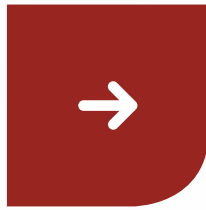


# Walter Maxwell Gibson College of Science and Engineering

2012-2013 Newsletter

Volume XIII





# Choryn Sundin

SUU Valedictorian 2013  
From: Santa Clara, Utah  
Major: Biology/Chemistry with Forensic Emphasis

## Table of Contents

- 2-3 Student Feature Stories
- 4 Skaggs Naming Ceremony
- 5 CARAT & Academic Awards Night
- 6-9 Activity Highlights for the Year
- 10 The Latest in our Integrated Engineering Program
- 11 Staff Achievements & Graduation
- 12 Faulty Awards and Special Recognition
- 13-15 Faculty Scholarly Publications & Presentations

### Do you feel your experience and background here at SUU have prepared you for success?

Yes. At least for science classes we learn skills that are needed by those in our field such as pipetting, extractions, PCR, how to use different instruments, how to do research, etc. I did an internship at the **Southern Utah Crime Lab** which is found on campus. There I experimented with various fingerprint development techniques and added FT-IR samples to their database. I double-majored and was able to complete this in the regular 4-year time frame.

### Why did you choose your major(s) as opposed to other majors within the College of Science and Engineering?

I LOVE chemistry. I also enjoy biology, mainly the genetics part. Both majors had a lot of the same classes so I thought, why not do them both? The subject matter of the other majors in the college doesn't interest me as much so I didn't pursue them.

### Was there anyone in your life that influenced you to pursue the field you are pursuing?

I chose my majors because I really enjoy the material. But, I have had a lot experience with science my whole life since my dad is a high school chemistry teacher.

### Was there a professor or professor(s) that influenced you during your time here at SUU? In what ways?

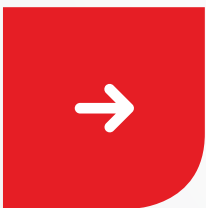
A lot of professors helped make SUU a good experience for me. Each class was different and I could say good things about all of them. **The chemistry and biology professors have a pretty good sense of humor and are personable.** I liked that I got to know the professors fairly well and because of this it was easier to ask for their help with the material, or finding internships, or experiment ideas.

### What was a typical day like for you as a student?

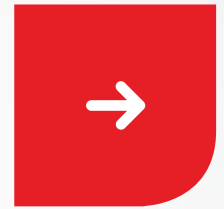
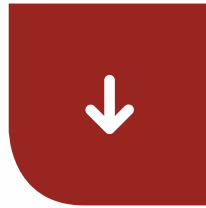
Wake up early, get ready, study a little (I study better in the mornings), go to classes, study some more, have dinner, relax (with a big bowl of ice cream) and go to bed.

### Would you recommend studying a field in the sciences and engineering to women? If so, why?

Definitely. I think sciences are becoming more popular to women despite the old stereotype that science and math are more "guy subjects."  
From classes I've been in, **women can do just as well as the men**, no matter the subject. A lot of the material isn't as hard as it seems, all you need to be successful is to enjoy what your are learning. Because there are less women in science it also makes it easier to get into grad school or find scholarships.



**YES!**  
I would recommend [SUU], and I have.



# Kezia Brown

COSE Valedictorian 2013

From: Cedar City, Utah

Major: Chemistry with Healthcare Emphasis

"Just in the past two weeks, I started my job compounding at a pharmacy up north. Within the first few days, I've recognized how the education I received at SUU, coupled with my research experience gained through summer internships, has prepared me to quickly learn and adapt to a new work setting, no matter how unfamiliar." -Skaggs Naming Ceremony, June 27, 2013



**Do you feel your experience and background here at SUU have prepared you for success?**

My background here at SUU has certainly prepared me for success. It was in Ty Redd's O-Chem class that I learned how to be a dedicated student. I think that initial experience in his class, as well as various classroom experiences after that, helped to mentally prepare me for the rigors of graduate school. **The standard that Chemistry majors are held to at SUU definitely prepares them for graduate school.**



**Has there been anything specific that you feel you did here that set you apart from other graduates?**

Probably the most unique part of my education here at SUU has been my involvement with administrative aspects of the College of Science & Engineering. I was asked to speak at both the dedication and naming of the L.S. & Aline W. Skaggs Center for Health & Molecular Sciences building. I was invited to attend many tours of the new building and dinners with the major donors. I also had the opportunity to speak at graduation.

