

SOUTHERN UTAH UNIVERSITY WALTER MAXWELL GIBSON COLLEGE OF

# Science & Engineering

## HALL NAMED DEAN

Dr. Frank R. Hall Chosen to  
Serve as Dean of WMG COSE

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## ORIGINAL WATER

Professor's Visualization  
Attracts International  
Attention

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## SOUTHERN UTAH OPIOID EPIDEMIC

The Opioid epidemic has deeply impacted counties throughout southern Utah. SUU's Utah Center for Rural Health is taking action to stem the tide of opioid addiction.

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## PLUS

Prestigious  
Fellowship Awarded

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# TOP STORIES FROM THE 2018-2019 ACADEMIC YEAR



WALTER MAXWELL  
GIBSON COLLEGE OF  
SCIENCE &  
ENGINEERING

<https://www.suu.edu/cose/>

AGRICULTURE &  
NUTRITION SCIENCE

<https://www.suu.edu/cose/agns/>

BIOLOGY

<https://www.suu.edu/cose/biology/>

COMPUTER SCIENCE  
& INFORMATION  
SYSTEMS

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ENGINEERING &  
TECHNOLOGY <https://www.suu.edu/cose/et/>

MATHEMATICS

<https://www.suu.edu/cose/math/>

NURSING

<https://www.suu.edu/cose/nursing/>

PHYSICAL SCIENCE

<https://www.suu.edu/cose/physci/>



**CHAZ GEORGE, SUU TO NAVAL AVIATOR** Computer Science 2017 Alum to U.S. Naval Aviator <https://www.suu.edu/everywhere/stories/chaz-george.html>



**STEPHANIE DEGRAFFENRIED** Geology Alum to CS Mining Project Geologist for Exploration <https://www.suu.edu/everywhere/stories/stephanie-degraffenried.html>



**JULIE HAMMARI** Math Education Alum to Awardee of the Presidential Award for Excellence in Math and Science Teaching <https://www.suu.edu/everywhere/stories/julie-hammari.html>



**MATT WILDE** Computer Science 2018 Alum to Amazon Cloud Support Engineer <https://www.suu.edu/everywhere/stories/matt-wilde.html>



**ERIKA SEIRUP** Biology-Zoology Alum to Wildlife Rehabilitation <https://www.suu.edu/everywhere/stories/erika-seirup.html>



## NURSING ALUM NOW AT JOHN HOPKINS

SUU Nursing Alum Timian M. Godfrey Biography

Navajo, former Miss SUU and 2007 SUU Nursing Alum Timian M. Godfrey redefines busy on a daily basis. As an advanced practice registered nurse, she alternates between hospital emergency departments on tribal lands of the Pine Ridge and Rosebud in South Dakota, Winnebago in Nebraska, and San Carlos Apache in Arizona, working about one week at a time.

Last year, she enrolled in the Executive Doctorate of

Nursing Practice program at the Johns Hopkins School of Nursing. As a full-time advanced practice nurse and mother to two children, she has also consistently been a Dean's List student (her advisor says, unsurprisingly, she is a quick study).

To add to this impressive lineup, Ms. Godfrey is also now pursuing her Public Health Training Certificate in American Indian Health. After participating in her first Center for American

Indian Health Institute this past January, she traveled to Baltimore in July to take two additional courses: Introduction to Data Management Using American Indian Health Data and Introduction to Quantitative and Qualitative Research Methods, as part of the Johns Hopkins Center for American Indian Health 2018 Summer Institute.

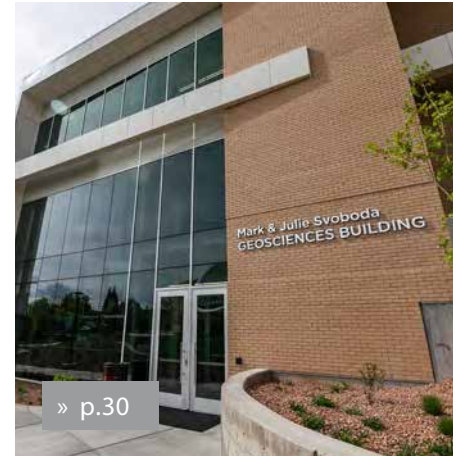
- Biography provided by Center for American Indian Health



## ON THE COVER

SUU's Geosciences program unveiled its new state of the art home in May 2019 at the dedication for the Mark and Julie Svoboda Geosciences Building. The renovation of the former business building offers 26,123 square feet of space for SUU's Geosciences.

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# ALUMNI SPOTLIGHT



As an Agricultural Science major, Celeste Maloy took advantage of an internship with the Natural Resources Conservation Service (NRCS), an agency of the United States Department of Agriculture. This internship turned into a full-time career as a soil conservationist with the NRCS.

After working for the NRCS for over a decade, Celeste decided to make some life changes and go to law school. In need of letters of recommendation for her law school applications, she reached out

to two of her former professors Dr. Jim Bowns, now deceased, and Dean Winward.

"It's hard for me to believe that many college professors would have much meaningful memory of a student who had been gone that long, but Dean Winward and Dr. Bowns took that type of interest in their students," said Celeste.

Following law school and carrying her passion for public lands that she acquired with the NRCS, Maloy now splits her time between the Washington County Attorney's Office and working as a public lands policy advisor for the Utah Association of Counties. Celeste's work has taken her all over UT and Washington, D.C. as she helps shape the future of public lands policy.



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## CSIS DEGREE BADGES

**Social Media and Web Design Badges help bridge the gap between graduation and career.**



SUU has launched Degree Boost Badges, a new initiative aimed at bridging the gap between graduation and career. Each four course badge teaches marketable skills

that help graduates secure a job and earn a higher starting salary. Computer Science and Information Systems currently offers Badges in Social Media and Web Design.

## K12 TOURS

**Two Museums collaborate to serve K12 classes.**



The Garth & Jerri Frehner Museum of Natural History partnered with the Southern Utah Museum of Art to provide educational tours to K12 classes throughout Fall 2018.

Grades K-5 learned about the connections between art and the natural world and created artwork based on their visit. The Grade 6-12 tour featured a behind-the-scenes tour of both museums to show students the best practices and tools to run their own museum. Upon completing the tour, students worked in

groups to design their own museums and curate an exhibit from their museum design.

## FFA at SUU

**SUU club brings hundreds of FFA students to SUU for event.**



The SUU Agriculture Club hosted the 2018 Future Farmers of America (FFA) Livestock, Horse, Range & Agronomy Judging Contest in September 2018 at the Diamond Z Arena and SUU Valley Farm.

Hundreds of students from approximately 30 FFA Chapters from Utah and Nevada competed in this event.

## ALUMNI SPOTLIGHT

Construction Management alum Zane Hunzeker currently works as the Virtual Design and Construction Manager for the San Diego Division of Swinerton, a

commercial construction company that has helped build communities all over the United States and beyond.

“Aside from changing the skylines of southern

California, my favorite part of the job has to be taking our clients through their building in virtual reality before we even start digging the hole.” said Zane.

### ALUMNI SPOTLIGHT

Claire Cleveland came to SUU as a non-traditional student with a passion for geology and biology.

At SUU, the intersection of life and earth fascinated her, leading to an honors double major track with emphasis in geology and biology.

A National Science Foundation Graduate Research Fellow, Claire is now pursuing a doctorate degree at Pennsylvania State University. Her focus is to find new ways to make science more accessible to the

public. She is also working with SUU professors, Dr. Johnny MacLean and Dr. William Heyborne, on the pilot project SMARTS, Science Made More Accessible Through Stories.

“SMARTS collaborators use new techniques in scientific storytelling to establish best practices in teaching to support and train 6th through 9th grade educators, expand science-based public outreach, and provide specialized training events for pre-college and undergraduate emerging scientists,” said Claire.

### SUU Rural Health Scholars trained in QPR.



Suicide is the 10th leading cause of death in the United States, with Utah ranked 5th in the county for suicide death rate. With such alarming numbers, SUU’s Rural Health Scholars (RHS) decided it was time to get involved.

Ryan Lofthouse, a senior pre-med student with RHS, organized and facilitated a Question, Persuade and Refer (QPR) Training for all first year RHS students. QPR is an emergency mental health intervention designed to help those struggling with suicidal ideation.

### MONEY & MASTERS

#### Master’s degree named as 9th most affordable in the country



SUU’s online Master’s program in Cyber Security & Information Assurance was recently named the

9th most affordable online master’s program for 2019 by SR Education Group.

