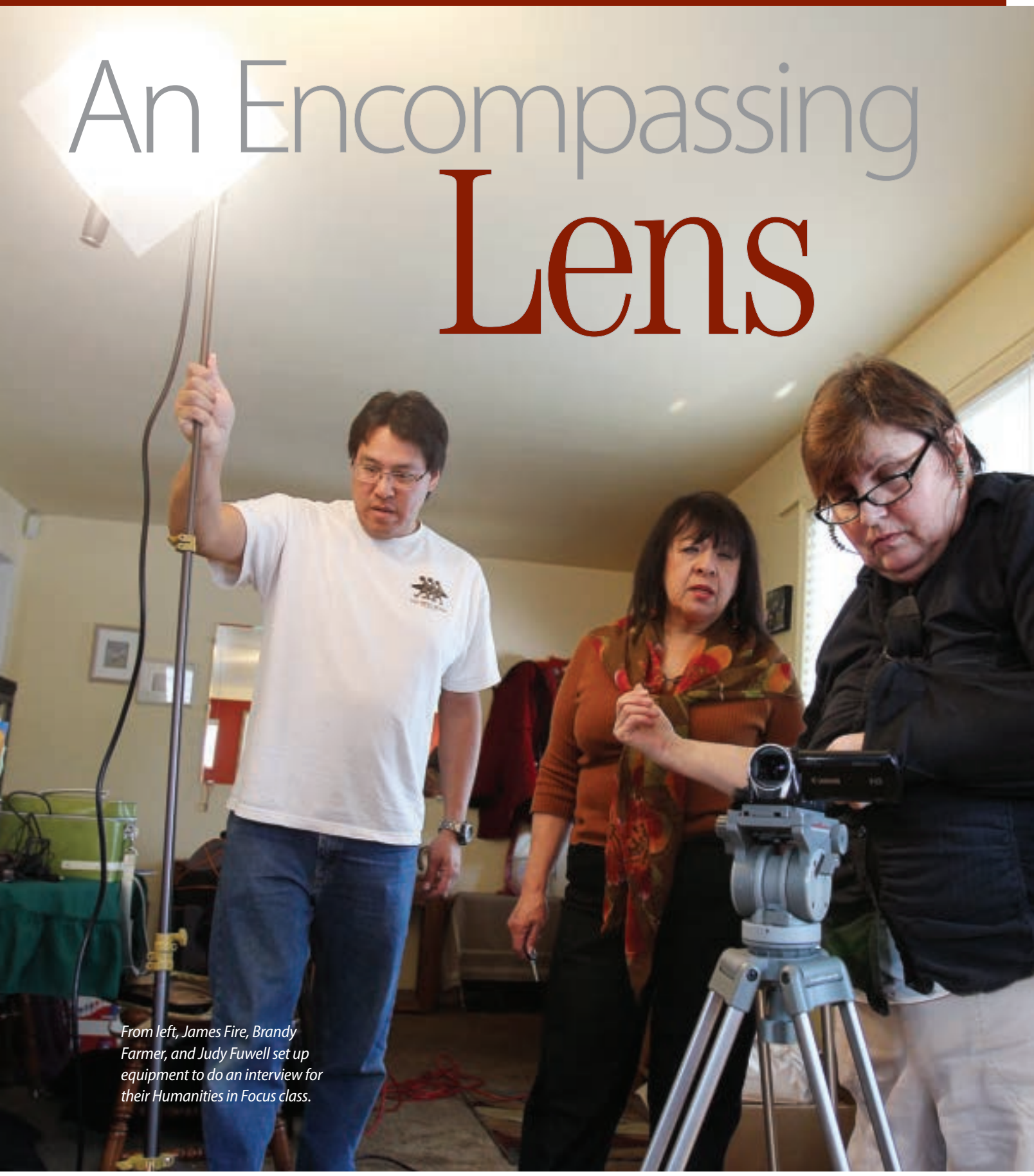
A 30-year-old woman with a history of upper respiratory infections had no idea she carried a gene for an immunodeficiency disorder, until her six-year-old son was diagnosed with the same illness. Now, a test available as early as this spring may make it easier for others to discover whether they have the disorder.

After learning she has common variable immunodeficiency, a disorder characterized by recurrent infections such as pneumonia and by decreased antibodies, the woman, her husband, their three children, and parents joined a multidisciplinary University of Utah study, and researchers identified a novel gene mutation that caused the disease in the mom and two of her children. The researchers discovered that a mutation in the NFKB2 gene impairs a protein from functioning properly, which interferes with the body's ability to make antibodies and fight infection.

The disorder typically doesn't present with symptoms until adulthood, and it's not uncommon for someone to reach their 20s, 30s, or beyond before being diagnosed, according to Dr. Karin Chen, co-first author of the study published in the *American Journal of Human Genetics* online. Identifying the NFKB2 mutation will make it easier to recognize and treat the disorder, particularly after a test developed in conjunction with the study by ARUP Laboratories becomes available as early as May.

"If we can screen patients for genetic mutations, we can identify disease complications associated with that gene, start looking for them and treating them sooner," says Chen, instructor of pediatric immunology at the University's School of Medicine.

An Encompassing Lens



From left, James Fire, Brandy Farmer, and Judy Fuwell set up equipment to do an interview for their Humanities in Focus class.

Two U professors' documentary filmmaking program gives 'invisible' students a voice.

Story by Kim M. Horiuchi Photos by Brian Nicholson

University of Utah English professor Jeff Metcalf's epiphany came eight years ago as he was teaching adult high school students enrolled at the Salt Lake City School District's Horizonte Instruction and Training Center. Many of the students were dropouts, and none had ever had any contact with a university before. Their education had stalled when life got in the way, and Metcalf worried about them. He was also intrigued. "What fascinated me most were the stories that happened before and after class—stories about people who had come to this country for political asylum, refugees, people who had been on the streets, who were homeless, people who had never had a place for their voice to be heard."

Metcalf BS'74 MEd'77 wondered how he could provide space in a university setting for people who had never thought their experiences and opinions mattered. "I thought, 'Wouldn't it be great to create a documentary class and teach them how to make documentaries so they felt less invisible?' I made a promise to these students that we would do that." There was only one problem, he says: "I realized I knew absolutely nothing about documentary filmmaking."

But Craig Wirth BS'73 did. Metcalf had met the fellow professor, an Emmy Award-winning documentarian, once or twice in the hallway at the U's Language and Communications building. Metcalf's office was right above Wirth's, so he introduced himself and explained his idea. "I told him, 'You just need to meet some of these students,' " Metcalf recollects. "After that happened, there was no turning back for either one of us."

They created the Humanities in Focus program, which helps "marginalized populations" make documentary films to tell their stories. Each Monday night, Metcalf and Wirth tag-team in teaching a class of 25 to 30 students in the J. Willard Marriott Library's digital media lab. The program, which costs about $40,000 a year to run, is supported by the U's College of Humanities and Honors College, as well as University Neighborhood Partners, a U endeavor that brings together University resources and community members in Salt Lake's west-side neighborhoods.

In the eight years since Humanities in Focus began, more than 350 students have collaborated in making 36 documentaries, and a half-dozen students have gone on to graduate from the University of Utah. The students have ranged in age from 17

Beatriz Sanchez, center, answers questions while being interviewed and filmed at her home by Humanities in Focus students.

to 82 years old. A majority are Hispanic (many coming from the Horizonte center and other programs serving west-side Salt Lake City neighborhoods), and almost all are living below the poverty line. The first lesson is acquainting them with the video and digital equipment they will use, including iPads, cameras, and videocams. "That stuff is not in their lives, so it begins with this simple task of taking the lens off the camera," Metcalf says. The next step is helping the students determine what their story is and how they will document it.

"I would say Craig and I could easily work at any carnival," Metcalf says. "It's fair to say we're hustling them the whole time. It's three-card

A Mother's Choice

Lucia Chavarria's mother was 27 years old when she became a widow with nine children. She had never gone to school, was living in Mexico, and had no way to make a living. She made a desperate choice and sent nearly half of her children, including Lucia, to live with their grandmother in the United States.

It was a decision that would haunt Chavarria's mother for years. "Four felt they were given away. That was just tormenting her," Chavarria says. After enrolling in the University of Utah's Humanities in Focus program, Chavarria decided to tell her mother's story in a 2008 documentary, *My Mother's Unheard Voice*.

Communications professor and program co-founder Craig Wirth describes the film as "an absolutely unbelievable documentary about a mother's love for her children." Wirth says Chavarria, now a paid mentor to the Humanities in Focus class, went from a quiet student to someone "who began to match wits with me. And now she is one of the most amazing documentary-makers I've ever seen."

When she first enrolled in the class, Chavarria says, she didn't know anything about cameras, was "still kind of afraid of computers," and often thought, "Please don't make me talk in front of crowds or I will pass out." But somewhere along the line, she says, "I got hooked."

When she was finished with her film, she brought her mother to Salt Lake City from Mexico to see it, and after its screening in 2008 at the Episcopal Church Center of Utah, a member of the audience came up to Chavarria's mom and said, "You are such a brave woman. I admire you." The audience member's comment and the film itself helped the mother accept her life decisions. "After the documentary, she felt she had done the right thing," Chavarria says. "It's given her some peace of mind. It helped her start to heal."

Visit continuum.utah.edu *to view Chavarria's film about her mother.*

monte. We're always sort of creating this undertone of 'Start thinking about what you're going to do. What's the most important story you would tell if you had 15 minutes' worth of fame?' "

Over the year-long course, the students earn six hours of University credit and become experts in lighting, sound, and editing, as well as writing scripts and interviewing. Perhaps most importantly, Wirth says, they learn how to express themselves—often on very personal levels. "I have not witnessed such pure and true documentary in my entire career," says Wirth, who has produced broadcast feature stories as a television reporter for more than 40 years. "I can't think of a better academic lesson but also a life lesson. It's where academia and life come together in a really bold and new form."

The Monday night classes begin with a potluck dinner—"We learned early that a lot of problems would be solved breaking bread together," Metcalf says—and quickly progress to the work at hand. On one recent night, several former students offered advice and encouragement and talked about the results of their work in the class. Jeannette Villalta, who dedicated her film about AIDS to a friend who died of the disease, mailed a copy to comfort family in Guatemala after learning her own brother had tested positive for HIV. "You never know the impact your stories can have on another life," she says. Natalia Solache made a documentary about being homeless and working for 10 years to gain her U.S. citizenship. In 2006, the Boys & Girls Clubs of Greater Salt Lake nominated her as their volunteer of the year, an honor that was recognized by the national organization Parents Anonymous and included a trip to the White House. "I went from sleeping on the floor to getting ready in this fancy room to go have breakfast with the First Lady."

Alejandro Miranda, a current student who is working on a documentary about his life, says he endured years of abuse at the hands of his stepfather before moving out of his house in Costa Rica as a teenager to work at a bed-and-breakfast, whose owner pressured him into a sexual relationship. Eventually, Miranda says, he was rescued by a couple who were lodging there while working with a nonprofit organization to save the country's rain forests. They put him in touch with Metcalf and helped him move to Salt Lake City. Now, Miranda believes he has a voice. "I have a clear idea of where I'm going and what I want. I am not ashamed of myself anymore."