Not all students get the opportunity to see the "inner workings" of the college and build a friendship with the Dean. It's been a lot of fun to get to know the donors as well and be more involved with the great new Skaggs CHMS building.

**Why did you choose your major as opposed to other majors within the College of Science and Engineering?**

I initially chose chemistry because of my great high school chemistry professor Steve Steffensen – father of SUU professor Mackay Steffensen. I did well in the class then, but more importantly, I enjoyed learning. Mr. Steffensen prepared the greatest show of chemistry demonstrations at Halloween, where he blew up all sorts of stuff – every chemistry major's dream, or at least mine. I've always had pyro tendencies and it all started when I lit my brother's bed on fire when I was about five. Additionally, my brother who is a few years older than me also majored in chemistry and I enjoyed following in his footsteps.

**Was there anyone in your life that influenced you to pursue the field you are pursuing?**

All sorts of good teachers growing up, but I mostly followed after my brother,

Spencer Brown. I've always enjoyed talking science with him. When I came home from AP Chemistry, I'd always ask him my questions from the homework or whatever and I could listen to him explaining the problem for ages. I'm following him again, as far as careers are concerned, since I will be going to pharmacy school just like him.

**What career are you pursuing?**

I'm pursuing a career as a pharmacist. I will be attending the University of Utah in the fall and I'm hoping to become a clinical pharmacist. I love chemistry when it has the application, like healthcare.



*Kezia speaking at Skaggs building naming ceremony. June 27, 2013*

## L.S. & Aline W. Skaggs Center for Health & Molecular Sciences

On June 27th, 2013, the WMG COSE and campus-at-large celebrated the official naming of the Science Center Addition (SCA). Funded in part by a generous gift of \$2 million from **The ALSAM Foundation**, created by and named after L.S. and Aline W. Skaggs, the center houses SUU's acclaimed nursing program and the **Frehner Natural History Museum**. The former SCA is now officially named the L. S. and Aline W. Skaggs Center for Health and Molecular Sciences. In addition to funding support for the center's construction, the Skaggs endowment provides for student scholarships in pre-pharmacy studies and a consistent funding stream for undergraduate research. Enduring supporters of SUU and of the higher

education community at large, the Skaggs are among the nation's most philanthropic families.

"This gift has transformed the Walter Maxwell Gibson College of Science and Engineering and will further help our students to excel here and in their post graduate pursuits," said **SUU President Michael T. Benson**.

The L.S. and Aline W. Skaggs Center for Health and Molecular Sciences recently received LEED Gold Certification from the U.S. Green

Building Council, affirming its excellence in energy efficiency, sustainability and environmental quality. The Center is the only building in Utah's southwest region to receive LEED Gold Certification.



**Festival of Excellence** Southern Utah University hosted its inaugural Festival of Excellence on Tuesday, April 9, bringing together the noteworthy research, artwork, poetry and scholarly explorations of SUU faculty, staff and students conducted over the past year. Providing a stage for the prodigious scholarly work of Thunderbirds far and wide, the Festival of Excellence allowed the campus and local communities to glean from academic discussions around the world. With students and faculty in side-by-side presentations, attendees were educated on a myriad of topics, with just one guiding standard: all research has been completed by a member of the SUU community. Topics for the 200+ presentations varied greatly and included several topics from the sciences.

"So many members of the SUU community travel around the globe, presenting unique research to people from India to Costa Rica, but their peers across the hall hear nothing about it," said **Provost Bradley J. Cook**, who first envisioned such a concept for an academic showcase. "The Festival of Excellence will change that."