### MORE ON MASTERS

#### CSIA Masters program ranked Best in Nation.



The Best Schools ranked SUU’s Master of Cyber Security and Information Assurance (CSIA) in the nation’s top 50 programs.

This is the same program that has been designated as a National Center of Academic Excellence in Cyber Defense Education by the National Security Agency and the Department of Homeland Security.

SUU was the only school from Utah included in the ranking.



## COMPETITIVE GEOLOGY GRANT AWARDED TO SUU

Geoscience Program Receives \$25,000

SUU Geology Program was selected to receive \$25,000 from Dominion Energy's 2018 Environmental Grant Awards for the SUU Geology Field Trip Program.

"SUU's Geology Field Trip Program is a six-credit course that occurs almost entirely in the field," said Johnny MacLean, Assistant Provost of Faculty Affairs. "We teach two sections with roughly 28 students every summer, and each section runs for five weeks. Students from all over the country come to our field camp where they learn about several types of geologic processes in the spectacular settings of our national parks and other public lands. This is truly experiential education at its best."

The money awarded to the Geology Field Trip Program will be used to fund on-site specialists, equipment and gear, and travel fees.







These grants support programs and people dedicated to making our world a better, more liveable place.



Dominion Energy awarded \$1 million in grants through its philanthropic arm, the Dominion Energy Charitable Foundation. These grants were given to 129 organizations in 12 states working to improve natural spaces or encourage environmental stewardship.

“Each year I am impressed by the diverse and meaningful efforts being made in our communities to improve and sustain the environment,” said Hunter A. Applewhite, president of the Dominion Energy Charitable Foundation. “These grants support programs and people dedicated to making our world a better, more livable place - one that can be treasured today and passed down to future generations.”

The competitive grants program supports environmental education and stewardship projects that preserve, enhance or make nature more accessible. SUU was one of eight organizations in the company’s western region that received grants up to \$25,000 along with the National Forest Foundation and Friends of Arches and Canyonlands Parks.

The SUU Geology Program provides hands-on, field-based learning experiences to students, utilizing the SUU's close proximity to some of the most diverse land in North America. Students study nearly two billion years of geologic history within a 100 mile radius of campus, involving students in cutting edge research and taking

education outside the classroom.

One of the nation’s leading operators of solar energy, Dominion Energy is one of just three companies to have reduced carbon intensity by more than 40 percent since 2000. To learn more please visit the Dominion Energy website at <https://www.dominionenergy.com/>





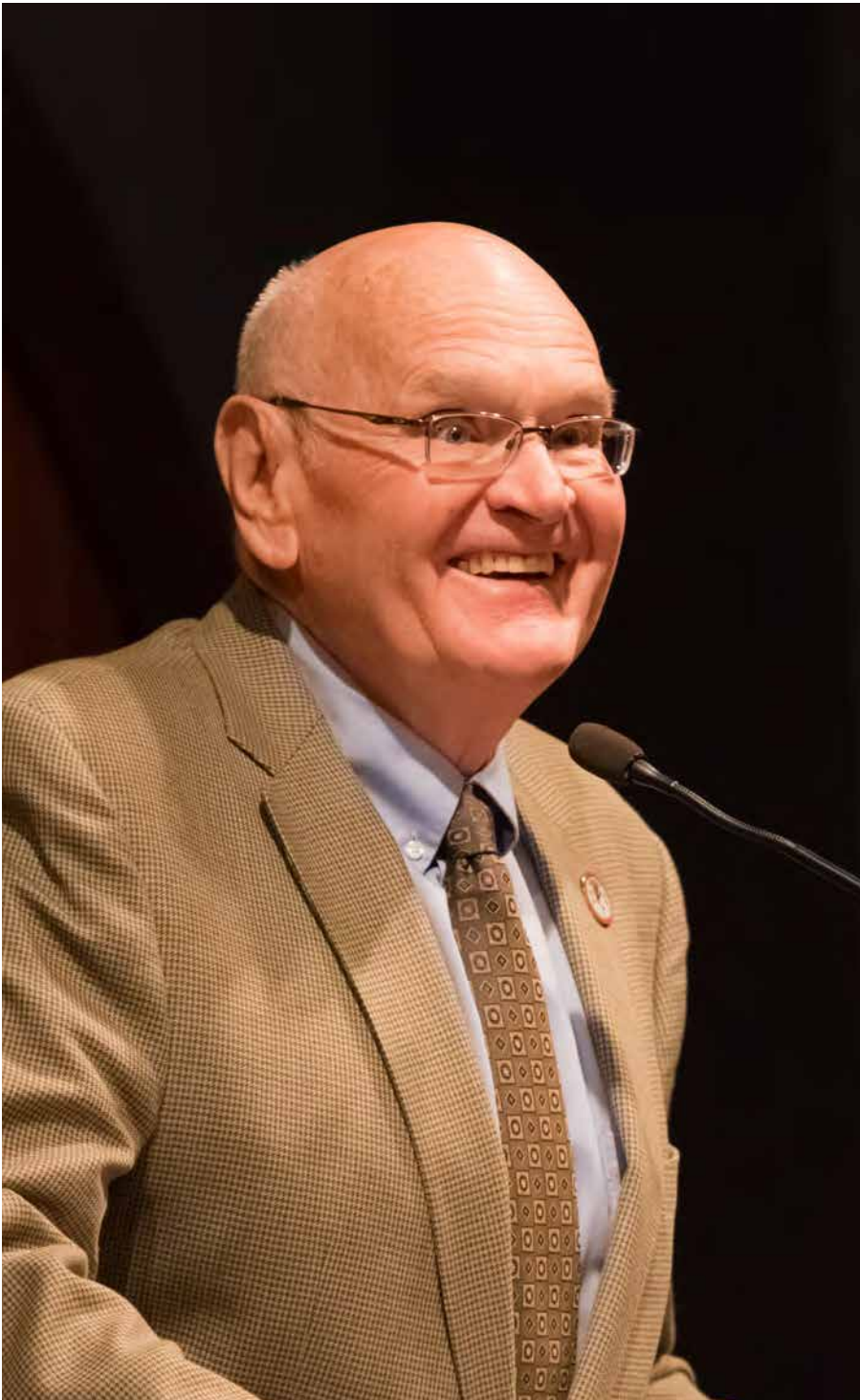
## EVES: INTERIM PROVOST

Dean Robert Eves has agreed to Serve as SUU Interim Provost and Vice President for Academic Affairs prior to his retirement.

Before his retirement from SUU, Dean Robert Eves has accepted one more leadership role. He will serve as SUU's Interim Provost and Vice President for Academic Affairs. As Provost Brad Cook steps down to begin his new role as President of Snow College, Eves began his appointment on May 4, 2019, and continue until the search for SUU's next Provost is concluded.

Eves has served for 31 years in a variety of roles at SUU. He began his tenure as an assistant professor of geology. As time progressed, he became Chair of the Department of Physical Sciences and Dean of the Walter Maxwell Gibson College of Science & Engineering. He plans to place the capstone on his academic legacy with the position of Interim Provost.

Dean Eves is a graduate of SUU and our longest serving Dean," said SUU President





Dean Eves ability to make informed decisions about the college has allowed [WMG COSE] to prosper during his tenure.



Scott L Wyatt. "His understanding of all aspects of the university, from the student, faculty and administrative perspectives will be a tremendous benefit to all of us as he spends his final year, prior to retirement, leading academics at the university. I am very grateful for his willingness to serve in this capacity."

Eves has been a mentor to countless students. His leadership has fostered a period of exceptional growth for WMG COSE. Particularly in the past six years, which have seen an 83% growth in the number of freshmen and an impressive 71% retention rate for freshmen/sophomores.

"Even as a brand new faculty member, Dean Eves would weigh my input as if we had worked together for

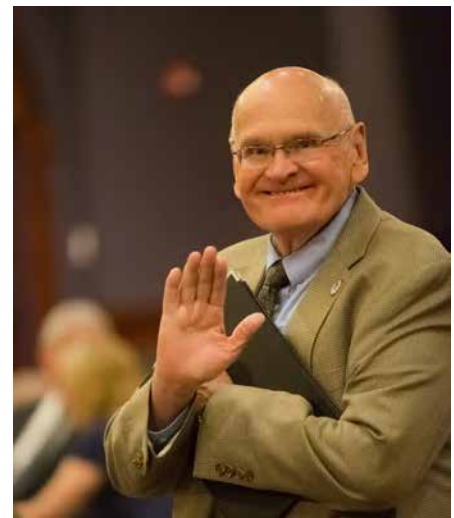
decades," said Casey Webb, former student and now lecturer of geology at SUU. "He seems to have the keen ability to instantly see the immediate consequences of any decision being made. Dean Eves' ability to make informed decisions about the college has allowed [WMG COSE] to prosper during his tenure."