It is stories like those that captivated Alexza Clark PhD'13, who made the Humanities in Focus program the focus of her doctoral dissertation at the U. Now the communications director at St. Cecilia Academy in Nashville, Tennessee, Clark had worked as a television producer in New York for CNN and Anderson Cooper. After marrying, she moved with her husband to his hometown of Salt Lake City, where she began pursuing her doctorate in communications at the U. She helped Villalta produce her documentary on AIDS and made her own documentary about Humanities in Focus. "I was utterly mesmerized that someone going

Finding Lessons

Tony Aguilar's documentary includes television news footage of the smoldering remains of a two-story, Dallas-area home destroyed by an explosion. Police determined the man found dead inside was in the middle of a divorce and had committed suicide by blowing up the house. The man was Aguilar's son-in-law.

Aguilar wanted to make a documentary about his son-in-law's suicide as part of the University of Utah's Humanities in Focus program, in an effort to help others. He joined the class a year ago after a colleague at the Utah Transit Authority had taken the course and told him about it.

Aguilar, who works as a bus driver, had immigrated to the United States from El Salvador in 1975. While living in New Jersey, he had worked out of his home as a freelance video producer for a local television station. So he was interested to learn about the U program. "I thought, 'Wow, this is what I have been waiting for,' " he says.

His first documentary was a group project about autism. He hopes the documentary he made this year about his late son-in-law will encourage others to listen to their children and be aware of signs of possible suicide. On the day of the explosion four years ago, Aguilar had read a message that his son-in-law had posted on Facebook, saying, "This could all be over soon!"

Aguilar saw the post and immediately called his wife, asking her to have their son, who was also living in Utah, telephone Texas police. The police, he says, helped get his daughter and her five children to safety. "One call made a difference," he says. "If I didn't call, it would have been a different story."

Visit continuum.utah.edu *to view Aguilar's film about suicide prevention.*

Stories that Heal

Judy Fuwell BS'10 was perfectly content learning about the literature and poetry that University of Utah professor Jeff Metcalf was teaching to low-income students in the Utah Humanities Council's Venture Course eight years ago, until he started talking about documentaries. At his behest, she signed up for the inaugural Humanities in Focus class. "I thought we were going to watch documentaries and talk about them and put our stories with poetry," she says. "When we went, I was a little shocked when they had cameras. I had not used any kind of video camera."

In the years since, she has made 31 documentaries that include *Family in Crisis*, made in 2006, about her daughter's meth addiction; and *Hi Mom, My Name is Claire*, finished last year, about another daughter's struggle with pica, a disorder characterized by an appetite for unusual substances, including chalk or dirt.

After the Humanities in Focus class, Fuwell enrolled as a full-time U student and graduated at age 58 with a bachelor's degree in communications. "It gave me a lot of self-confidence," says Fuwell, now an adjunct professor at the U.

Fuwell says telling those stories has helped her family heal. "I just didn't realize how important stories were or how they can help people until I started doing this."

Visit continuum.utah.edu *to view Fuwell's two films about her daughters.*

"We're always sort of creating this undertone of 'Start thinking about what you're going to do. What's the most important story you would tell if you had 15 minutes' worth of fame?' "

through such devastating traumatic events in their life would be willing to dedicate a whole year to learning to tell their story and then show others that story."

Sylvia Torti PhD'98, dean of the Honors College, says honors students became involved in the program two years ago, as part of the college's practice labs, which are special year-long courses of 12 students who take on pressing social issues under the direction of multiple professors. The Honors College students also learn about filmmaking along with the students from the community. The program is unique, Torti says, in bringing students and members of the community together in a mix of different socioeconomic, cultural, ethnic, and age groups. "Really, how many courses in college do you have where you're working on a project and interacting with people from all over the world, some of whom have spent time living on the street, others of whom have been abused or on drugs?" she says. "It really, I think, demystifies the idea of 'the other.' "

Metcalf says the stories are often difficult ones, and documenting them can be transformational. "We all carry stories in our bones," he notes. "The people who have been very timid living in the shadows, when they discover their voice, it means something."

—Kim Horiuchi is an associate editor of Continuum.

Visit continuum.utah.edu *to view Clark's film about the Humanities In Focus program, as well as Villalta's film about AIDS.*

From left, Lucia Chavarria, Jeff Metcalf, Sam Katz, Judy Fuwell, and Craig Worth watch Katz's documentary video during the Humanities in Focus class at the U's Marriott Library.

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Photo by Ed Carreón

A BOOK FOR Life

U BASKETBALL STAR BILLY MCGILL RECALLS HIS HIGHS AND LOWS IN HIS NEW AUTOBIOGRAPHY.

By Stephen Speckman

The University of Utah's Einar Nielsen Field House was packed for the final game of the 1962 season as the men's basketball team pounded the floor against Wyoming. Six-foot-nine-inch U center Billy McGill was in the zone, and his signature jump hook shot was, as usual, impeccable. He finished with 51 points that evening to lead his team to a 94-75 win. Long after the final seconds of the game had ticked away, the crowd continued to cheer, and McGill heard U President A. Ray Olpin start talking about him over the loudspeaker. All-time leading scorer and rebounder at the U. School record for most points per game. The highest-scoring center in NCAA history. One of the "greatest players" the school has ever known. "Today we are retiring the number 12 in honor of Billy McGill!" the president said, and a jersey bearing McGill's number was raised to the rafters.

"It's the highlight of my career," McGill writes in his new memoir, *Billy "the Hill" and the Jump Hook: The Autobiography of a Forgotten Basketball Legend*, published in November by the University of Nebraska Press. "I shake the president's hand, and I hug my coach. I wave to the crowd. And just like that, it's all over."

But McGill's pro career was just on the horizon. As a college player, he was a two-time All American, and in the 1961-62 season, he led the nation in scoring with an average 38.8 points per game, including a 60-point performance against archrival Brigham Young University. At the end of that season, he decided to leave school and was the No. 1 overall pick in the 1962 NBA Draft by the Chicago Zephyrs. But a knee injury plagued him, and after just three years in the NBA, he trailed over to the ABA for two seasons. He found himself back in his native Los Angeles, eventually sleeping in abandoned houses and washing up in a Laundromat.

McGill, now 74, recounts those highs and lows, and what came after them, in his new book, co-written with Eric Brach. "I wrote it for my beloved [Utah] coach, Jack Gardner, and the many Ute fans," McGill says. "I wrote it for them. I wrote it for Utah. …I wanted people to know exactly what happened."

McGill about four years ago had dusted off an old manuscript at the bottom of a closet in his Los Angeles home. They were words he had written three decades earlier about the twists and turns of his life. With assistance from Brach, who was finishing up a graduate degree in creative writing at the University of Southern California, McGill turned those memories into the book.

The story begins in San Angelo, Texas, where McGill was born, and where his mother left him in the care of relatives until he was five years old. She eventually returned to bring him to Los Angeles.

Growing up in the hardscrabble streets of LA, he found solace in pickup basketball games, as well as the

Photo courtesy Special Collections, J. Willard Marriott Library, University of Utah

Billy McGill leaps for a basket during a U game. He was a two-time All-American and a top NBA pick.

local YMCA gym and its staff. At eleven, he was dunking. Legend has it that during one pickup game with him and Bill Russell against Wilt Chamberlain and Guy Rogers when McGill was still in high school, McGill leapt into the air and threw the ball in a sideways arc over his head to nail the first-ever jump hook, later emulated by many top players.

As a freshman at Thomas Jefferson High School in Los Angeles, he had made the varsity squad, and the team that year won the city title. McGill was named to the All-Southern League first team and to the All-City squad. His high-school grades were bad, and he didn't have good study habits. But his game kept improving, and his popularity was growing.

At his high school team's appearance in the city championship game, McGill went airborne for a shot during the game and then heard a "pop." He fell like a "sack of rice" to the floor, he recalls in his book. A doctor called it the worst knee injury he'd ever seen and suggested an operation to insert an "iron" knee. McGill was told he'd never play basketball again. "As soon as I hear these words, I feel my brain start to dissolve," McGill writes.

McGill ranks No. 2 all-time at Utah for career scoring and No. 1 in career rebounding, and he still owns the single season and game records.

McGill declined the operation. He rested. And then he worked hard, coming back his senior year to become an "unencumbered scoring machine," he writes, despite a knee that hurt and swelled after each game.

When colleges came calling, McGill met a man named Rich Ruffel, who talked about the University of Utah campus, a place that McGill would later describe as "overwhelming," "beautiful," and "breathtaking." McGill also met legendary U coach Jack Gardner, now a Basketball Hall of Fame inductee, and instantly liked Gardner's blend of sincerity, authority, and kindness. With a four-year scholarship on the table, McGill chose Utah and became the first African American to play basketball for the U.

McGill was a second-team All-American during the 1960-61 season and then earned first-team honors during the 1961-62 season. He became the 11th player in all-time collegiate history to record 2,000 points and 1,000 rebounds during his career. He still ranks No. 2 all-time at Utah for career scoring (2,321 points) and No. 1 in career rebounding (1,106). McGill also owns the Utah single-season (1,009) and single-game (60) records for scoring, as well as the single-season (430) and single-game (24) records for rebounding. In sum, he was great, but he quickly began to live life "by the needle," requiring his knee to be drained by a doctor several times a week. He also encountered racism in Utah and on the road like he had never known growing up in California. His 60 points in that famous game against BYU came after a racial slur there, he says.

His academic work still wasn't a priority for him in college, he writes, and when the NBA knocked on his door, that was it for caring about classes. He dropped out in 1962 and purchased a brand new Austin Healey convertible with the $17,000 starting salary he received from the Chicago Zephyrs. "Deep down I know dropping out is dumb, even as I'm doing it," McGill writes. "But it's so easy to rationalize to myself."

McGill was introduced to a cutthroat

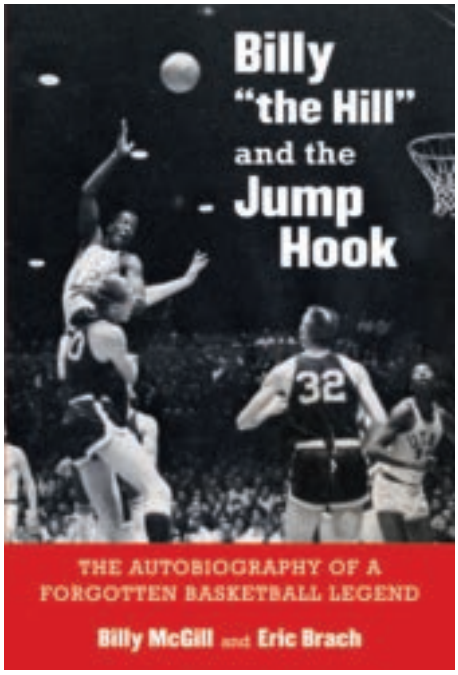
Photo courtesy Billy McGill

McGill, shown here in 1958, is credited with inventing the jump hook shot, later emulated by many players.

world in the NBA, one he says is full of "sharks" and where a hurt black player is "easily discarded." As his Chicago Zephyrs teammate Woody Sauldsberry told him, "Nobody's got your back."

McGill was no longer the dominant force he was in high school and college, though he still had plenty of talent and an unstoppable jump hook. But his knee kept getting worse. He saw his playing time drop dramatically. After one game, future NBA Hall of Fame inductee Oscar Robertson told him, "It's a shame… that they don't play you more, especially after how you tore it up in Utah," McGill writes.