**This 42,385 square foot addition to SUU contains:**

- Three interactive classrooms
- 10 research and teaching labs
- 24 faculty offices
- Two undergraduate research labs
- An animal care facility
- And an energy efficient rooftop greenhouse.
- The Center's nursing facilities, which replicate a hospital environment, have helped to make the program one of the state's best.

**Science & Engineering Fair**  
The 2013 fair was a huge success thanks to all of the participants and their teachers. 392 projects were on display, showcasing some of the best work SUSEF has ever seen.

Congratulations to **Taylor B., Logan, Taylor H., Samantha, and Sadie**, our 2013 ISEF winners.





**Dr. Rita Teutonico**  
*Dir. Research Department, USU*  
Presented Sept. 20<sup>th</sup>



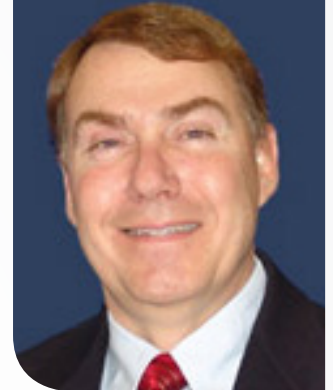
**Adam T. Woolley**  
*Professor, BYU*  
Presented Nov. 15<sup>th</sup>



**Dr. Erik Gulbrandsen D.O.**  
*Physician, Canyon View Clinic*  
Presented Jan. 24<sup>th</sup>



**Jon Christensen**  
*VP of IPSC*  
Presented Feb. 21<sup>st</sup>



**CARAT** The CARAT Seminar series is one segment of the proposed Center for Applied Research and Advanced Technologies. It serves to educate students about the latest advances in the many fields of science and allows them the opportunity to meet leaders of industry and gain knowledge about areas they may potentially be interested in. The CARAT is being developed to provide the venue, structure and instrument for integrating academic and applied scholarly activities with the interdisciplinary technical needs of Southern Utah businesses as related to the college fields of expertise. The CARAT is envisioned to address one of SUU's key roles, which states, "Southern Utah University serves as a comprehensive regional University... to enhance the economic, technological and cultural development of the communities served."

**Becky Low**  
*VP Dairy Council UT/NV*  
Presented March 19<sup>th</sup>



**Samuel Duncan**  
*Engineering Manager IMFT*  
Presented April 18<sup>th</sup>



## Academic Awards Night



### OUTSTANDING STUDENTS

- Sarah Ann Davis** – Agriculture
- Stephanie Karen George** - Nutrition
- Brian Christopher Johnson** - Biology
- Simon Bergeron** - Computer Science & Information Systems
- Zane Hunzeker** - Engineering Technology & Construction Management
- Christopher Roy Hoffman** - Integrated Engineering
- Jessica Lindow** - Mathematics

- Jason J. Avery** - Nursing
- Katheryne M. Hunter** - Nursing
- Braden L. Leigh** - Physical Science

### SCHOLARSHIP RECIPIENTS

- Walter Maxwell Gibson Scholarship  
**Christopher Roy Hoffman**  
Integrated Engineering Major
- Alice Solvej Lind Gibson Scholarship  
**Choryn Sundin**  
Biology Zoology, Chemistry Major

## Construction Management Students Cement another Win

Students from SUU's **Department of Engineering**

**Technology and Construction Management** have cemented brighter futures after bringing home a second consecutive win at the Associated Schools of Construction regional tournament in Reno, Nevada.

Six T-Birds took their skills on the road to compete in the rigorous competition and returned home with a solid third place ranking among western universities in the mixed-use competition.

"Only the best students are chosen to attend, so just being there is an honor," stated Matt Edwards, professional in residence for construction management at SUU. "A win at this competition not only means our students can measure up to other schools, but that SUU is a school from which to recruit."

The winning group included construction management students **Cole Wilson, Jeff Lister, Ryan Hedstrom** and **Tony Aguirre**, as well as engineering technology student **Nick Hammer** and architectural design student **Zane Hunzeker**.

## Ag Student Trips

Range club took 10 students to Orem UT. November 1-2, 2012 to compete in the Utah section of the Society for Range Management contests. Range club also took six students to Oklahoma City, OK. February 2-6, 2013 to compete in Society for Range Management contests.