During his time as Dean, SUU dedicated the L.S. and Aline W. Skaggs Center for Health and Molecular Sciences in the fall of 2011 and will see the completion of the new home of the geosciences program, the Mark and Julie Svoboda Geosciences Building on May 2.

"SUU's enrollment reached 10,000 last year, and a goal has been set to enroll 15,000 students by 2025. This kind

of rapid growth comes with significant challenges," said Eves. "Despite the challenges, I, personally, am honored to be here at this time in the history of a great school."

Eves earned a bachelor degree in physical science from then Southern Utah State College. He earned both a master's degree and a Ph.D. in geology and geochemistry from Washington State University.





## NEW DEAN NAMED FOR SCIENCE & ENGINEERING

Dr. Frank R. Hall Chosen to Serve as Dean

**S**UU is excited to announce that after an extensive national search, Dr. Frank R. Hall has

been chosen to serve as the new Dean for the Walter Maxwell Gibson College of Science and Engineering.

**H**all has over two decades of experience in administration and service



at the university level. His past academic appointments include Dean of the College of Science, Engineering, and Technology at Saginaw Valley State University, full Professor and Dean of the School of Education, Health and Natural Sciences at Worcester State University,

as a member of the United Nations World Ocean Assessment Program and is part of the Council of Colleges of Arts and Sciences. Hall has also worked as a contractor with the National Oceanic and Atmospheric Administration, was a staff

As the Dean of the Walter Maxwell Gibson College of Science & Engineering, Hall will oversee the Departments of Agriculture & Nutrition, Biology, Computer Science & Information Systems, Engineering & Technology,



[Dr. Hall's] diverse background in STEM education at all levels makes him well prepared to lead a college that focuses on teaching, outreach, community service, and undergraduate research.

faculty positions at the University of New Orleans and University of Delaware, and Ford Foundation Postdoctoral Fellow at University of Colorado.

"I am very excited for Dr. Hall to join us at SUU," said Dr. Jean Boreen, Dean of the SUU College of Humanities and Social Sciences and hiring committee chair. "I look forward to working together on interdisciplinary projects."

Hall's scholarship has focused on science and science education, and the intersections between science and society. He currently serves

member for the National Academy of Science, and served as a Program Manager with the National Science Foundation.

"When I interviewed at Southern Utah University, I was impressed by their student-centered approach to education and dedication to hands-on opportunities for students, preparing them for life after graduation," said Dr. Hall. "I am honored to be joining the SUU community, to support President Wyatt's vision of the future, commitment and dedication to diversity, the well-being of all students, its outstanding faculty, and community outreach, service and engagement."

Mathematics, Nursing and Physical Science.

Throughout his career, Hall has been dedicated to improving diversity, inclusion and access to underrepresented and underserved students. He was nominated as an Outstanding African-American in STEM by the Black Engineers of the Year Awards in 2014.

Hall completed his Ph.D. in Geological Oceanography at the University of Rhode Island. He also holds a master's degree in Geology from Lehigh University and a bachelor's degree in Earth Science from Kean University.



## STUDENT SELECTED AS UNITED NATIONS DELEGATE

Rural Health Scholar to Serve in UN Youth Assembly

**R**ural Health Scholar Siphon Ncube has been selected as one of the global youth leaders attending the 23rd session of the Youth Assembly organized by Friendship Ambassadors Foundation at New York University this February.

**S**outhern Utah University student, Ncube hopes to participate in a Youth Impact challenge where she will present a proposal about two projects that incorporate the

United Nations (UN) sustainable development goals about quality education, as well as good health and well-being.

**T**his year's theme for the Youth Assembly is "Empowering Youth for Global Development." Ncube plans to advocate for quality education by talking about disadvantaged yet academically gifted African students who are unable to pursue tertiary education because of financial

constraints, as well as advocating for scholarship funding for them. She hopes to help them receive the same opportunities she has received.

**T**he goals she has are to network, create opportunities and obtain funding for students who want to attend cultural immersion trips RHS offers to help tackle rural health care challenges in third world countries.

**N**cube is a pre-medical student born and raised in South Africa, majoring in biology with a chemistry minor. She has always loved science and aspires to become a doctor involved in research. Her dreams of attending a United States medical school include hopes of becoming the voice of change by working for the UN to help implement policies that will



ensure change in the world.

**N**cube is the vice-president for The African Union Club here on SUU's campus, a Shriner's Hospital Ambassador, and volunteers with the Community Engagement Center on SUU's campus, helping with Bread and

hopes of leaving a legacy after graduating from SUU by mentoring SUU students about this program. Her spirit of volunteerism and mentoring continues when Ncube goes back to South Africa where she volunteers at hospitals, helps set up mobile clinics and spends her time helping at

care. This program is available at SUU, Dixie State University, Snow College, and Utah State University-Eastern in Price. Services assist students in becoming successful applicants to medical, nursing, podiatry, dental, pharmacy, physical therapy and other health professions pro-



[Ncube's] dreams of attending a United States medical school include hopes of becoming the voice of change by working for the United Nations to help implement policies that will ensure change in the world

Soup night. She also volunteers at the Iron County Care and Share and is a recent member of the National Society of Collegiate Scholars, an honor society for students with high academics. She is also a member of the Student National Medical Association and the International Federation of Medical Students Association, both national societies are comprised of medical students from around the world who are helping to tackle various health issues in their respective regions.

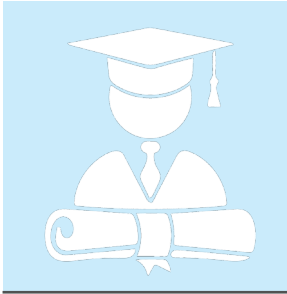
**G**rowing up in rural South Africa, Ncube saw the health challenges people faced. She has

orphanages.

**N**cube is a member of the SUU Rural Health Scholars Program, which provides additional services for students interested in careers in health

grams. Student applications are strengthened through a regimen of classes, seminars, community service, job shadowing, research and advisement.





## SUU VALEDICTORIAN 2019

Mechanical Engineering Student Cameron Aston  
Named 2019 SUUValedictorian

**F**or mechanical engineering major Cameron Aston, completing all his courses with a 4.0 and being chosen as the Southern Utah University 2019 Valedictorian is a dream come true. To him, it is “proof that you can do anything you set your

them so much that he would read the owner’s manuals in his free time. His passion for all things related to motors led him to begin his education at Southwest Technical College as an automotive technician. He graduated Southwest Tech at the top of his class and moved on

**D**r. Ali Siahpush, associate professor of engineering, has known Aston for four years. He praised Aston for his strong work ethic, saying “He is never late, he is always there. He does a really good job doing his homework; his exams. I grade his exams first to make sure my solutions are correct.”



“I love my major because of the sheer diversity of what we learn. It keeps me interested and moving forward without getting bored. I can’t wait to get out into the workforce and put my new knowledge to use to make a positive impact as an engineer.

mind to and an honor [he] will always treasure and be grateful for.”

**A**ston’s love for mechanics and engineering started at an early age. Growing up in Fredonia, Arizona surrounded by dirt bikes, ATVs, and other off-road vehicles, Aston loved learning about

to welding courses. Aston’s welding professor encouraged him to study engineering and enroll at Southern Utah University where he says he “never looked back.” He will graduate with a major in mechanical engineering and a CAD/CAM minor.

**S**iahpush described Aston as being a “typical mechanical engineer” Along with being an outstanding student, Siahpush said, “There are times he knows more than I do. He is the one that corrects me in class, and I love that! He has a good sense of humor and he communicates well. He does well in lab environments, he does well in analytical solutions and experimental work. He would be an engineer I would hire right away because I know he will do a good job.”



**D**uring his senior year, Aston focused his capstone project on building a solar-powered light system for the Cedar City “C”, located at the top of Cedar Mountain on the northeast side of Cedar City.