By the time McGill was 30, he had retired from pro ball and began a slide into an oblivion that included depression, living with his parents, and eventually homelessness, which he details in the book with candor. But he crawled out of the rabbit hole of despair and slowly began to rebuild his life. Without a college degree, McGill writes, it was hard to get a good



paying job. After two years of sleeping in Laundromats and bus stops, sports editor Brad Pye, Jr., of the *Los Angeles Sentinel*—who had first called him "Billy the Hill" back in his high school days—helped him find a job in general procurement at Hughes Aircraft in 1972. McGill eventually met and married Gwendolyn Willie, whose children from another marriage he adopted. (His grandson Ryan Watkins, who also stands at six feet nine inches, is now a senior forward for Boise State.)

University of Utah Athletics Director Chris Hill MEd'74 PhD'82 says McGill was one of the U's most "fantastic" players ever, a "pioneer" as the team's first black player, and a star remembered even today for his "unique" style of play and his "enthusiastic approach" to the game. McGill's jersey still hangs high in the rafters at the U's Jon M. Huntsman Center, one of only seven to have been retired, and he was honored in 2008 as a member of the U's All-Century Team. This past February, he came to Salt Lake City to be honored at the U men's basketball game against Arizona and two nights later was recognized during a

pre-game segment by the NBA's Utah Jazz. In March, McGill is being inducted into the Pac-12 Hall of Honor.

Times have changed, Hill says, in terms of the support offered to athletes to encourage them to graduate. "We can say very seriously that we provide every single opportunity for a kid to graduate. If they leave for the pros in good standing, many, many times we help them after they're done, if things haven't gone well for them. It's a case-by-case basis, but the support is so different now, and it's so important."

Most college players, he adds, think they're going to play in the NBA someday. "So you're wasting your energy telling people they can't play professional basketball," Hill says.

"Somewhere along the line, they come to that realization. But the most important thing for us is to make sure we continue to hammer home the importance of having an education and supporting them in every way."


Photo by Ed Carreón

McGill stands outside his home in Los Angeles. He eventually worked for Hughes Aircraft after leaving the NBA.

After his pro career ended, McGill was mostly forgotten beyond LA until the 1990s, when the NBA called on him to speak with incoming players as part of its Rookie Transition Program, which the NBA didn't have back when McGill played in the league. He spoke to young pros about how the lives of NBA players can take a turn for the worse, to groups that included Chris Webber, Shawn Bradley, Vin Baker, and Sam Cassell, as well as Isaiah Rider and Penny Hardaway, who, McGill writes, refused to heed his warning and even took pot shots at him.

But former NBA star Bill Walton says it would be shortsighted to say McGill's book is merely a cautionary tale for cocky young NBA hopefuls. "This is a book for life," says Walton, who emulated McGill's jump hook shot in his pro career and now calls McGill his "hero."

"To be able to always exhibit such class, dignity, pride, and professionalism in the face of extreme adversity, incredible obstacles—this is the stuff that legends are made of," Walton says. "We all have so much to learn from Billy McGill. I just hope that people are brave and bold enough to give [the book] a try."

—Stephen Speckman is a Salt Lake City-based writer and a frequent contributor to Continuum.

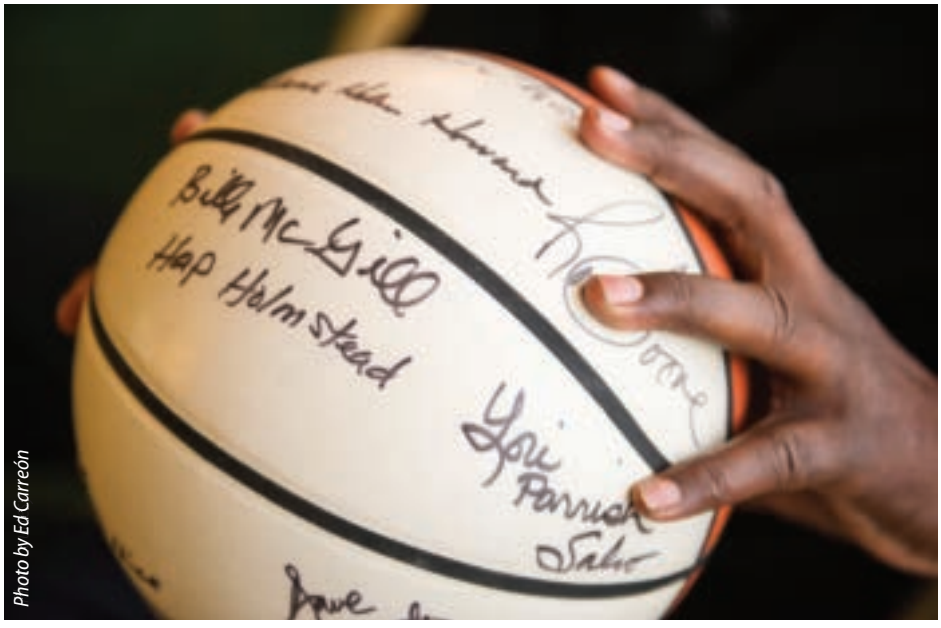


Photo by Ed Carreón

McGill holds a basketball from his University of Utah days, signed by many of his teammates at the U.

Visit continuum.utah.edu *to see two videos of some of the highlights of McGill playing basketball at the U, as well as a gallery with more photos.*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Genetics AND U

Groundbreaking University research and current legal developments are changing medicine and patient access to discoveries.

By Jennifer Dobner

Gregg Johnson is trying to outlive his family history. To do that, the 57-year-old textiles artist has had a colonoscopy every year since the mid-1980s. Each time, doctors remove upward of 150 tiny polyps in hopes of preventing colon cancer. Johnson lost his mother, Sandra "Sammy" Moon Johnson, to metastasized colon cancer in 1983 when she was just 47 years old. Her mother also died from the disease, at age 42, just like dozens of others on the branches of Johnson's family tree. "We're cancer magnets," Johnson says.

Johnson, who lives in Salt Lake City, keeps his health closely in check thanks in part to University of Utah scientists and researchers who tapped his family for genetic testing and cancer studies more than 20 years ago. Tests confirmed what the family essentially already knew: Their biological lineage includes a genetic mutation that predisposes them to colon cancer and can be traced back to a single English couple who emigrated to America in the early 1600s. The U's research study, which stretched over a dozen years and included data on hundreds of Utahns, helped investigators unlock critical genetic coding linked to APC—adenomatous polyposis coli—a syndrome characterized by the early onset of colon cancer, says Deborah Neklason PhD'99, research assistant professor of oncological sciences at the University of Utah Medical School and director of the Utah Genome Project. The data and health protocols, when paired with a clinical intervention, including genetic counseling, testing, and regular colonoscopies, have helped reduce familial cancer rates for Johnson and others. "We have prevented almost all the [potential] cancers in that family," says Neklason. "This is about a change in behavior and awareness. This is an incredible story of the impact of genetic testing."

For decades, U researchers and investigators have played a critical role in identifying pieces of the genetic puzzle that continue to change the face of medicine, from understanding how some diseases work to improving patient diagnoses, medical outcomes, and daily health management. At the same time, researchers and patients have been watching court cases,

involving Myriad Genetics and the U Research Foundation, proceed over patenting of some of that research and related questions about future studies, as well as public access to genetic testing and personalized medicine. The outcome of those cases is factoring into the future course of the research.

Genetics is the study of how specific traits and characteristics are biologically transmitted to us by our parents. Formed by deoxyribonucleic acid, or DNA, genes are the physical units of heredity that are carried on our chromosomes. Scientists believe each person's body has about 20,500 separate genes, the totality of which is known as the genome. Isolating those genes has helped scientists identify anomalies that either cause or increase our risk for some diseases. Over the past four decades, advancements in genetic research have provided enormous insight into the workings of the human body and the causes of disease, says Lynn Jorde, chair of the U Medical School's Department of Human Genetics. Genetic tests can indicate if a person is a carrier for a disease, or if an unborn child will have genetic conditions. "It gives us the potential to treat disease more efficiently and, in some cases, even to prevent disease altogether," says Jorde, whose own research includes the genetic basis of both hypertension and human limb malformation.

University of Utah researchers can claim dozens of key discoveries in genetic and molecular medicine, including genes responsible for more than 30 diseases, such as melanoma, atrial fibrillation, hypertension, macular degeneration, and neurofibromatosis. U scientists also are credited with developing key tools in bioinformatics to help further understanding of how genetic material works. "The University of Utah is great at this, and they have been for a long time," says Lawrence Brody, chief scientific officer at the Maryland-based Center for Inherited Disease Research at the National Human Genome Research Institute. "The faculty there has made fundamental contributions to human genetics."

For decades, U researchers and investigators have played a critical role in identifying pieces of the genetic puzzle that continue to change the face of medicine.

Deborah Neklason, a U research assistant professor of oncology and director of the Utah Genome Project, notes that genetic testing, paired with clinical intervention, has helped save patients' lives.

Photo by Tom Smart

Brody attributes Utah's critical mass of talent to two factors: significant philanthropic funding to support genetics research, and a population of large families with a Mormon church-supported predilection for genealogy work, which has provided a trove of family history to aid in genetic study. The University houses the Utah Population Database, with some 20 million records that layer family genealogies with state demographic records, including data on births, deaths, cancer rates, and other medical diagnostic and treatment records. It is the only resource of its kind in the United States and the largest such database in the world. The church/state partnership provides records on about 7.3 million individuals, some of whom can be linked to 11 generations of relatives. The database has supported about 100 research studies, allowing investigators to analyze patterns of genetic inheritance and identify specific genetic mutations.

Genetic data are instrumental in the development of personalized medicine. Knowing what's in a person's genome allows physicians and patients to make more informed health care choices, Jorde says. To date, scientists have been able to link about 4,000 diseases to mutated genes, according to the American Medical Association. Yet genetic testing still has many limitations, Jorde says. The testing, which is done through sampling of tissue, blood, or other body material, can only provide a predictive risk assessment, and then only for some diseases. Test results can be missed or misinterpreted.

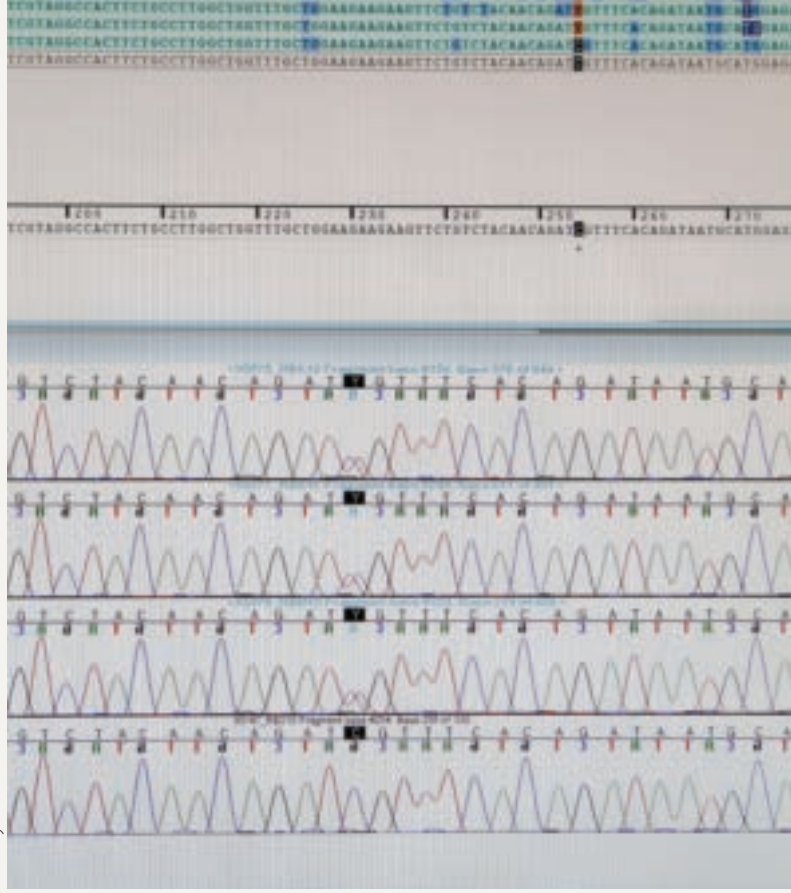


Photo by Tom Smart

A computer charts a genetic analysis of a patient at the University of Utah. Genetic data are instrumental in the development of personalized medicine.