## Geology River Trip

The Geology Program offered an alternative spring break in March 2013 - a rafting trip through Labyrinth Canyon on Utah's Green River. Dr. Johnny MacLean led eleven geology majors, one Outdoor Recreation, Parks, and Tourism management major, and one emeritus professor, Laura Cotts, on an educational adventure to investigate ancient mountain building processes, beautiful sedimentary exposures, and complicated relationships concerning rivers and energy development in Utah's semi-arid desert.



*"Field trips like this help students make connections between classroom concepts and real-world phenomena. It's exactly what we mean by experiential education."*

-Dr. Johnny Maclean





**Success Academy** This year marks the 9th year of the Southern Utah Center for Computing, Engineering, and Science Students (SUCCESS) Academy partnership with SUU. Of the 92 graduates, more than 86 earned SUU Associate of Science degrees in 2013 while completing their high school diplomas. Over 80% of the graduating class will attend SUU to complete their Bachelor of Science degree. Additional info can be found at: [successacademyonline.com](http://successacademyonline.com).



*NCLEX national standardized nursing licensure exam.*

**94% pass rate for Fall 2011**

**94% pass rate for Spring 2012**

**T-Bird Trio takes Gold in State Competition**

Students within the **Department of Engineering Technology and Construction Management** won three gold after competing in the SkillsUSA state competition in Salt Lake City. This statewide competition includes 94 areas of specialty that span the building trades, health occupations, automotive technology, electronics and personal services.

**Jacob Tatton**, 1st in Electronic Technology, **Cory Bulloch** 1st in Technical Drafting, **Robert Bonds** 1st in Cabinetmaking. Tatton, Bulloch and Bonds advanced to the national SkillsUSA competition in Kansas City. **Robert Bonds**, took 2nd in the Nation in Cabinetmaking.



*This is the best thing students can do. To take what they have learned in the classroom and use it in a real-world scenario. These competitions create partnerships that will in turn help students receive remarkable jobs after graduation." real-world phenomena. It's exactly what we mean by experiential education.*

*-David Ward, Skills USA Advisor*

**Cory Bulloch**, took 3rd in the Nation in Technical Drafting. SUU has had **30** national medal winners over the past few years, 10 of which were in the electronics fields of competition.

**T-Bird battles for Guard's Best Warrior**



During a grueling three-day test of his physical and mental abilities, Sergeant Conlee Luke, a senior studying **CAD/CAM Engineering at Southern Utah University** and a noncommissioned officer in the Army National Guard, took sixth place at the National Guard Best Warrior Competition in Little Rock, Ark. Prior to the national competition, Luke took first at the Region VII Army National Best Warrior Competition and was named its Noncommissioned Officer of the Year. Luke, a member of the 116th Engineer Company, 1457th Engineer Battalion, 204th Maneuver Enhancement Brigade, joined the National Guard in 2008 and then took part in SUU's ROTC program in 2010 and has since moved up in rank.

## Nursing Trip to Belize

Twelve students and two faculty advisers from **The Department of Nursing** volunteered their time, talent and compassion on an outreach and service trip to Belize this past June. The group provided health care and assessments at local clinics, visited schools and senior centers, and taught health education; all while having fun and enjoying the local culture.

**Faculty Advisers:** Rebecca Rasmussen, Shelley Sanderson  
**Student attendees:** Katrina Baird, Heather Chandler, Alese Clark, Pamela Hansen, Kyle Higginson, Camille Hughes, Kathryn Hunter, Michel Jones, Jael Lewis, Afton Romero, Megan Stringham, McCall Ryneason



## Voyager

The Voyager project, which is directed by **Professor Peggy Wittwer** (Beverly Taylor Sorenson College of Education and Human Development), continues to reach out to public education in the region.



Peggy is assisted by COSE Professors **John R. Taylor** and **Mackay B. Steffensen**. Voyager is a state of the art mobile laboratory loaded with teaching technology and able to deliver it to remote locations. Website: <http://suu.edu/cose/voyager/>.