**E**very year for Cedar High School’s homecoming the students light the “C” with road flares, but Aston wanted to design something more permanent that could be used nearly every night. Paired with and supported by Cedar High School, Aston and his team created a design that includes color-changing LEDs so the “C” can be lit, potentially, any color of the rainbow.

**“**The idea was actually given to the department by Cedar High School,” said Aston. “We thought it would be an amazing legacy project. When it goes up, I will be proud to know I was part of such a large community icon.”

**A**ston and his team are getting close to completing the design and hope to have a system ready for Cedar High School by the end of the semester.

**W**hen discussing his honor to be this year’s valedictorian, he said, “It is truly beyond my wildest expectations for myself.”

**A**s an engineering major, Aston has learned about a wide range of principles and has participated in project-based learning opportunities throughout his education.

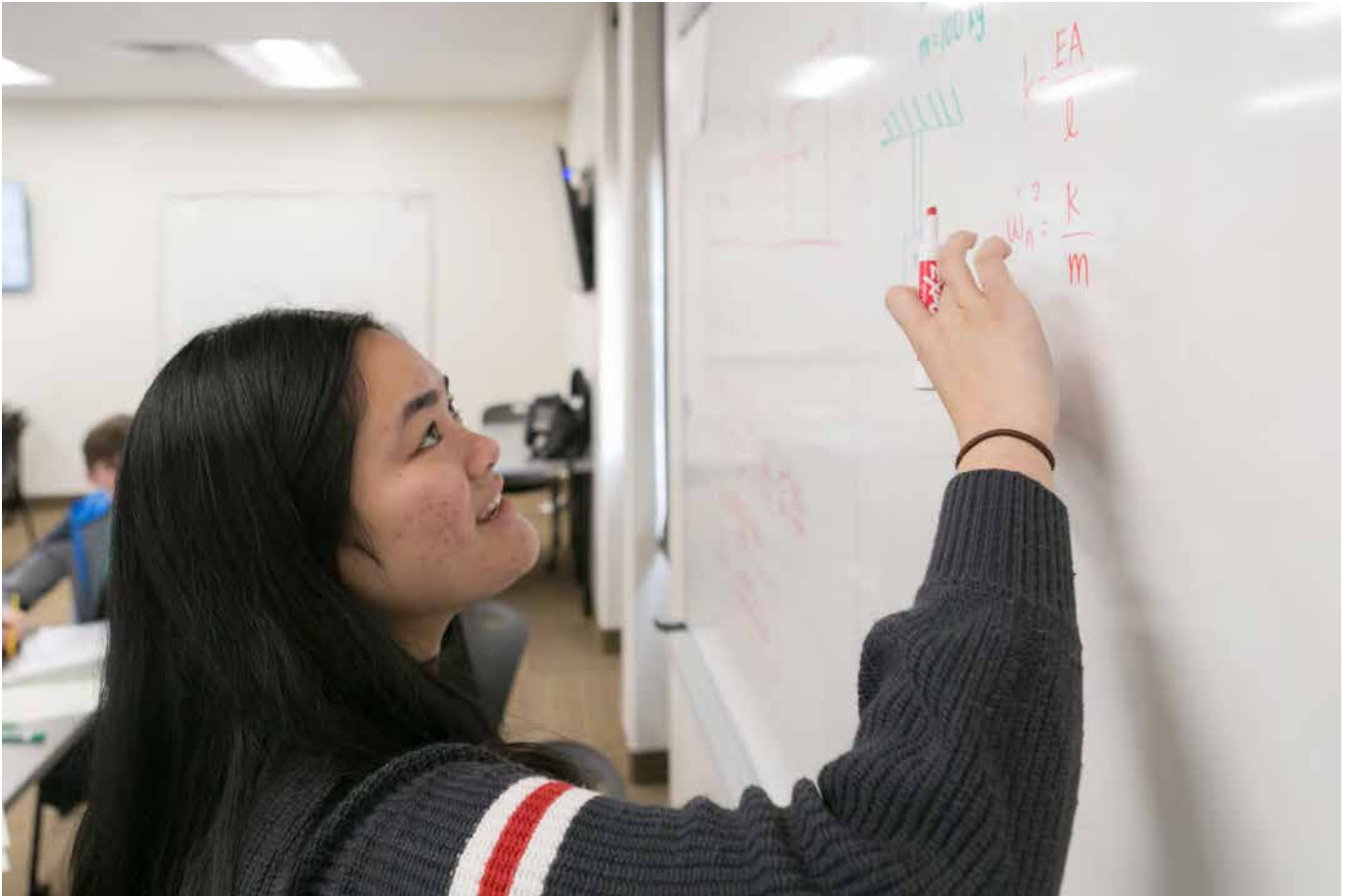
**“**I love my major because of the sheer diversity of what we learn,” said Aston. “It keeps me interested and moving forward without getting bored. I can’t wait to get out into the workforce and put my

new knowledge to use to make a positive impact as an engineer.”

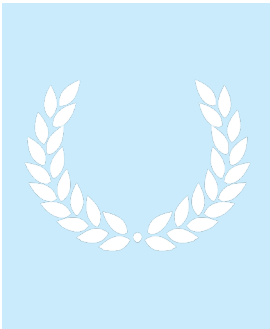
**F**ollowing his graduation from SUU, Aston plans on working in the field as a design engineer and is currently considering a position in southern Utah. While he eventually plans on pursuing graduate school after a few years working in the field, he is ready for a small break from studying.

**“**If I have learned anything from SUU, it’s that I love to learn. I plan to continue learning everything I can about engineering and other aspects of science,” Aston said.





## ACADEMICS



# ACADEMIC EXCELLENCE

Engineering Student Kelly Pelicano Recognized by Southern Utah University Women's Network for Academic Excellence

Kelly Lou Pelicano, a third-year engineering major at Southern Utah University has been recognized by her department and the SUU Women's Network for her exceptional academic performance as well as her community engagement.

Pelicano has come a long way to study at SUU. Born in Cebu City in the Philippines, she spent her early years in Papua New Guinea before moving to California with her family where her parents teach high school.

"Kelly is a great student," said Dr. Ali Siahpush, associate professor of engineering at SUU. "She is always committed to doing her best and is very self-motivated. I have the utmost respect for her in how she conducts her

professional life."

"My favorite thing about studying engineering at SUU is learning from professors who have years of experience working in the engineering industry,"

said Pelicano. "The professors regularly connect the material in class to projects they've worked on, which is so interesting to hear about! I never have to think 'will I ever use this?' because my professors make the real-life applications clear."

This past summer Kelly was able to expand her education by conducting research at the University of Minnesota Twin Cities as a part of a National Science Foundation Research Experience for Undergraduates (NSF REU) Kelly Lou Pelicano, a third-year engineering major at Southern Utah University has been recognized by her department and the SUU Women's Network for her exceptional academic performance as well as her community engagement.

"Other students in the program hailed from the University of Southern California, Purdue, Milwaukee School of Engineering, University of California Merced, and many more," said Pelicano. "Though they came from more widely-known institutions, I felt well-prepared and equipped to work and learn with them because of my experience at SUU."

Kelly's achievements aren't limited to the classroom, she has also worked as a tutor for engineering and mathematics courses. She has served as an assistant event director on the SUU Student Programming Board, activities coordinator and vice president of the SUU chapter of Engineers Without Borders, and vice president of the Newman Club. Somehow, she still finds time to volunteer with her church's music ministry, travel, and spending time with her family.

"I've learned the importance of time management and working well with others in my time as a tutor, TA, and officer of Engineers Without Borders," said Pelicano. "I am

still able to do homework and study, work, attend many basketball games, be active in clubs, and still have time to myself."

After she graduates with her bachelor's degree, Kelly looks forward to pursuing a graduate degree in mechanical engineering and working in the engineering industry. She hopes that her education will allow her to see more of the world.

"The fundamental engineering of machines or structures is something that doesn't vary internationally so I hope that my future job has opportunities to work in places all over the country and world," she said.

### SUU LAUNCHED ITS NEW MECHANICAL ENGINEERING MAJOR IN FALL 2018.

"Mechanical engineering is a broad discipline in high demand, so our graduates will be able to engage in engineering careers locally, across the state, and all over the country," said Dr. Scott Munro, Associate Professor Engineering and Mechanical Engineering Program Director.

"Expanding the engineering program will also help persuade



companies considering southern Utah as a location. They will have a talent pool of qualified engineers to fill positions locally, as well as being able to leverage the technical expertise of SUU, potentially creating partnerships that enhance the student experience and benefit the company and the community."