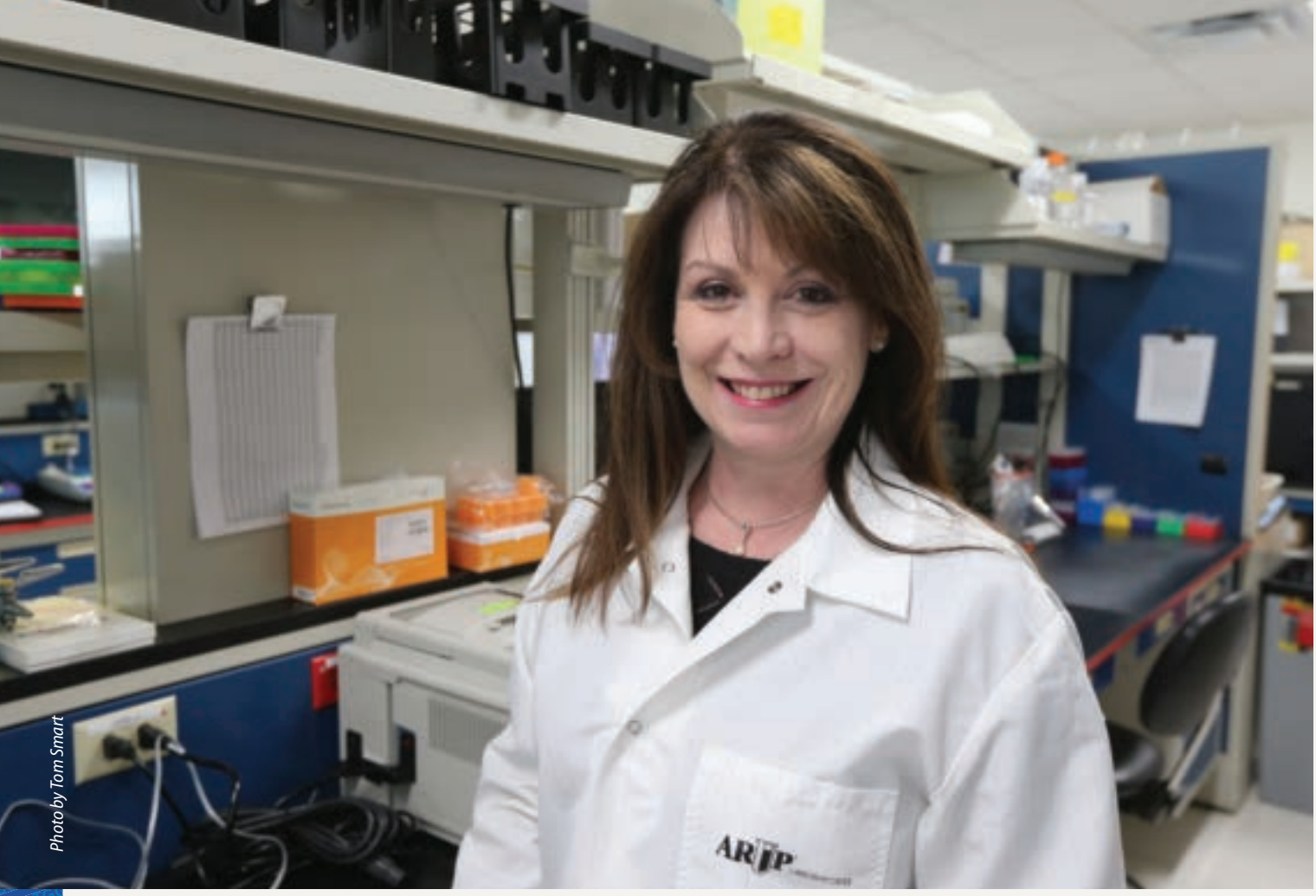


Photo by Tom Smart

Elaine Lyon, director of molecular genetics and genomics at ARUP, says many in the molecular sciences industry have long been opposed to patents and see them as a disincentive to innovation and a barrier to helping patients. The royalty fees have also driven up research costs and made patient tests expensive.

In some cases, research and technology may not yet exist to explain some genetic mutations, even though those mutations can be identified. "People think, well, I can just get genetic tests and find out everything about me, all of my predispositions to everything," Jorde says. "In reality, genetic testing, while it can be very useful in certain contexts, only reveals predisposing factors. Sometimes they can be very powerful predictors; sometimes they can be only approximate predictors."

The biomedical community can sometimes contribute to public confusion about the power of genetic testing, in part because researchers "want to say this is important and useful," Jorde says. That's where some in the research community become uncomfortable with companies that offer direct-to-consumer genetic tests that in many cases are for diseases for which the genes haven't actually yet been identified, such as the gene for bipolar disorder.

Questions about commercial genetic testing were at the center of the 2009 lawsuit against the Salt Lake City-based biotech company Myriad Genetics, the University of Utah Research Foundation, and their partners. Filed by the American Civil Liberties Union on behalf of more than 20 plaintiffs, including medical associations, researchers, health advocates, and patients, the case asked one central question: Can a human gene be patented? More specifically, ACLU attorneys challenged whether the U.S. Patent and Trademark Office should have issued a patent on the tumor suppressor genes BRCA1 and BRCA2 to Myriad Genetics, which was founded in 1991 by a team of scientists, including then-U genetics researcher and medical professor Mark Skolnick.

One of the first companies to examine the relationship between genes and human disease, Myriad was created to develop genetic tests based on research from the U, including Skolnick's work to isolate the BRCA1 and BRCA2 genes. The U Research Foundation, which facilitates commercialization of faculty inventions from many academic disciplines, later licensed Skolnick's discoveries to Myriad. Over two decades, Myriad has paid its BRCA patent partners—the U, the Hospital for Sick Children, Endorecherche Inc., and the Trustees of the University of Pennsylvania—8 percent of its annual profit in the form of royalties, or more than $57 million, Myriad spokesman Ron Rogers says. The U's share of the royalties has amounted to more than $40 million over the years as of last fall and is used to support further research and education programs at the University, according to Tom Parks, the U's vice president for research.

Certain variations in the BRCA1 and BRCA2 genes signal a person's risk for some hereditary forms of cancer. Women with a BRCA mutation face a 36 to 85 percent lifetime risk of

breast or ovarian cancer. In men, BRCA gene mutations are linked to breast and prostate cancers. The BRCA genes earned wide public attention in May 2013 after film actress Angelina Jolie announced she had undergone a bilateral prophylactic mastectomy following genetic testing. Jolie lost her mother to both breast and ovarian cancers.

In the lawsuit, ACLU attorneys claimed the patents on the BRCA genes gave Myriad, which didn't license the patents to other researchers, an unfair monopoly on the genes and their associated genetic information, as well as the predictive tests for the mutations, which at roughly $3,000 could be too expensive for some patients. ACLU attorneys argued the exclusivity was a civil liberties issue because it "limits the public's right to benefit from scientific breakthroughs that advance medical research," court documents state. "This monopoly has a chilling impact on other researchers' ability to conduct medical research, undermining advances toward better treatment, cures, and more accessible, affordable genetic testing. ... Such a monopoly serves to profit one company at the expense of the public good."

Myriad attorneys argued that patents have been used for more than 100 years, across all kinds of commercial economies and industry, to provide a critical incentive for investment in innovation and discovery. "Research is a very expensive proposition," Myriad attorney Ben Jackson says. "Companies have to spend millions of dollars to make these discoveries. But more importantly, to bring these discoveries to the average person, companies need incentives."

"In reality, genetic testing, while it can be very useful in certain contexts, only reveals predisposing factors. Sometimes they can be very powerful predictors; sometimes they can be only approximate."

The U.S. Trademark and Patent Office has issued thousands of gene patents since the early 1980s as the pace of genetic research and discovery exploded. By 2005, nearly 24,000 genes had been identified, and more than 4,300—20 percent of the whole human genome—had been claimed as intellectual property. In the early days of genetic discovery, academic researchers, private labs, and biotech companies all sought out patents as a means of preserving future commercial opportunity, even if they weren't quite sure about the value of their work. "Twenty

or so years ago, [patents] really helped push people a little bit forward," says Brody, of the Center for Inherited Disease Research. "There was a rush to find the genes that were responsible for the major diseases, and because they were patentable, they were patented. They were staking out turf."

But patents proved troublesome and less profitable for most in biomedicine, says Brody. In most cases, patent holders found "there was little money to be made" from the claims they had staked on specific, single genes, he says. Researchers also found that the patents were barriers to advancing their scientific discovery.

As a young researcher, molecular geneticist Elaine Lyon says she found herself stymied many times in the lab because she kept bumping into patents in her work on a test to identify a protein that metabolizes drugs in the body. In some cases, Lyon wasn't even studying the specific patented gene but was still blocked because the area of her interest was part of a genetic sequence that fell under a patent's umbrella. "At this point, I was getting more and more frustrated," says Lyon, who is now the director of molecular genetics and genomics at ARUP, an anatomic pathology reference laboratory on the University of Utah campus.

Lyon says many in the molecular science industry have been long opposed to patents and see them as a disincentive to innovation and a barrier to helping patients. The royalty fees associated with using patented genes have also contributed to stalling research by driving up costs or making the tests that resulted from research too expensive for patients, says Lyon, who is also president of the Association for Molecular Pathology. The association's members had mixed opinions about the Myriad case, but Lyon says she shared the views of one colleague who said no matter the outcome, "it would be best for the field if we just had this decided once and for all."

"There was a rush to find the genes that were responsible for the major diseases, and because they were patentable, they were patented."

Photo by Tom Smart

Lynn Jorde, chair of the U Medical School's Department of Human Genetics, notes that genetic research helps give doctors the potential to treat disease more efficiently and, in some cases, prevent it altogether.

The unanimous decision from the U.S. Supreme Court came on June 13, 2013. The court ruled that genes cannot be patented, because they are a product of nature. "Myriad did not create anything," Justice Clarence Thomas wrote in the court's opinion. "To be sure, it found an important and useful gene, but separating that gene from its surrounding genetic material is not an act of invention."

The decision invalidated Myriad's five patents associated with BRCA genes and has similar implications for other gene patents that have been issued over the years. But the court did not leave researchers or biotech companies entirely without opportunity or incentives for competition. The ruling says patents can apply to cDNA, or artificially constructed DNA that contains some section of isolated, natural genomic DNA. Innovations in medical research technology and development in disease testing processes would also likely be patentable.

Whether the court's decision will squelch investment and commercial development isn't clear, although it may cut into the profits of biotech companies by increasing competition. On the same day the ruling was announced, two companies said they would immediately begin offering their own BRCA tests to the public. At least five related lawsuits remain pending.