## Museum of Natural History

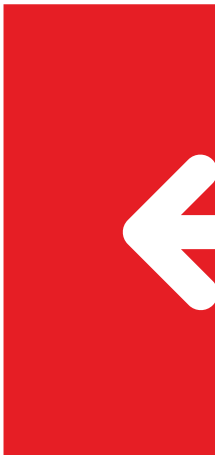
The **Garth and Jerri Frehner Museum of Natural History** was made possible with the support of Garth and Jerri Frehner.

Steadfast believers in the value of education, the Frehners are Southern Utah University Modern Day Founders. They have used their shared passion for big game hunting for the edification of others, which can be seen in their gorgeous exhibit of large and small game animals at the Museum. Garth and Jerri's generosity provides University students, staff, and faculty as well as Cedar City residents with the opportunity to learn about our natural world.



## Science Olympiad

Over 175 competitors from all over the state, ranging in grades from 6-12 traveled to SUU to compete in 35 different competitions. Needless to say, this event was a monumental success. Competitors and their coaches were exposed to our beautiful campus, phenomenal faculty, students and volunteers, state-of-the-art facilities and top notch science and engineering programs.

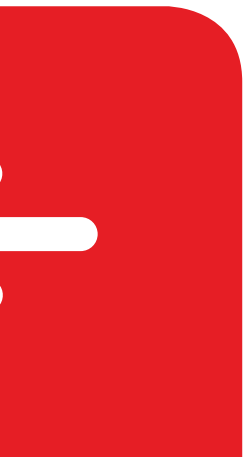




Engineering Week National Engineers Week is observed by more than 70 engineering, education, and cultural societies, and more than 50 corporations and government agencies. The celebration of National Engineers Week was started in 1951 by the National Society of Professional Engineers in conjunction with President George Washington's birthday. President Washington is considered as the nation's first engineer, notably for his survey work. The **Department of Integrated Engineering** celebrates Engineers Week each year by hosting competitions for middle to high school-aged students, hosting a seminar given by a well known engineer and a banquet honoring the engineering profession. Over 200 students participated in the 2013 Engineers' Week here at SUU!



SUU Tech Fair The Technology Fair & Expo began in the 1920's and is hosted each year by the **Department of Engineering Technology & Construction Management**. This event provides a unique opportunity for high school students to showcase their work to community members, local businesses, SUU faculty, staff and students. The Woodturners Association also provides entertainment by demonstrating their skills on the lathe, live for observers. Local businesses in the technology industry also host booths, judge competitions, mentor students, and give the ETCM students an opportunity to network with them and pursue job opportunities. The 2013 Tech Fair had over 250 participants and several hundred attendees.



The always popular Cardboard Boat Race is a special favorite on campus.



### Homecoming Parade Winners:

This years homecoming theme was *SUUPER Heroes-Legends live on.*

**Best Overall:**

*COSE Leadership Board: Ironman Float*

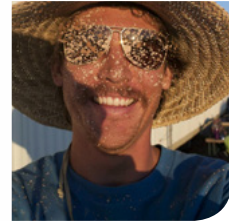
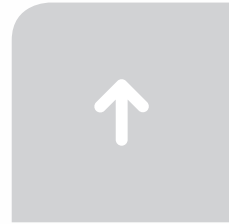
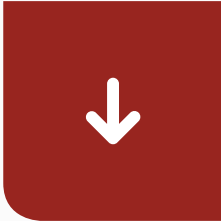
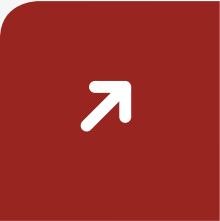
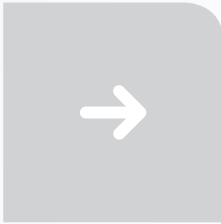
**Best Homecoming Theme:**