## AEROSPACE INITIATIVE

### Governor Herbert Visits Partners in Support of the Aerospace Workforce Initiative

**G**overnor Gary Herbert visited partners and participants in the Southwest Aerospace and Manufacturing Strategic Workforce Initiative in July 2018. Several partners including the Iron County School District, Southwest Technical College,

**“**We need baseline talent to continue to grow business in Utah,” said Herbert. “Employers are looking for future talent and you are on the cutting edge. You’re in a very good sector for economic stability and economic opportunity.”

presented by the Higher Education Appropriations Subcommittee. This request will extend the current Utah Aerospace Pathway program. This effort will provide the opportunity for stackable credentials with multiple entry points and exit points to support multiple academic paths.



**“**We need baseline talent to continue to grow business in Utah.

**S**tudents completing the Southwest Aerospace

Southern Utah University, MSC Aerospace and a dozen of the program’s students attended the meet and greet event held at the Cedar City Airport.

**“**The initiative provides support to students in high school and post-secondary training,” said SUU President Scott Wyatt. “It will prepare them for technical jobs in southern Utah.”

Manufacturing Strategic Workforce Initiative have the option to go into the work-force upon graduation from high school or to continue their education through STech or SUU.

**T**he Southwest Aerospace and Manufacturing

Strategic Workforce Initiative is a collaborative program that helps students develop skills that put them at the forefront of the rapidly growing aerospace industry

**D**uring the 2018 Utah Legislative Session in Salt Lake City, the Legislature granted the request for the Strategic Workforce Initiative funding

**T**he credentials will begin with high school training and

concurrent enrollment and then extend to additional certificates and certifications which include associate’s and bachelor’s degrees articulated through

STech and SUU. These trained and educated students would supply skilled labor quickly for the growing aerospace and manufacturing industry.

**D**r. Richard Cozzens, associate professor in the Department of Engineering and Technology at SUU, is the Principal Investigator for the initiative. Cozzens has been working with STech, Iron County School District, MSC Aerospace and other industry partners for many years on numerous grants and projects and has built a strong working relationship with each partner. These many years of collaboration were critical in helping Cozzens and the partners recognize the need and lay the groundwork for this particular initiative.

**//** Being awarded the Aerospace and Manufacturing Strategic Workforce Initiative is exciting," said Cozzens. "It is something we have been working on for several years, but we now have the resources to make it happen."

**C**ozzens sees this as an opportunity to assist high school counselors, teachers and parents in guiding students to the appropriate educational credential. These defined pathways will include innovative educational and occupational coordination between Iron County School District, STech, SUU and industry partners. The idea is that students will be motivated by having a clear and effective path to a rewarding career in a manufacturing or other STEM related careers, thus supplying local businesses with skilled employees.

**T**he southwest portion of Utah has unique needs in aerospace

that are continually growing. The impact of just one successful skilled job placement in Iron County has the same economic impact as 11.48 skilled job placements in Salt Lake County. This initiative will grow the number of skilled workers needed in Iron County.

**S**UU and STECH have the same goal in mind; they want to better serve their students and provide multiple options for success to prepare them for the workforce. The Southwest Aerospace and Manufacturing Strategic Workforce Initiative is a stepping stone in a greater movement to bridge tech schools with four-year institutions.





## THE FIRST WATER IN THE UNIVERSE

Professor's Visualization Attracts International Attention

“As much as half the water in our solar system didn't come from here, so there is this question... where [did] it all come from?”



The birthplace of water in the universe has been the focus of Southern Utah University professor Brandon Wiggins' research for a long time. Recently, that research garnered him second place for the Best Scientific Visualization at an international competition hosted by the Institute of Electrical and Electronics Engineers (IEEE).

“I'm a guy that looks for water in the universe in general,” Wiggins says of his research. By better understanding the origins of water in the universe and how that water is formed, Wiggins hopes to help answer the question of how common life is in the universe.

“As much as half the water in our solar system didn't come from here, so there is this

question about where it all comes from,” says Wiggins. “Our simulations showed that this story could begin as early as the first stars, at the very beginning of the universe, going supernova. These supernovae spew elements such as oxygen, silicon and carbon into the depths of space. The energy from these blast waves heats surrounding clouds of gas, drives chemical reactions,

and causes the very first trace amounts of water to form. So you have this star that is dying, and that death gives rise to these molecules that we know to be life-giving.”

Wiggins was the principal investigator on the project, “The First Water in the Universe,” which brought together scientists from SUU, the University of Texas at Austin and the Los Alamos National Laboratory. Together they worked to create a groundbreaking scientific visualization that combines chemistry, cosmology and art to create visually stunning representations of complex data sets.

“What we’ve done for the first time is combine chemistry with these cosmology calculations and plotting multiple things in the same 3D space,” says Wiggins. “We were approached by Francesca Samsel from the University of Texas at Austin, who is one of the world’s experts at visualizing scientific data sets. She wanted to tell the story in a way that was beautiful because she thought there was poetry about the story. The way she leveraged her incredible knowledge of color, and what compliments and what

doesn’t, helps guide the eye to things that are scientifically relevant in the simulation.”

By working together to combine all of the scientific data together in the same 3D space Wiggins’ team has been able to create data visualizations that are both beautiful and scientifically useful. The team’s visualization was showcased at IEEE where it received the second place prize. Thousands attended including representatives from Apple, IBM, Intel, Microsoft and other tech and computing companies.

“They have one of the premier scientific visualization showcases in the world because, for the computing community, data visualization is a really important issue right now,” said Wiggins. “The problem we are trying to address is how do you make big data accessible.”

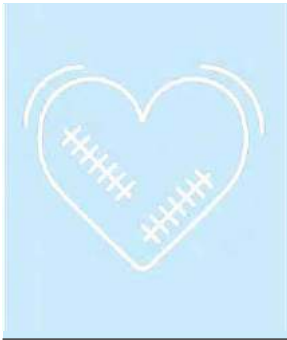
Two positive outcomes came from the “The First Water in the Universe” simulation. Not only did the team’s video visualize Wiggins’ years of research on the origins of water it also showcased the potential and options for data visualization to



a worldwide audience of giants in the technology industry.

Brandon Wiggins is an assistant professor of physics in SUU’s Walter Maxwell Gibson College of Science and Engineering. With a 4.9 rating on RateMyProfessor.com and having received SUU’s Outstanding Educator Award after his first year of teaching, Wiggins is one of SUU’s most popular professors.

In discussing his time in the classroom and lab, Wiggins stated, “We try to press the boundaries quite a bit as far as what the conventional physics education looks like. We will show you things in physics that you have never seen before.”



## REINVENTING THE STITCH

Current Suture Technology hasn't changed in 3000 years. SUU Biology/Pre-Med Major and Student entrepreneur Brings the surgical stitch into the 21st Century

**T**he SUU Entrepreneurship Program has aided the efforts of a number of successful entrepreneurs. Among them is Christopher Christiansen, a senior biology/pre-med major from St. George, Utah who noticed

about modern applications to this ancient invention and developed a working idea to upgrade the stitch.

**C**hristiansen connected with a few other people about the idea and together they

and distribution stages. Christiansen is working with local entrepreneur Jason Whitesides from TouchMD to distribute the product in physical stores. This "do-it-yourself" kit has the potential to slash the costs of hospital services and make a routine procedure like stitches a home treatment.



My goal is to integrate my medical training and love for inventing... SUU's pre-medical and entrepreneurship programs have given me the tools to succeed.

**"**We were recently invited to the Utah Entrepreneur Challenge and the University of Utah's Bench to Bedside competition," said Christiansen. "We were awarded \$5,000 by Zion's Bank and named 'Best in Medicine'. It's quite rewarding when you see your hard work pay off as a student entrepreneur."

a problem with current medical practices while working in a local emergency room.

**A**s an emergency room scribe, Christiansen has seen hundreds of medical procedures. During a routine shift, he noticed that current sutures (stitches) haven't changed much since their invention 3,000 years ago. He started thinking

created Zero Stitch, a new and improved version of a medical suture. Taking ideas from existing medical equipment, Christiansen and his team sat down with a mechanical engineer to revise and optimize their product design.