Another potential impact: Research universities that have partnered with private companies to take their discoveries into the commercial marketplace may suffer some financial losses. Revenues from royalties, which are paid in exchange

Photo by Tom Smart

Myriad Genetics, with headquarters located in the U's Research Park, was founded in 1991 by scientists including then-U professor Mark Skolnick.

for licensing rights, could drop, Myriad's Jackson says. "Any university should be concerned about an alternate, broad reading of the court decision."

Jackson believes the court's opinion is "appropriately narrow," but also not entirely timely. "Gene patenting is in its twilight," he says, because most of the important gene discoveries were made prior to 2001, when the Human Genome Project, which has mapped the entire human genome, first began publishing its findings.

Brody agrees that Supreme Court case was somewhat oddly timed, considering the fizzling competition for gene discovery, but he still believes it will have a significant impact. "I think it's an important decision, because it allows individuals and companies to go forward and use the genetic information to innovate and invent new things without worrying about whether you're on somebody's turf," he says.

Neklason, at the U Medical School, says that if the ruling had come 10 to 15 years earlier, it might have made the research climate "more collaborative and less competitive," but neither she nor Jorde believe it will have much effect on the day-to-day mission of U genetics investigators. "No matter what, you are going to see some competition; scientists are competitive people," Jorde says.

Currently, U scientists are involved with at least nine ongoing research studies in medical genetics, such as projects to identify high-risk genes for childhood cancer, and assessing cancer risks for diseases with known cancer genes, including psoriasis and arthritis, chronic obstructive pulmonary disease, and familial atrial fibrillation. In addition, more than a dozen new projects are beginning this year, including studies on the genetics of Lou Gehrig's disease, genetic susceptibility to spontaneous pre-term birth, and locating a "thinness" gene to prevent obesity.

Meanwhile, the effects of the Supreme Court ruling should help drive down the costs of gathering genetic information, ultimately benefiting patients in terms of both access and overall health and well-being, U researchers predict. Currently, it costs about $8,000 to have a private lab produce a person's entire genetic sequence—far less than in the past, and about the same price Myriad charges now to run just the two BRCA gene tests. In the future, sequencing could cost even less.

The U houses the Utah Population Database, which layers family genealogies with demographic records including data on medical diagnostic and treatment records. It is the largest such database in the world.

For his part, Johnson believes knowing more about his genetic health is saving his life. Not a fan of doctor visits or pill popping, the father of two boys says his increased awareness about genetic factors has also led him to gently nudge many of his friends to seek testing. "I've outlived my mom by a number of years, so from my perspective, this is saving my life," he says. He's also grateful to know that in some small way, his family's history and participation in research work will likely help many others. "My mom was very gracious and giving, and she was always thinking about others," says Johnson. "I'm sure she'd approve."

Photo by Charlie Ehlert

Gregg Johnson credits genetic testing with helping prevent cancer in his family.

—Jennifer Dobner, a former longtime Associated Press reporter and editor, is now a Salt Lake City-based freelance writer and a frequent contributor to Continuum.

Visit continuum.utah.edu *to watch a video about U genetics research and the Utah Genome Project.*

University of Utah students Sara Fauver, left, and Karlee Stokes, both of whom are currently participating in the U's ACCESS program, work on a laboratory assignment.

CONNECTED FOR SUCCESS

The U's ACCESS program has helped dozens of women thrive in science and math fields.

Story by Heather May *Photos by August Miller*

Even more than two decades later, Hugo Rossi can still recall the woman standing in his office, crying over math. The then-University of Utah mathematics chairman was teaching a remedial algebra course in the late 1980s and noticed that some of his nontraditional female students who had entered college years after high school were unnecessarily anxious. They were among the best students in the class, but they'd end up in his office, fearing for their grades. They reminded him of his own daughter, who loved math but couldn't be persuaded, even by him, that she could make a career of it. "I remember very distinctly one woman saying, 'I know the time is going to come when I won't be able to do it.' I asked her, 'How do you know that?' Basically, they had been told that by their parents and their teachers: 'OK, it's cute you have a little interest in mathematics, but it's not really for women.' "

After Rossi became dean of the U's College of Science, he set about overhauling that damaging stereotype. In 1991, he launched the ACCESS Program for Women in Science and Mathematics, which since then has helped hundreds of women enter and succeed in science, technology, engineering, and mathematics fields. Of those who have graduated, 76 percent earned a degree in science or a science-related field, with 15 percent receiving an advanced degree in a science-related field. Data gathered by the program show ACCESS students graduate with a higher grade point average than other College of Science graduates (3.62 versus 3.38 from 2000 to 2010) and have higher graduation rates (70 percent versus 52 percent from 2000 to 2009).

The program now has more than 500 alumnae, and ACCESS graduates have gone on to become professors, doctors, and teachers. One woman is a researcher at NASA's Jet Propulsion Laboratory and works as the tactical activity planner for the Mars rover Opportunity. "We've got superstars all over the country," says Lisa Batchelder, the ACCESS program's coordinator.

Pierre V. Sokolsky, dean of the U's College of Science, was so impressed by the program Rossi created that he doubled its enrollment after he became dean in 2007. It's now a $150,000 a year program funded with $40,000 from the U and the rest from private contributions, including a large grant from Chevron.

The ACCESS program currently recruits 42 high school graduates—up from 12 in its first year—to spend the summer before their freshman year on campus for a seven-week intensive science program. With help from a scholarship, the students live at the Donna Garff Marriott Honors Residential Scholars Community building and study physics, astronomy, chemistry, mathematics, and biology with top U professors. The students develop a

network of peers and mentors and are introduced to campus life. In addition to the scholarship that covers their summer program and housing, they are given a $2,000 stipend during their freshman year that they can use for expenses.

"It makes all the difference in the world to have someone who they feel is on their side," says Rosemary Gray, who has been the ACCESS program's director since 2006. "It really helps with retention. It helps them feel more connected to the University."

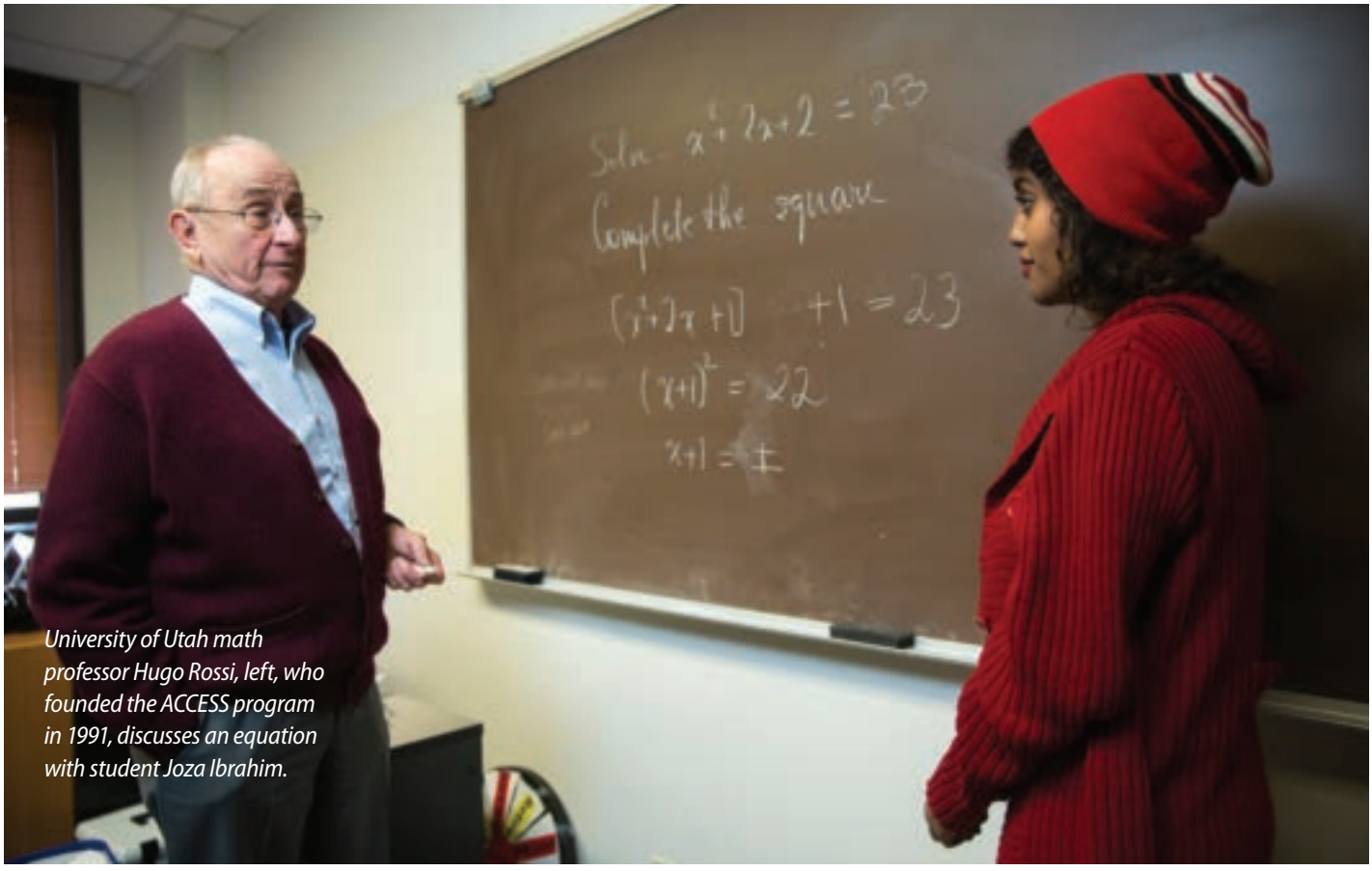
Instead of attending lecture courses during that first summer, the students work on research experiments and spend time "getting their hands dirty," Sokolsky says. "There's a lot of dry things that [science majors] have to do. That's not what [science] is about. That's learning the language. Sometimes I tell my students, 'Why are you learning French? Because you want to learn French or you want to spend time in Paris?' A lot of students get stuck because they don't see that it leads to a trip to Paris," he says. "The earlier you can get them to see what it's really about, the more motivated they'll be to get through the hard parts."

During their freshman spring semester, ACCESS students also work as assistants in research labs and present their findings at a symposium, an experience most students don't get a chance to do until they are juniors. And though the ACCESS program's formal activities finish at the end of the students' freshman year, most students continue their connections with one another during their subsequent years at the U.

Rossi says the U program was inspired by the Emerging Scholars Program developed by Philip Uri Treisman at the University of California, Berkeley. While a graduate student, Treisman—an eventual MacArthur Fellow and now director of the Charles A. Dana Center at the University of Texas at Austin, which works on helping underserved students succeed in college—saw that minority students weren't doing well in freshman calculus even though they excelled in high school. His study of the reasons why led him to conclude it was because they were isolated on campus, not because they weren't motivated or smart enough. He developed a program that helped students connect with fellow students and professors through an honors mathematics course, as well as with the campus at large.

The University of Utah program Rossi developed from that model is now well known, and about 100 applicants each year compete for the 42 slots. The selected women have an average GPA of 3.97. But in 1991, the students were largely recruited by Rossi and others involved in creating ACCESS, he says.

Stacy Firth BS'95 MS'98 was in the inaugural ACCESS class, which she joined after her junior year in high school. She had already taken Advanced Placement calculus that year and was persuaded by Rossi to try the U's summer program. She made good friends and loved campus life. While Firth knew she liked math and science, "ACCESS was pivotal in solidifying that interest. I could have been dissuaded if I had been plopped into a massive freshman/sophomore-level course where there are tons of students and not had the connections I made through ACCESS."