*National Science Teachers Association*

**Most Creative:**

*Geology Club*





## Design Build Bluff which architects, engineers, and others work

DesignBuild BLUFF (DBB) is a non-profit organization that designs and builds architecturally innovative, sustainable, pro bono homes for Navajo families living on the reservation near Bluff, Utah. University students design the homes during the summer or fall semester, and construct them the following semester. Southern Utah University was included in DBB to encourage integrated design, a process in

holistically to create cost effective, sustainable living environments for their clients. SUU provides expertise in energy analysis & computer simulation of building performance, working cooperatively with the National Renewable Energy Laboratory (NREL), Golden, Colorado. These activities provide value since 48% of the energy used in the United States is consumed by buildings. Starting In May of 2012, SUU students **Chris Hoffman & Mark**

**Tervort**, twenty University of Colorado, Denver architecture graduate students, Professor John Murray (SUU), and Professor Rick Sommerfeld (CU) met with Navajo client Lorraine Toney and her family to discuss their housing needs. Students and faculty from SUU and CU worked in Denver during June & July to design the Rain House, a 1200 square foot, energy efficient, passive solar home for Lorraine. Construction began in August. Completion is expected in December.

[Watch the Video Here](#)

## Engineering, Computer Science, & Technology Summer Camp

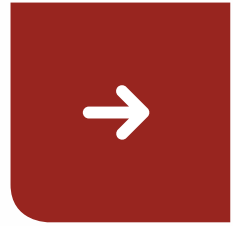
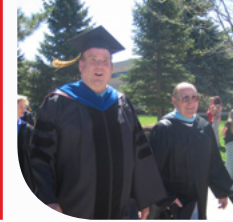
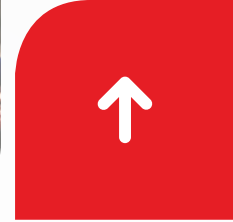
Many high school students beat the summertime brain drain by exploring a wide variety of academic and career opportunities within engineering alongside SUU's engineering professors, who organized the University's inaugural Engineering, Computer Science & Technology Summer Camp for students across the region. Camp projects ranged from computer science students who designed apps for Android phones to electronic engineering students

who created a solar-powered generator. The integrated engineering students studied the fundamentals of catapults in a competition to create a catapult with the farthest reach, and construction engineering students learned how to work with cement, which they then sculpted to create life-like shrubbery. All students in attendance heard from local engineers and computer scientists and took a field trip to the Tonaquint Data Center in St. George, Utah.

According to Glen Longhurst, chair of SUU's Dept. of Integrated Engineering Longhurst, is not surprising. **"Many young students see engineering as a scary topic but this camp opens them up to the idea that it is possible to not only go to college but have a successful career as an engineer."**







**BARBARA RODRIGUEZ**  
EXECUTIVE ADMINISTRATIVE ASSISTANT

ongoing student success. With an amplified workload as the college has expanded, Barbara still makes time to work directly and regularly with each of the college's eight departments, ensuring all of COSE's students are getting the very latest directives, and its faculty the utmost in support. Barbara also helped organize the addition of SUU's Museum of Natural History, she coordinates the annual regional high school science fair the University hosts, and she maintains budgets for SUU's largest college.

**Barbara Rodriguez** knows how to work, and it seems she takes on a new responsibility every day. As the administrative assistant to the Dean of the College of Science and Engineering (COSE), Barbara's assistance has been pivotal in growing COSE's enrollment and



**JESSICA BURR**  
ACADEMIC ENHANCEMENT COORDINATOR

**Jessica Burr** is an SUU graduate, class of 2007. After a brief teaching career in California and spending time in the computer industry, she has found her way home to the T-bird nest as

the College of Science and Engineering (COSE) Academic Enhancement Coordinator. Since arriving in 2011 and in addition to her recruiting responsibilities, Jessica has taken on the directorship of the Southern Regional Science Olympiad, developed and advised the COSE Leadership Board, and was an integral part of planning and carrying out the Inaugural Engineering, Computer Science & Technology Summer Camp this past May.



Our healthcare professional acceptance success continues.

- 87.5% acceptance to medical schools
- 90% acceptance to dental schools
- 100% acceptance to pharmacy schools
- 80% acceptance to PA schools

This phenomenal success is largely attributable to a dedicated faculty and student body and a working partnership between the southern Utah Area Health Education Center's (AHEC) **Rural Health Scholars** program, directed by Ms. Rita Osborn, and the WMG COSE.