**Z**ero Stitch is currently patent-pending and will soon move to the manufacturing

**A**s a biology major, Christiansen didn't know anything about business, finance or entrepreneurship before he started attending the SUU Entrepreneurship Speaker



Series. There, he gained mentors who helped him connect with the right people. He credits his uncle Rich Christiansen, a member of the SUU Board of Trustees, Tyler Stillman, SUU Director of Entrepreneurship, Jason Whitesides, TouchMD President, Kary Smith, Managing Partner/Owner of TouchMD, and his father as vital mentors to Zero Stitch.

“Entrepreneurship is the perfect blend of creativity, curiosity, and hard work,” said Christiansen. “Starting a business while in college allowed me to use the quality education I was receiving each semester and apply it to real world problems and situations. It can be stressful and difficult to balance school and a business, but the connections

and experience gained are worth all the work and effort.”

Tyler Stillman has worked closely with Christiansen to build his business and says he is the personification of what business guru Jim Collins calls ‘Level-5 leadership’.

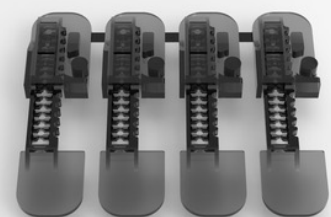
“Chris demonstrates exceptional humility, fierce resolve, and a willingness to give other people credit,” said Stillman. “He is an extraordinary young man, and he’s a tremendous credit to SUU and to the entrepreneurship program. Chris will be successful in his professional ventures, and he’ll do it while improving the lives of the people around him.”

Christiansen offers this advice to other entrepreneurs: “Always be learning. Even though I come from a science and biology background I don’t

feel that this hurt me in any way in the world of business. As an entrepreneur, there will always be something you need to learn and understand in order to make your product or idea successful. Having a mentality to always be learning has been hugely helpful to me through this process.”

Christiansen is in the midst of applying to medical schools. He plans on continuing to develop Zero Stitch as well as multiple other products and business ideas while in medical school. Christiansen and his colleagues have started an LLC and currently have five other medical device projects that should be launching within the next 18 months.

“My goal is to integrate my medical training and love for inventing and entrepreneurship,” said Christiansen. “SUU’s pre-medical and entrepreneurship programs have given me the tools to succeed.”





## NURSING SCHOLARSHIPS

\$60,000 in Scholarships Provided to Culturally-Diverse Students Pursuing Nursing Degrees at Southern Utah University

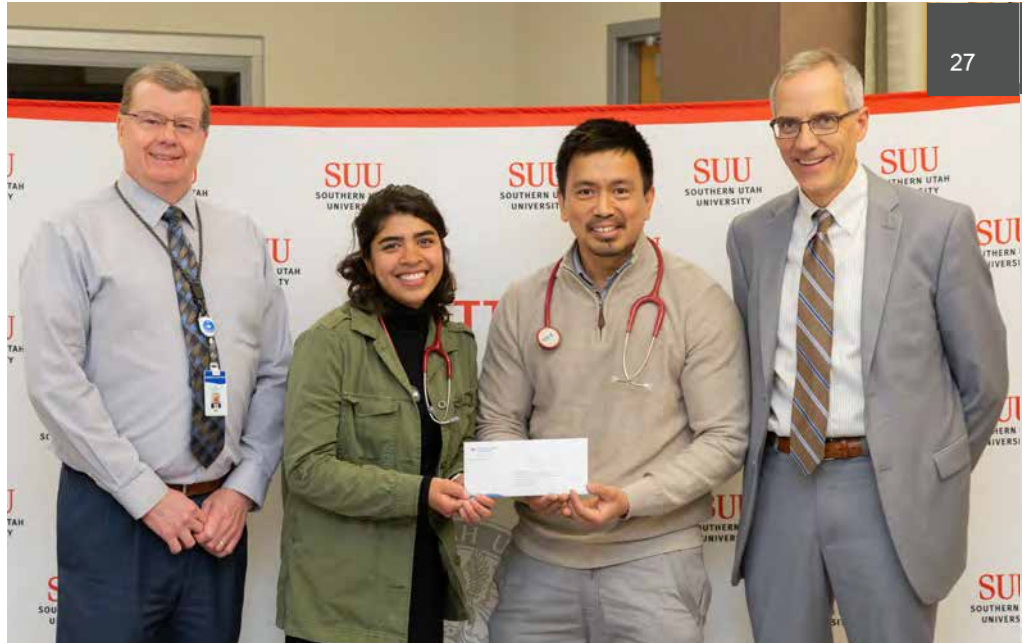


Intermountain Healthcare (IHC) Cedar City Hospital (CCH) presented a check to SUU in Spring 2019 for \$60,000 in scholarships for minority students, as part of their Diversity in Nursing Scholarship program. These scholarships, of up to \$3,000 per semester per student, will be awarded to SUU nursing students enrolled full-time, and can be used to cover the cost of tuition, books, fees, and any other barriers including childcare or transportation, that may prevent culturally-diverse students from enrolling or continuing their education.

President Scott L Wyatt of SUU says, "We are appreciative of this generous donation and what it does for our nursing students. It is important to SUU that all types of students are successful together and that we have opportunities for students of all socio-economic, racial and ethnic backgrounds."



It is important to SUU...that we have opportunities for students of all socio-economic, racial and ethnic backgrounds.



**Eric Packer, Administrator at Cedar City Hospital, says, "We are proud to support this exemplary nursing program at SUU.** [CCH] is an official clinical site for the SUU nursing department, which provides an opportunity for student nurses to learn and train in a real-life healthcare setting. Our hospital knows just how outstanding the nursing program is at SUU because our hospital hires many of their graduates and they are an integral part of why our hospital is one of the best rural hospitals in the nation."

**One student that received this scholarship is Vishant Thapa.** He was born in Siliguri, India, and worked in the laboratory at CCH for seven years before he decided to change his profession to nursing. "I am very

grateful for this scholarship, it has been very important and meaningful to me and my family," says Thapa.

**Another student that received this scholarship is Cecilia Campas.** "I'm from Southern California, and with the help of this scholarship I'll be the first in my family to graduate with a bachelor's degree," says Campas. "I'm very interested in mission work as a nurse. To prepare for that, this summer I'll be going on a mission trip to Mexico for five weeks to teach English to college students."

**Maria Martinez, Director of the SUU Center for Diversity & Inclusion, says, "We are grateful for this support from Intermountain Healthcare.** It is increasingly important that healthcare

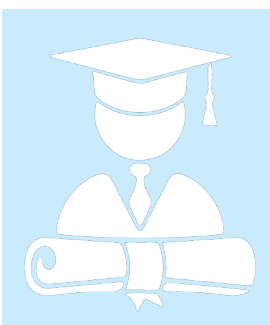
providers represent the diverse demographics of our community, and these types of scholarships support our diverse students to increase representation in both the healthcare field and in higher education. We thank [IHC] for seeing a need and creating more opportunities for our diverse nursing students."

**IHC CCH donated \$100,000 to the Diversity in Nursing Scholarship program at SUU in April of 2016.** This latest donation of \$60,000 shows their ongoing commitment to this program.





## GRADUATION



# WMG COSE VALEDICTORIAN 2019

MATHEMATICS MAJOR: NIC BASTIAN

Nic Bastian is proud to represent the Southern Utah University Walter Maxwell Gibson College of Science and Engineering as the 2019 Valedictorian. Bastian will be graduating with a degree in mathematics with a concentration on pure mathematics.

While in high school, Bastian decided he wanted to win the Snow College annual math contest. He dedicated one hour every night to studying math, even during the summers. After placing first place in the competition during his junior and senior year of high school, he kept up his evening math studies.

"I really enjoyed the challenge of mathematics and viewed solving math problems somewhat like a game, where I won the game when I answered the question correctly," said Bastian. "This sense of enjoyment that came from doing well in math is ultimately what made me decide I wanted to major in mathematics."

During his sophomore year at SUU, Bastian faced the hardest class of his collegiate career - Math 4580: Complex Analysis. He averaged 30 hours a week on this class alone alongside four other courses he took that semester.

"At the time I wished I would drop the class, but looking back I wouldn't change a thing," said Bastian. "That class was tremendously hard and I was pushed beyond what I thought I was capable of and as a result I became

a far better student and mathematician."

Bastian has participated in undergraduate research alongside Dr. Andrew Misseldine, assistant professor of mathematics, allowing him to apply his education in an experiential way. He has also taken six courses from Dr. Misseldine and looks to him as a mentor.