University of Utah math professor Hugo Rossi, left, who founded the ACCESS program in 1991, discusses an equation with student Joza Ibrahim.

She went on to graduate with a bachelor's degree in chemical engineering, and she recalls three other ACCESS students attended the U with her in that field. "There was a really good cohort of us going together and feeling like, 'We're not foreigners here,' " she says. "For any student, if they feel like they're by themselves and nobody has their back, it's really hard to go into more challenging fields."

She believes that had she not had peers and professors from ACCESS to rely on when she struggled, she might have wrongly believed she wasn't capable of the work and changed majors, instead of realizing she could rise to the challenge. Firth went on to receive master's and doctoral degrees (the latter at UT Austin) in chemical engineering. Today, she teaches a survey of engineering class at Olympus High School in Holladay, Utah, that she helped design as an associate instructor in the U's College of Engineering. The course, for high-school freshmen or sophomores, introduces them to the field of engineering by tackling real-world engineering problems at the school or in the city and conducting fun experiments such as building a spectrometer and bioreactor to create biodiesel.

Pierre Sokolsky expanded the ACCESS program when he became dean of the U's College of Science in 2007.

Firth's female students clearly have a role model and encouragement to pursue math and science. Yet just three girls are enrolled among the 41 high-school students in Firth's current engineering courses. That's why Firth believes the U's ACCESS program is still necessary.

Sokolsky agrees that the situation at Olympus isn't unique. "It's getting better, but talk to these young women. There's a lot of pressure to be a homemaker or to go into business or do other things that are typical of women," he says. "Science is about talent. It's about discovery. We need all the brains we

can get. Ignoring half the world simply doesn't make any sense."

The percentage of women obtaining bachelor's degrees at the U from the colleges of engineering and science has grown since the program's creation in 1991, but women are still outnumbered. The number of female engineering graduates has stayed flat, at 9 percent. The number of women graduating with bachelor's degrees in the sciences, meanwhile, has grown from 23 percent to 34 percent, but only in the field of biology does the proportion of females begin to approach the number of males, with about 46 percent of graduates being female.

U biology professor Rosemary Gray has been the ACCESS program's director since 2006.

Nationally, male high school students are more than twice as likely as female students to be interested in science, technology, engineering, and math fields. By 2016, 45 percent of high school boys are forecast to enter those fields, compared with less than 15 percent of girls, according to a report by the college planning service My College Options and the resource site Stemconnector.

While the number of women earning bachelor's degrees nationally in science and math fields has grown dramatically since the 1960s, men still outnumber women, except in biological and agricultural sciences and chemistry, according to the American Association of University Women. When it comes to engineering, physics, and computer science, women obtain just 20 percent of the degrees. The gap persists and is more dramatic in the workforce, the association says.

Sokolsky believes that ideally, every freshman should have a chance to enroll in a program like ACCESS, to transition them from high school to college. For now, the U has also created an ACCESS-like program for refugees and minorities, called Refuges, which includes a summer science bridge course. And each department has its own way of trying to keep students engaged, including the Curie Club in the Department of Chemistry, which was recently created to inspire women to become scientists and to help women scientists balance family and work life.

Sokolsky also thinks the U should hire more female professors to provide role models to students. The College of Science currently has 25 female professors and instructors out of its total of 156 faculty members, up from one female faculty member in 1990. He says the tenure process needs to take into account the balance of work and home life, and he imagines a time when faculty members could temporarily take part-time appointments but still be taken seriously. "If we're going to be successful in integrating women in a real way, we have to come to grips with the fact that life is not just writing papers and research," he says. "You have to change the attitude that you're not serious if you care about your family."

Current students in the U's ACCESS program say resistance to women in science and math is subtle when it surfaces. Sophomore Sara Fauver says she felt like she had to prove herself more than boys did in her AP calculus and biology classes at Utah's West Jordan High School. Karlee Stokes says she was one of few girls in upper-level science classes at Morgan High in northern Utah, and she was the only girl who competed in her region to be a science Sterling Scholar. "I had a lot of people who told me I wouldn't ever win," the U freshman recalls. She ended up beating those so-called "genius boys" in the regional contest.

Seeing friendly, female faces in college classes can make a difference, students in the U ACCESS program say. Fauver knows of girlfriends in physics and engineering at the U who changed majors because there were few women in their classes. She believes the ACCESS program gave her an edge. In addition to the peer support and the professors' mentoring, her freshman research lab experience led her to join two other undergraduate research programs. "I'm really grateful for all the doors this has opened," she says.

Stokes recollects that in an introductory biology class of 200 students, she sat by ACCESS friends every day. "To already know them going into the class, to have someone to study with, that was why I did so well in the class." Stokes, a biology major, credits the program with helping her toward greater success. "It changed my life," she says. "Without it, I would still be in science. But with it, I'm excelling more than I ever would have. We've had so many opportunities that we wouldn't [otherwise] have had."

—Heather May is a former Salt Lake Tribune *reporter who now works as a Salt Lake City-based freelance writer.*

Visit continuum.utah.edu *to watch a video about how the ACCESS program helped a student who is now in medical school.*

First Imagine, Then Do: One Student's Story

"The U Futures Scholarship gave me the time and resources so I could focus on school while still being a husband and father," Glen Bailey says. "That has meant so much to me and my family and I want to express my sincere gratitude for the support I've received at the U."

The Bailey Family: Finn, Kelsey, Glen, and Miller.

Glen Bailey is a first generation college student. He attended junior college in his native Sacramento before moving with his wife, Kelsey, to study political science at the University of Utah. Now, a senior in his third year, Glen juggles being a father to two boys, ages two and four, while working and studying full-time. Needless to say, it's a lot to juggle. With a U Futures Scholarship award, Glen was able to stay in school. Once he graduates this spring, his University degree will make all the difference to his young family's future.

Established in 2012 by members of the University of Utah Board of Trustees and other generous donors, the U Futures Scholarship provides awards to students who are within three semesters of graduation as an incentive to complete their education. With the U Futures Scholarship Fund, life's challenges no longer have to derail completion of a student's college degree.

For more information about how you can make a difference through the U Futures Scholarship Fund, please contact Erica Marken, Director, Undergraduate Advancement at 801-581-8388 or erica.marken@utah.edu.

Learn more about the great things your contributions accomplish at **giving.utah.edu**

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Six Honored With 2014 Founders Day Awards

Frederick Kempe

Kem Gardner

Donald Yacktman

Ted Jacobsen and Charlotte Garff Jacobsen

The accomplishments of five outstanding graduates of the University of Utah and one honorary alumnus were recognized with 2014 Founders Day awards in February.

Award-winning journalist and foreign-policy expert **Frederick Kempe** BA'76; real estate and higher education leader **Kem Gardner** BS'67 JD'70; stock fund manager **Donald Yacktman** BS'65; and **Ted** (BS'65) and **Charlotte Garff Jacobsen** (BA'64), both of whom had primary roles in development of the U's Lowell Bennion Community Service Center, each received the Distinguished Alumnus/a Award. **John Bloomberg** was presented with an Honorary Alumnus Award. These awards are the highest honor the University of Utah Alumni Association gives to U graduates and friends, respectively, in recognition of their outstanding professional achievements and/or public service, as well as their support of the University.

Kempe, who after the U went on to receive a master's degree in journalism from Columbia University, spent more than 25 years as a reporter, columnist, and editor for *The Wall Street Journal*. Since 2006, he has served as president and chief executive officer of the Atlantic Council, a foreign policy think tank and public policy group based in Washington, D.C. He is the author of four books, including *New York Times* best seller *BERLIN 1961*, and is a regular media commentator in Europe and the United States, contributing to, among others, CNBC and the BBC. At *The Wall Street Journal*, Kempe won national and international awards, including participating in two Pulitzer Prizes.

Gardner was cofounder and served as president of The Boyer Company for more than 30 years, and he has served since 2005 as chairman of The Gardner Company, a private commercial real estate firm. He has helped develop major corporate, residential, and retail facilities, including the Myriad Genetics corporate campus and The Gateway shopping mall. A former chair of the Utah State Board of Regents, he remains active in higher education, serving on the U's National Advisory Council. He and his wife, Carolyn, have given significantly to the U, including support for the Honors College and its engaged learning initiative, and annual support of the J.D. Williams scholarship endowment.

John Bloomberg

Yacktman received his bachelor's degree in economics, *magna cum laude*, at the U before going on to an MBA with distinction from Harvard University. He is president and portfolio manager of Yacktman Asset Management, which he founded in 1992. As head of what remain two of the world's best-performing stock funds, Yacktman was ranked by Morningstar at No. 2 for domestic fund manager of the decade for 2000 to 2009. Highly respected in his industry, he is regularly interviewed by entities such as Bloomberg News and CNBC, and he has also shared insights with students and deans at the U.

The Jacobsens have given countless hours of service to the U and have financially supported many U entities for decades. Ted, who after his bachelor's degree went on to a master's of science degree from Stanford University, headed Jacobsen Construction for 30 years, helping create buildings such as the Jon M. Huntsman Center, the Warnock Engineering Building, and The Grand America Hotel, as well as Mormon temples throughout the western hemisphere. Charlotte's service to the U includes membership on the U's National Advisory Council. Ted is the immediate past chair of the U College of Engineering's National Advisory Council.

Bloomberg (BS'57, Amherst College; MBA'62, Harvard University) is a former Wall Street research analyst and competitive skier. After his vision began rapidly deteriorating, he was introduced to Dr. Randall J. Olson with the University of Utah's Department of Ophthalmology and John A. Moran Eye Center. In gratitude for surgery by Olson that Bloomberg has credited with saving his vision, Bloomberg and his wife, Toni, began generously contributing funds and art to the Moran Eye Center. The John and Toni Bloomberg Ophthalmology Library at the eye center is named in their honor. He has served on the Department of Ophthalmology Advisory Board, the College of Science Advisory Board, the College of Fine Arts Advisory Board, and the President's Club Committee.

Founders Day Scholar Aims for Medical School

Juliet Louise Kanyana, a University of Utah premedical student majoring in Health, Society and Policy, has been selected to receive the 2014 Founders Day Scholarship. Kanyana, who is originally from the Democratic Republic of Congo, came to the United States as a refugee with her family in 2011. After finishing a year of high school in Salt Lake City, she went on to the University, where she is now a sophomore. Her aim is to become a physician and eventually return to Africa to help people there who don't have access to quality medical care.

The University of Utah Alumni Association awards the $6,000 Founders Day Scholarship annually to students who have overcome difficult life circumstances or challenges and who have given service to the University and the community.

Kanyana was four years old when militants attacked her village in the Democratic Republic of Congo, and amid the bloodshed and chaos, she and her family were forced to flee. They eventually reached a refugee settlement in Uganda in 1998, when she was five years old. While still a child, she was forced to work as a laborer to survive. "Though I was still young, I remained strong and committed myself to my study, so that I can have a better future and help others," she says.

As a teenager, she attended a boarding school that was several hours away from the refugee settlement. Most girls in the refugee camp dropped out of school after primary school because their families believed they would get married and didn't need much education, and some girls were forced into early marriage. Kanyana was able to attend secondary school because the leaders of the nonprofit group COBURWAS—founded by young refugees from the Democratic Republic of Congo, Rwanda, and Sudan—helped convince her parents of the importance of educating a girl.