"Nic is a brilliant student, probably one of the best students I've ever seen at SUU," said Misseldine. "He prioritizes his time well, he has presented his research at a gaggle of different places and has been published in a mathematical journal with another submission on its way. He is the perfect model of the type of student we want in the Walter

Maxwell Gibson College of Science and Engineering."

While in school, Bastian led study groups for various math classes and found joy in helping students understand difficult concepts.

"I mainly started my study groups because I thought it would help me get better at talking with people," said Bastian. "The group did help with that, but I also found that I really enjoy teaching."

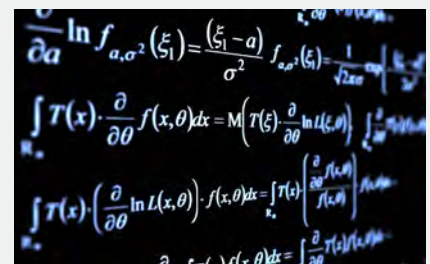
Looking forward, Bastian has been accepted to the Brigham Young University graduate mathematics program. He hopes to become a professor one day so he can share his passion for problem solving with aspiring student

## DEPARTMENT OF MATHEMATICS OFFERS FOUR BACHELOR OF SCIENCE DEGREES

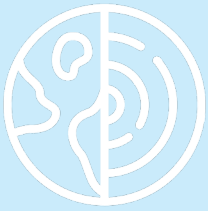
The SUU

Department of Mathematics offers four degrees leading students to careers in Mathematics.

Emphases include Actuarial Science, Applied



Mathematics, Pure Mathematics, and Mathematics Education. For more information on mathematics at SUU visit <https://www.suu.edu/cose/math/>



## NEW HOME FOR GEOSCIENCES

SUU unveils the Mark and Julie Svoboda Geosciences

SUU's Geosciences program unveiled its new state of the art home in May 2019 at the dedication for the Mark and Julie Svoboda Geosciences Building. The renovation of the former business building offers 26,123 square feet of space for SUU's Geosciences.

The Geosciences Building was redesigned as an environment where the study of earth's history coexists with contemporary design and technology. Two full-size Utah raptors greet visitors to the south entrance, and a wall sized topographic map of Bryce Canyon National Park in the first-floor lobby pay homage to Utah geoscience. The advanced geographic information systems (GIS) lab and renovated classrooms allow for an updated space and equipment for students to pursue courses in geology, geography and geographic information systems (GIS).



"We live, and work, amidst some of the most stunning natural exposures of Earth history," said Robert Eves, SUU Interim Provost and former Dean of the Walter Maxwell Gibson College of Science & Engineering. "Geoscientists from all over the US not only teach the geology of the Southwest in their classes, they bring their students here on field trips and summer field camps. Moving into this new facility will provide larger, better equipped classrooms and

labs, and will signify to all that the geosciences are an important field of study at SUU."

"What we have done is replace existing areas with new, enlarged spaces. We haven't created new spaces, with the exception of student meeting and study areas spread throughout the building, but we have enlarged the footprint of every classroom and laboratory in the new facility," said Eves.

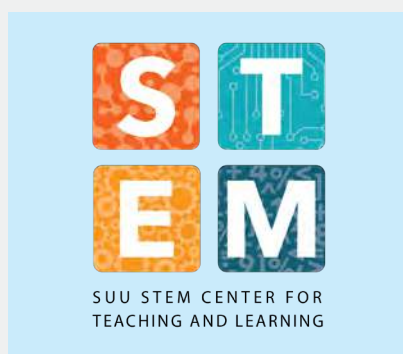
A large financial gift from geologist and SUU graduate, Mark Svoboda ('80) and his wife Julie Gillies ('81) helped expand the home for geosciences. The Svoboda's love for geology began when they met at SUU's Geology Club during a field trip to the Grand Canyon. After both he and his wife graduated, Mark went to work briefly in the oil and gas industry before he earned a geology baccalaureate from Weber State in 1982, and a master's degree from the Mackay School of Mines at the University of Nevada in Reno in 1988.

Now he and Julie are sharing their geologic success by providing funds for a first-class home for the geosciences, including geography, at SUU.

"This project never would have happened without the gift from Mark and Julie Svoboda. Their generosity, their desire to give back to their alma mater and change the lives of SUU students is really remarkable. We can't thank them enough," said Cameron Brooks, SUU Executive Director of Development.

## SUU STEM CENTER FOR TEACHING & LEARNING TO CALL GEOSCIENCE BUILDING HOME

The SUU STEM Center for Teaching & Learning is excited to be moving into its first physical home on campus. Located on the 3rd floor of the new Geosciences Building, the space is currently unfinished. Plans for the space are currently being drawn up, but it is anticipated that the space will include office areas for STEM Center staff, work areas for student employees,



and modular spaces for small workshops and activities in addition to housing the STEM Center's extensive lending library of educational materials, technology, and supplies. Contact [stem@suu.edu](mailto:stem@suu.edu) for more information about the STEM Center, including opportunities to sponsor the space.



## OUTREACH



# OPIOID RESPONSE PLAN

The Opioid epidemic has deeply impacted counties throughout southern Utah. SUU's UCRH is taking action to stem the tide of opioid addiction.

The Utah Center for Rural Health (UCRH) at SUU has received a planning grant of \$200,000 for combating the opioid use disorder. The grant was awarded in September as part of a series of grants from the Federal Office of Rural Health Policy at the Health Resources and Services Administration (HRSA) aimed at combating the opioid crisis.



The Centers for Disease Control and Prevention ranked Beaver, Emery and Carbon counties among the top 5% of counties in the country at risk of HIV and HCV as a direct result of the opioid epidemic. In the rankings, Carbon County is 84th, Beaver County is 114th, and Emery County is 186th. Carbon county alone dispenses 176 opioid prescriptions per 100 people, more than twice the national average, and the Utah state average. Every month, 52 Utah adults die as a result of drug poisoning, 77.6% of which involve opioids. These statistics highlight the dire need for health measures to be taken in these counties to prevent further morbidity.

Rita Osborn is the Executive Director of the Utah Center for Rural Health, and is overseeing the planning grant.

“Our own rural communities are terribly underserved,” said Osborn. “Our hope is that our findings and needs assessment will be able to provide care that can be replicated in other counties. By forming a consortium of health providers in these communities, we will be able to better serve those with an opioid use disorder.”

The UCRH will use the grant to create a rural consortium with entities working on the opioid use disorder in Utah. Already the UCRH has begun collaborating with the Four Corners Behavioral health, Southwest Utah Public health, Southwest Utah Behavioral health, Beaver Valley Hospital, Castleview Hospital, Green River Medical Center, Carbon Valley Medical Center, and the Southeast Public Health Department.

The goal of the group will be to work together in order to avoid duplication of services, maximizing the assets already in place in rural communities, as well as to utilize the individual strengths of

the consortium members to improve the care available to those with an opioid use disorder. Through the establishment of this consortium Southern Utah’s rural communities will be better able to plan for the future, identifying existing gaps in rural health coverage to better allocate future funds for fighting the opioid crisis in more effective ways.

The Utah Center for Rural Health’s mission is to promote and enhance the quality of rural health through leadership, advocacy, coalition building, and education. For more information, contact Rita Osborn at [osborn@suu.edu](mailto:osborn@suu.edu)

## BEAVER COUNTY OPIOID SOLUTIONS SUMMIT

Beaver County hosted the inaugural summit of the United Rural Opioid Healthcare Consortium (UROH) in March 2019.

The Summit is available in its entirety at <https://local10.centracom.com/stream/2278/beaver-county-opioid-solutions-summit>.



Information on future UROH events, programs and news about opioid use disorder, visit <https://www.suu.edu/ahec/urohc/>



# BRINGING GREEN INFRASTRUCTURE HOME

Innovative Methods Boost Conservation at SUU

A cost-effective and resilient way to manage weather impact, green infrastructure provides many environmental, social, and economic benefits. Green infrastructure can be as complicated as a large city park, or as simple as trees planted along a sidewalk. While infrastructure includes roads, bridges, buildings, and lights, green infrastructure is built to incorporate nature.

SUU is utilizing green infrastructure as a resource for the Cedar City community and a place for SUU students to conduct research.

Found on the roof of the L.S. & Aline W. Skaggs Center for Health & Molecular Sciences on SUU's upper campus, the green roof is covered with plants and a thin layer of material in which the plants grow. This green roof helps to insulate the building from the extreme temperatures of Cedar City, as well as soaking up rain to prevent flooding.

## THREE SIMPLE SUGGESTIONS TO CREATE GREEN INFRASTRUCTURE & WATER CONSERVATION IMPROVEMENTS AROUND YOUR HOME

1. Build a green roof on a dog house or backyard shelter.
2. Map your waterflow and consider adapting your landscape.
3. Ask your local extension agent to measure how



effective your irrigation system is and recommend some-water native plants.

You can learn more about green infrastructure at [epa.gov/green-infrastructure](http://epa.gov/green-infrastructure).

Dr. Jacqueline Grant is an Associate Professor of Biology at SUU and the Director of the Garth and Jerri Frehner Museum of Natural History. As a conservation biologist, her work focuses on green infrastructure and organismal biology related to insects, mammals, and amphibians.

"A green roof is covered with plants and a special soil-like

matrix in which tough plants can grow," said Grant.

"The green roof at SUU was created in 2010 as part of the national Leadership in Energy and Environmental Design (LEED) certification process that gives us national recognition for sustainability on campus. The green roof helps to

and even bats have been known to use green roofs if they are furnished with shelter and the right plants."

SUU students gain research experience by studying the green roof. They have built a special piece of equipment called a lysimeter, used to measure how much water is

drains and save on water bills too. Grant has three simple suggestions to create green infrastructure and water conservation improvements around your home:

1. Build a green roof on a dog house or backyard shade shelter. Remember that green roofs are heavy



Green roofs can be important for connecting wild habitats to each other and for providing urban habitat. The most studied green roof inhabitants are insects, but birds, lizards, and even bats have been known to use green roofs."

insulate our building and protect it from the damaging rays of the sun, soak up stormwater runoff that might lead to flooding, and provide habitat for urban pollinators."

The first years of SUU's research, supported by the National Science Foundation, showed that very few pollinators were attracted to the non-native plants on the roof, so in 2016 native plants were added. "In urban areas, green roofs can be important for connecting wild habitats to each other and for providing urban habitat," said Grant. "The most studied green roof inhabitants are insects, but birds, lizards,

used on the green roof. Their research will help determine if green roofs can also be used to grow food.

A green roof provides urban biodiversity, reduces noise and air pollution, and increases the lifetime of the roof. It also offers environmental benefits and is very cost-effective in dense areas where storm water management costs are high and energy conservation is a priority.

Green infrastructure may seem to have an urban focus. However, by repurposing the flow of storm water, home-owners can help reduce the flow of water into storm

so your construction needs extra support to hold the weight of plants, matrix, and water.

2. Map where the water flows in your yard after a rain-storm. Is the water flowing away from yard and down the street? You might consider a landscape design that encompasses rainwater harvesting to nourish your plants.

3. Ask your local extension agent to measure how effective your irrigation system is. They can help you determine how much to water and possibly recommend some low-water native grasses for the lawn.



## ALUMNI SPOTLIGHT



## FELLOWSHIP AWARDED

SUU Geology 2019 Graduate Zachary Smith Accepted a Prestigious Fellowship Offer from Ohio State University's (OSU) graduate program

The OSU Earth Science graduate program has a 15% acceptance rate, and of those 15% they recommend 10% of accepted graduate students for the university fellowship, which includes a full year of funding, benefits, and the opportunity to be a research or teaching assistant. This year, they only selected six students for their Earth Sciences program.

At OSU, Smith will be studying geomechanics and geophysics with an emphasis in landslide mechanics and dynamics. Smith will be working closely with Dr. William Ashley Griffith, Associate Professor in the School of Earth Sciences.

Growing up, Smith always believed he would be a lawyer. It wasn't until he took his first online courses at SUU that he discovered his passion for geology. While living with his family in Swaziland for a year, Smith happened to take Geology of National Parks. He was able to connect with the head geologist of Swaziland's Geologic Survey and Mines Department, and got to explore some of Swaziland's greatest geologic areas.

"After I came back from Africa and began studying full-time at SUU, I gained a personal relationship with many of the faculty and they have helped me with multiple research projects," Smith said.

Smith has conducted three research projects in conjunction with SUU, and was able to present each project at different national conferences including the Geological Society of

America and the American Geophysical Union. Since 2016, Smith has also been an Intergovernmental Internship Cooperative hydrologic technician intern for the Dixie National Forest conducting research in geology and hydrology. Several professors at SUU helped make these projects possible.

"Zach has the ability to see what will enhance his education and professional experience, then sets out to [utilize the knowledge, skills, and resources he has obtained]," commented David Maxwell, Geographic Information Systems

Lecturer and GIS Program Director.

Smith has also been involved with the Geology Club at SUU and the geoscience honor society, Sigma Gamma Epsilon.

"I have watched Zach be successful implementing new technology and applying new knowledge to his chosen profession of geology," Maxwell continued. "Zach is a humble, dedicated, hardworking student and I can say without hesitation that Zach will be successful in whatever endeavor he takes on."





## SOUTHERN UTAH COMPUTING PIPELINE

Creating a Pipeline for Young Women

According to the National Center for Education Statistics, more than 57 percent of college undergraduates are women, yet only 18 percent progress into STEM (science, technology, engineering and mathematics) fields as a career. Southern Utah University is showing initiative on this front and is working to meet this national need for females employed in computing and technology workplaces.

SUU has partnered with the National Center for Women in Information Technology (NCWIT) to reverse the trend in rural areas by sponsoring Aspirations, a competition for girls who are active and interested in computing and technology. Dr. Shalini Kesar, Associate Professor of information systems, has been leading the Southern Utah NCWIT Chapter since 2014, spearheading its

development across 18 counties. "It's wonderful to see our chapter is igniting an interest among the girls about the opportunities they have in computing and STEM," said Kesar. "SUU is beginning to create a pipeline for women in computing and STEM within the southern Utah region."

The Southern Utah chapter now targets 18 counties, expanding to eastern Nevada: Beaver, Garfield, Iron, Kane, Millard, Piute, San Juan, Sevier, Washington, Wayne, Grand, Emery, Sanpete, Juab, and in Nevada: Lincoln, White Pine, Elko, and Eureka.

### ASPIRATIONS PROGRAM INSPIRES YOUNG WOMEN IN SOUTHERN UTAH

"Aspirations has opened me up to so many amazing opportunities! Through this program, I met so many awesome companies and women who are willing to encourage me in my pursuit of a STEM career. I now feel more confident in my career choice knowing that there is a whole community willing to know that there is a whole community

willing to stand by me and support me," stated Aubree Miller. Miller participated in Aspirations for the first time in 2018-2019. She is a junior from St. George, Utah, captain of her robotics team. Miller has an interest in computing, robotics and STEM outreach.





# BEST PUBLIC NURSING PROGRAM IN UTAH

SUU Program Ranked Best in Utah

Southern Utah University’s Department of Nursing is honored to be ranked third “Best Bachelor of Science in Nursing (BSN) Program” in Utah by the RN Nursing organization. Of all the BSN programs ranked, SUU was the highest ranking public university on the list. SUU offers a BSN with a pre-licensure emphasis and a RN to BSN emphasis.

“We are pleased to be recognized for the outstanding outcomes our students produce,” said Nursing Department Chair Donna Lister. “We have highly motivated, intelligent, and

engaged students. Every student receives individual attention to their progress and learning as they advance in the program.”

SUU’s nursing program values experiential education offering several hands-on experiences for students. Students are able to practice nursing in hospital, care center, home health, hospice, general community, school, and community clinic settings.

“When students graduate they have a portfolio of experiences that is rivaled by very few graduate nurses,”

said Lister. “Nursing lends itself to recognizing and personalizing the individual. Our faculty and staff are very good at meeting the individual where they are, and helping them grow in the profession.”

The RN Nursing organization uses the NCLEX exam pass rates, tuition costs, faculty strength and other information important to nurses in determining its rankings. RN Nursing is passionate about helping nurses at all levels of their careers with the guidance of their team of professional and retired nurses.





## Frank R. Hall

- ✓ United Nations World Assessment Program Member
- ✓ Council of Colleges of Arts & Sciences Member
- ✓ National Oceanic & Atmospheric Administration Contractor
- ✓ National Academy of Sciences Staff
- ✓ National Science Foundation Project Manager
- ✓ SUU Walter Maxwell Gibson College of Science & Engineering Dean

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