In April 2011, Kanyana, her parents, and her eight brothers were resettled in Salt Lake City. She enrolled at the University of Utah in 2012. Kanyana maintains good grades while also being involved in student groups on campus, including the Alpha Epsilon Delta Premedical Honor Society and the Association of Future Female Physicians, and she is vice president of the African Student Union.

University Effort Yields Record 433,346 Pounds of Food

Dozens of University of Utah alumni and student volunteers helped organize and coordinate the U's 20th annual Food Drive, which ran from November 8 to 30, and the final results are in: Utah supporters generously donated more than $51,000 and a record 433,346 pounds of food.

The annual Food Drive, spearheaded by the U Alumni Association and its Student Alumni Board, has grown to become a vital part of holiday efforts benefiting the Utah Food Bank. "We are thrilled to represent the University and the Alumni Association in the community on such an important program," says **Julie Barrett** BS'70, chair of the Alumni Association's Community Service Committee. "What better cause than addressing the needs of the hungry in Salt Lake. The student efforts were terrific."

The food drive was developed 20 years ago as a friendly competition between the alumni associations of the University of Utah and Brigham Young University. The initial competition tested which school's fans could bring more pounds of food to the football stadium. Soon the competition grew to include monetary donations. While the rivalry component no longer exists as part of the drive, each dollar donated still allows the Utah Food Bank to fulfill specific needs such as transportation and purchases of perishable food. The Utah Food Bank turns $1 of cash into the equivalent of eight pounds of food.

The U Alumni Association's Student Alumni Board and MUSS Board members collected food and cash donations at football games and local grocery stores.

One reason for the record amount of food collected in the most recent food drive was that more than 45 local schools were recruited to join in the food drive. "We were overjoyed to observe that of the 433,346 pounds collected in this year's record-breaking food drive, 84,204 of those pounds came from schools," says U graduate student and Student Alumni Board member **Brooke Foster** BS'13.

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A BOLD RESCUE

By Ann Floor

All photos courtesy Jenny Wilson

Six of the seven men who participated in the 1967 rescue of an injured climber gather for a reunion in the Tetons: from left, Ted Wilson, Pete Sinclair, Ralph Tingey, Mike Ermarth, Rick Reese, and Bob Irvine.

When **Jenny Wilson** BS'88 was growing up, she and her brother **Ben** HBA'87 JD'90 would pack their bags each summer, get in the family station wagon with their parents, **Ted Wilson** BS'64 and **Kathy Wilson** ex'66, and head from their home in Salt Lake City to the Tetons in northwest Wyoming. Ted had been a Jenny Lake Ranger in the 1960s—part of a team of Grand Teton National Park climbing rescue rangers—and the Wilsons gathered at Jenny Lake to be with friends. As the group sat around the evening campfire, talk often turned to the events of 1967 and a difficult and daring rescue that Ted and his ranger friends had made.

"What touched me over the years was not only the heroics on the mountain, but also the passion and bond of friendship among the men," Jenny Wilson says. "Their story was an inspiration. Their connection with each other has lasted all this time, and I've been influenced by that."

In 2009, when her husband **Trell Rohovit** BS'88 suggested that the story should be made into a film, it gave her just the incentive she needed. She forged ahead, and Rohovit became an executive producer on the project. The resulting 52-minute documentary film, *The Grand Rescue*, had its world premiere this past November at the Rose Wagner Performing Arts Center in Salt Lake City and is now making the film festival circuit around the country, most recently at the Anchorage International Film Festival in December. Wilson also plans to enter the movie in the Telluride Film Festival this summer. The documentary tells the story of the three-day rescue of an injured climber and his partner off the north face of the Grand Teton, the highest mountain in Grand Teton National Park. The film focuses on the rescuers, who included six Jenny Lake rangers—four of them Salt Lake City natives and U graduates—as well as one expert climber who wasn't a ranger. "The essence of this rescue was a group of individuals who came together with a job to do and found within their bond a new power," Ted Wilson says in the movie.

As a first-time filmmaker, Jenny Wilson learned on the fly. Most recently the executive director of institutional advancement at the Moran Eye Center at the University of Utah, she previously had served as a member of the Salt Lake County Council and chief of staff to then Utah Congressman Bill Orton. She also worked for the Salt Lake Organizing Committee for the Olympic Winter Games of 2002 and for the Sundance

Institute. To get started on her film, she secured some financial backing and then raised close to the final amount needed through Kickstarter, an online funding platform for creative projects.

She brought on a cinematographer and a full crew for the film shoots. She also asked a friend, Meredith Lavitt, to join her as director and producer. Lavitt had prior experience in film production and currently works for the Sundance Institute in a non-filmmaking capacity.

The making of *The Grand Rescue* brought together for the first time since the 1967 event the six surviving team members and Lorraine Hough, who was climbing on August 22, 1967, with Gaylord Campbell when a rock slide knocked Campbell over and caused a double compound fracture of his lower leg. The two were stranded on a ledge at an altitude of 13,000 feet. The young national park rangers quickly went to work, and the resulting successful rescue was the first on the Grand Teton's north face. It was unprecedented for its time, due to the climber's severe injuries, the challenging terrain, and the much more rudimentary climbing and rescue gear of the time. One year after the rescue, then Secretary of the Interior Stewart Udall awarded the rescue team a citation for valor for "courageous action involving a high degree of personal risk under conditions of extreme severity and hazards."

Among the rescue team, ranger Mike Ermarth's quiet leadership raised confidence in the others. He recently retired as a distinguished professor of modern German history at Dartmouth College.

Bob Irvine BA'62 MA'66 knew the Tetons well, having climbed them since his teens. After the 1967 rescue, he remained as leader of the Grand Teton National Park mountain rescue team for the next 28 years and had an accomplished career as professor of mathematics at Weber State University in Ogden, Utah.

Leigh Ortenburger, the one member of the team who wasn't a ranger, knew the mountain best due to his years researching first ascents for his guidebook, *A Climber's Guide to the Teton Range*. He had a long career as a mountaineer and award-winning photographer. He died in the Oakland, California, wildfires of 1991.

From left, Ted Wilson, Pete Sinclair, Ralph Tingey, Mike Ermarth, Rick Reese, and Bob Irvine, in a photo taken in 1967, the year of their daring rescue.

Rick Reese BS'66 was a problem solver with climbing skills that were critical to the rescue effort. A Woodrow Wilson Fellow, he went on to teach at Carroll College in Helena, Montana. He also founded the Greater Yellowstone Coalition and served as director of the Yellowstone Institute and of community affairs for the University of Utah. He now lives in Bozeman, Montana.

Pete Sinclair is the author of *We Aspired: The Last Innocent Americans*, published in 1993, which includes a chapter on the 1967 Grand Teton rescue that provided the framework for the documentary script. He now is a retired professor of English at Evergreen College in Olympia, Washington.

Ralph Tingey BA'67 became a permanent park ranger at Grand Teton after the 1967 rescue and later was an assistant park superintendent of Denali National Park and superintendent of Lake Clark National Park, both in Alaska, as well as assistant superintendent of Grand Teton National Park. Now retired, Tingey lives in Ouray, Colorado, and continues to climb several days a week.

Ted Wilson BS'64 went on to serve as mayor of Salt Lake City and later as director of the Hinckley Institute of Politics at the University of Utah as well as the Utah Rivers Council. He also was Utah Governor Gary Herbert's chief environmental advisor and worked as director of governmental relations for Talisker Corporation. He now is executive director of the Utah Clean Air Partnership.

As for Jenny Wilson, she is continuing her work on the film's distribution. She also is running for the at-large seat on the Salt Lake County Council, a position she previously held from 2005 to 2010. She aims to continue to produce films.

—*Ann Floor is an associate editor of* Continuum.

Visit continuum.utah.edu *to view the trailer for the movie, as well as a gallery with more photos.*

U alum Jenny Wilson, right, worked with producer and director Meredith Lavitt on the new film.

Blossoming Into Her Own

By Marcia C. Dibble

"I am definitely a retro woman," says **Jaye Maynard** BFA'85, who has been receiving accolades for her musical homage to the late jazz singer-songwriter Blossom Dearie. Maynard's nickname is JayeBird, and her show *Bird Amongst the Blossom: A Tribute to the First Blossom Dearie Songbook*—styled as a midcentury-modern New York supper club act a la 1962—features Maynard on vocals, replicating the "wised-up baby-doll jazz stylings" of Dearie, with backup on piano and upright bass, interpreting songs written for and by Dearie in collaboration with such artists as Johnny Mercer, Dave Frishberg, and Bob Dorough (with whom Dearie worked on the popular children's educational series *Schoolhouse Rock!*).

Maynard is hoping to bring her *Blossom* show to Utah this year as the opener for her friend John Ciccolini's comingof- age musical-comedy *Frank Sinatra Screwed Up My Life*. That double-header had its premiere this February at the M Bar—"red leather banquettes and Italian food," Maynard notes fondly—in Hollywood, California. A Midwest native, Maynard spent more than 10 years in southern California after graduating from the U (finding her niche by looking "more East Coast amongst a sea of blondes") before moving to New York about 15 years ago. Maynard's master's thesis in vocal performance at New York University (completed in 2002) was called "Jaye Sings: The Barbie Show," in which she wore a recreated Barbie dress and performed songs including numbers from a "Barbie Sings!" collection put out by Mattel in 1961. Early this year, she moved back to Madison, Wisconsin, her hometown, as a "bicoastal" base and to take her show around the Midwest.

Maynard was theatrical from childhood and says she has always been fascinated by the 1950s and early '60s era in which her parents grew up. "I like to fantasize I was reincarnated from a 1940s big band singer turned '50s housewife," she says. A recent participant at the renowned International Cabaret Conference at Yale University, Maynard runs her own PlaidBird Productions, and she is also a producer with Angry Girl Gang Productions, which she co-owns with fellow U alum **Mark W. Knowles** BFA'85, a longtime friend and collaborator. Maynard was attracted to the U in great part because it offered "an actual musical theater program," with classes from dance to music to theater and the chance to earn an Equity card at the same time. She performed in regional productions, including four shows with Pioneer Theatre Company, before being handpicked for a tour of *Pirates of Penzance*, and then moved to LA after the tour's conclusion. There, besides the period pieces that are her love, Maynard also leapt at other opportunities, including performing improv and studying with Second City. She later appeared in the comedy-horror film *Moonshine*, which screened at the Sundance Film Festival, before starring in Aaliyah Miller's short film *After The Headlines*, about a mother coming to terms with her daughter's murder, which won several awards on the independent film festival circuit.


Photo by Matthew Karas

But *Blossom* has become her passion, and its namesake, her muse. "She was a self-producing artist, and she created an independent record label way back in the '70s; no one was doing it back then," says Maynard. After Dearie died in 2009, Maynard tracked down her songbook and began developing it into a show, and she eventually acquired Dearie's last apartment piano on eBay. Maynard called on her longtime friend **Dorian DeMichele** BFA'84 to help her produce the show, and it had its theatrical debut in 2011 in the United Solo Theater Festival, in New York. The show has since been recognized as a Pick of the Week by the *International Review of Music*. "I know I'm going to be doing this for the rest of my life; maybe not the Blossom Dearie songbook, but this niche of jazz cabaret where you are expressing yourself truthfully through the story of song," Maynard says. U

—Marcia Dibble is managing editor of Continuum.

Visit continuum.utah.edu *to view a gallery with more photos.*

'70s

Kent A. Nelson BS'75 was recognized as one of eight outstanding community lenders in the nation for 2013 by the Independent Community Bankers of America, one of the nation's largest banking industry trade groups, and was profiled in the group's *Independent Banker* magazine. Recently named executive vice president of Brighton Bank in Salt Lake City, he will continue serving as branch manager and commercial loan officer of the City Center office. He has been employed by Brighton Bank since 1986 and has more than 30 years of banking experience, with an emphasis in management, business development, and commercial real estate loan production. At the University of Utah, he completed a double major in finance and management.

'80s

Neil E. Hendriksen BMu'85 was selected by the National Federation of State High School Associations' music committee to receive a Section Award, representing Arizona, California, Hawaii, Nevada, and Utah. The award recognizes deserving high school or college band, choral, or orchestral directors, supervisors, and adjudicators who have had a significant impact on high school activities and programs. The regional award, presented to Hendriksen in February, also qualifies him for the next several years to be considered for a national award. For the past 28 years, he has been the director of choral activities at Woods

Cross High School in Woods Cross, Utah, and the school's madrigals and concert choir have earned superior ratings at the regional and state level for 27 consecutive years. Hendriksen is chair of the Utah High School Activities Association music committee and a past president of the Utah Music Educators Association.

William Wade BA'82, president and chief executive officer of Asia Satellite Telecommunications Company Limited (AsiaSat) was named the Satellite Executive of the Year in Asia-Pacific, at the 2013 Asia-Pacific Satellite Communications Council Awards held in Hong Kong. The award is given to an

individual who has made outstanding contributions and achievements to the satellite industry during the year. AsiaSat, based in Hong Kong, is a commercial operator of communication spacecraft. Wade was appointed president and chief executive officer of AsiaSat in August 2010. Prior to that, he served as the company's deputy chief executive officer for 16 years. He has more than 26 years of experience in the satellite and cable television industry. Before joining AsiaSat, he was with Hutchison Whampoa, also based in Hong Kong. Earlier, Wade served as executive director for Echosphere International (Echostar), where he established the company's permanent Asian operations in Singapore while managing its activities in Asia and the Middle East. Wade, who speaks Mandarin, received his bachelor's degree in humanities from the University of Utah and a master's degree from the Thunderbird School of Global Management.

James D. Walker BS'83 MA'87 PhD'88, a scientist in Southwest Research Institute's mechanical engineering division, has received the 2014 Edith and Peter O'Donnell Award, given by the Academy of Medicine, Engineering & Science of Texas. The O'Donnell Awards recognize rising Texas researchers "whose work meets the highest standards of exemplary professional performance, creativity, and resourcefulness," according to the academy. The award honored Walker's efforts on the Space Shuttle *Columbia* accident investigation and NASA's return-to-flight program, as well as his work that has contributed to the safety of U.S. military forces.

Walker's research centers on personnel protection ranging from vests worn by soldiers and police officers to designs for ground vehicles, the International Space Station, and satellites. Currently, he is the principal investigator and manager of a $5.1 million project to analyze vehicle response to land-mine blasts and other weaponry. Walker received both his undergraduate and graduate degrees from the University of Utah in mathematics.

'90s

Thomas G. Fazzio BS'97, an assistant professor at the University of Massachusetts Medical School, recently was recognized as a rising scientific star by President Barack

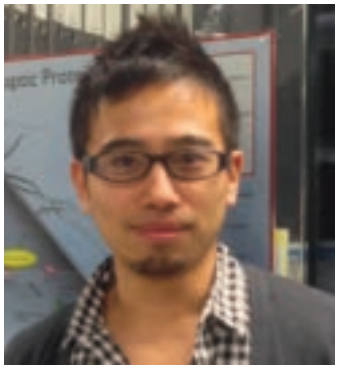
Obama with a Presidential Early Career Award for Scientists and Engineers. The presidential award is the highest honor bestowed by the U.S. government on outstanding scientists and engineers in the early phases of their research careers. Fazzio was one of 102 scientists and engineers chosen for this year's award. Presidential awardees are selected for their pursuit of innovative research at the frontiers of science and technology and their commitment to community service. A faculty member at Massachusetts since 2010, Fazzio's research focuses on understanding how DNA is packaged into tiny chromatin structures inside the nucleus of stem cells. He has uncovered previously unknown processes governing how the chromatin structure of a cell's DNA influences gene expression in stem cells, conferring on these cells the unique ability to replicate and differentiate into many different types of cells. A 2011 Pew Scholar, he received his doctorate from the University of Washington and Fred Hutchinson Cancer Research Center in 2004 after completing a bachelor's degree in biology at the University of Utah.

'00s

Naomi E. Levin PhD'08, an assistant professor of earth and planetary science at Johns Hopkins University, has received the 2013 Young Scientist Award (Donath Medal) and a cash prize of $10,000 from the Geological Society of America. The award recognizes outstanding achievement by scientists ages 35 and younger who have contributed to geologic knowledge through original research that marks a major advance in the earth sciences. Levin's research centers on

understanding how terrestrial landscapes and organisms responded to ancient climate change. She has focused on reconstructing environments of about 5 million years ago from sedimentary and isotopic records preserved in the East African rift. Levin has been a faculty member at Johns Hopkins since 2009. She received a doctorate in geology from the University of Utah after completing a master's degree in geology at the University of Arizona and two bachelor's degrees, in geology and anthropology, at Stanford University.

Shigeki Watanabe BA'04 PhD'13, a postdoctoral fellow in biology at the University of Utah, has been awarded the Society for Neuroscience's



inaugural Nemko Prize for his accomplishments as a young scientist. The new annual prize recognizes a young scientist's outstanding doctoral thesis advancing the understanding of brain function. Watanabe works in the laboratory of U biology professor Erik Jorgensen and is studying how nerve cell vesicles—tiny bubbles that contain neurotransmitter chemicals—are recycled after they help send a nerve signal from one nerve cell to the next. His studies also have revealed that vesicles move faster than previously imagined. He received both his bachelor's and doctoral degrees from the University of Utah in biology.

'10s

Maria Graefnings BS'12, one of Sweden's top female distance skiers, has joined Team Sysarb, the mid-Sweden-based cross country ski team. Graefnings has competed in long and short distance races in both skate and classic disciplines. She has achieved multiple International Ski Federation Cross-Country World Cup starts and two victories in the NCAA. She is the reigning NCAA 5-km freestyle champion, the first NCAA title of her career. Among the many honors Graefnings has received are being named Rocky Mountain Intercollegiate Ski Association Female Skier of the Year in 2011, FasterSkier. com 2011 Women's Collegiate Skier of the Year, and *Ski Racing* magazine's 2011 Nordic Collegiate Skier of the Year. Graefnings

received a bachelor's degree in exercise and sport science from the University of Utah.

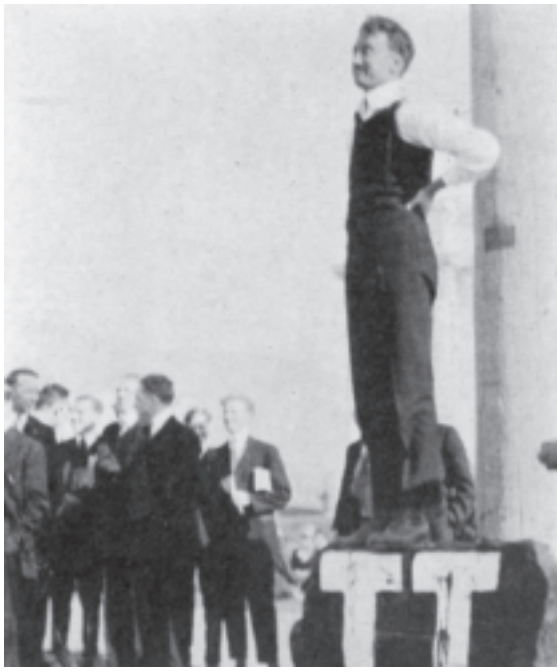
We want to hear from you! Please submit entries to Ann Floor, ann.floor@utah.edu.

The Campus Rostrum

The century-old rock has a colorful and mysterious past.

By Roy Webb

A big chunk of rock has been part of University of Utah campus history for a century, yet its whereabouts during some of that time remain a mystery. The Rostrum, a large granite boulder, started out as a feature in a pep rally for a 1913 football game against the University of Colorado at Boulder. Festooned with a "Bust Boulder" sign, the rock was loaded onto a wagon by freshmen and paraded around Presidents Circle. The parade continued through downtown Salt Lake City, where the boulder fell off the wagon and onto the streetcar tracks. It was shoved aside and later was moved to a spot near the flagpole in front of the U's Park Building (then under construction). Since freshmen were required to wear green beanies as a mark of their lower-classmen status, the boulder soon sported a coat of green paint and the year of their class. U administrators and upper classmen, however, weren't pleased, and the freshmen were required to clean off the paint and numbers and construct a concrete base for the boulder. A few years later, the Rostrum had taken on such an air of tradition that the junior class affixed a bronze plaque to the boulder with the word "ROSTRUM" and the year the plaque was added, "1916."



A speaker attempts to hold forth on the Rostrum in 1915, a time of turmoil over free speech issues at the University.

Photo courtesy Special Collections, J. Willard Marriott Library, University of Utah

The Rostrum had by then begun serving its namesake function of providing a place for public speaking. For Senior Chapel Day in 1915, a crowd gathered to hear the junior class perform "the burial rites of the rightly deceased Seniors," according to the *Utonian* yearbook. Also in 1915, a time of great turmoil at the U regarding free speech issues, a group of "Democratic speakers" attempted to hold forth on the rock but were told to leave the campus by the U's president, Joseph Kingsbury, according to a satirical account in the *Utonian*. A 1955 *Daily Utah Chronicle* article noted: "Here it was that all candidates for school office could have their say by simply standing on the rock. A crowd gathered immediately to hear the speech-maker."

The tradition of painting the rock in the school colors—crimson with a large white U—also became firmly established over the years, but the Rostrum was still frequently splashed with green paint by the freshmen, only to be repainted. In 1937, the Rostrum was moved away from the flagpole, where it could be painted without endangering infrastructure.

By 1944, though, the repaintings had become nightly, rather than annual, with "nurses, Army, and neighborhood vandals" visiting the rock to make their mark, even covering it with stripes or polka-dots, according to the *Chronicle*. U administrators decided to move it into a glass case in the basement of the Park Building. But the move didn't stop the painters. Staff members came in one day to find that the glass had been removed and the rock once again painted green.

By 1946, the rock had become such an annoyance that some administrators wanted to remove it and "bury it in a field," the *Chronicle* noted. In 1953, the *Chronicle* wrote that the rock had been taken to the mountains and dumped several years earlier. Nonetheless, it (or a replacement) was brought back to the base of the flagpole, only to be removed yet again, however, and this time supposedly "destroyed by dynamite." A 1964 *Chronicle* article notes that a new boulder was placed in Presidents Circle, while "the original rock has never again appeared, but is believed to be buried somewhere on campus."

By 1967, students were again being urged to use the Rostrum as a speaker's platform. "Many are the student voices searching for a platform, and you don't have to buy a press or rent a building to use the rock," the *Chronicle* wrote. "It is one school tradition we shouldn't lose."

Questions remain regarding possible whereabouts of the original Rostrum. But in historical photos from 1915 to 1991, the rock appears identical. So if it was removed from campus in the 1950s, was the same rock at some point recovered and returned to a place of honor on Presidents Circle? The Rostrum sits there still, if you want to wander by and take a look.

—Roy Webb BA'84 MS'91 is a multimedia archivist with the J. Willard Marriott Library.

Visit continuum.utah.edu *to view a gallery of more historical photos of the Rostrum.*

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