13 Associate of Applied Science  
 1 Associate of Pre-Engineering  
 5 Bachelor of Arts  
 17 Bachelor of Interdisciplinary Studies

We had **305** outstanding graduates in 2013.

11 Students graduated with double majors  
 51 Bachelor of Science in Nursing  
 9 Certificates  
 199 Bachelor of Science

## Awards & Special Recognition

### Faculty Achievements

**Dr. Dezhi Wu** received SUU Quality Service "Red Handed Award." Spring 2013

**Dr. John Murray:** Received the American Institute of Architects, Colorado Chapter, Annual Awards Gala, Denver, "Peoples Choice Award" for the Design-BuildBLUFFRaine House.

Murray was also recognized as the Outstanding Faculty Member Award, 2013, Integrated Engineering Department

Academic Advising had its 1st Annual Celebration of Academic Advising Awards Banquet which was held in the Festival Hall. **Dr. Ty Redd** was given the Faculty Partner in Advising Award and **Reko Hargrave** was given the Judith Bonniksen Award for Innovation in Advising.

### Dr. Dean Winward

• USDA Dixie National Forest Certificate of Merit

### Dr. John Taylor

• 2013 SUU Distinguished Educator

**Dr. Derek Hein** organized a conference that was held in October on campus.

**Dr. Jacqueline Grant** was awarded the 2013 Service Learning Fellow

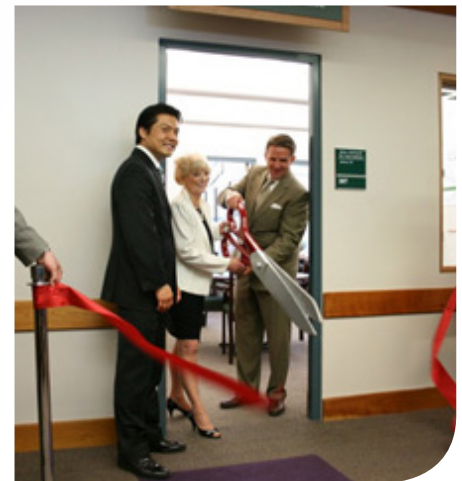
## New Pre-Med Institute set to assist SUU's International Students

Southern Utah University's new Betty McDonald Pre-Med Institute (MPI) ceremoniously opened its doors April 24, 2013 with preparations now well underway for its first group of students set to join this Fall 2013 semester. The new pre-med program, designed to satisfy the need for more complete medical school preparation for

SUU's international students, is the first of its kind in the country.

"Many of our

international students come to the U.S. with dreams to enter the health profession," explained MPI director, Johnny Oh, "But on top of the difficult course work, they're confronted with learning a language at a collegiate level and adapting to a new culture. It can be very daunting."



## Fourth Annual Research Symposium.

Nov 12, 2012

The Research Symposium is an opportunity for students and faculty to showcase their research to the campus wide community. Many of these poster and oral presentations go on to be published in scholarly publications. This years' presentations (23 poster and 20 oral presentations given by students and faculty) ranged from a "Multiple gene analysis of three genetic variants for type 2 diabetes in American Indians" to the "Design of Potent Vancomycin Analogues for Treatment of Methicillin-Resistant Staphylococcus Aureus Infections."

## The Inaugural COSE Leadership Board 2012-2013

From Left to Right: Jessica Burr (Advisor), Stephanie Godfrey, Ashley Rogers, Nathan Jacquez, Katey Blanchard, Kaylee Brown, Ernesto Balderas, Garth Jolley, Aaron Petersen, Jacob Ward, Amanda Maag, Heather Garcia, Alison Schmidt, Jacob Hanberg (President 2012-2013)





## Scholarly Publications

- Amstrong, S.; Han, J. "A method for numerical analysis of a Lotka-Volterra food web model" *International Journal of Numerical Analysis and Modeling B*, 3 (3) 2012, 442–459
- Bahi, S "Determinant of service quality in higher education: underlying structure of students and teachers perceptions" *European Journal of Management* 13 (1) 2013 (electronic article).
- Bahi, S.; Ross, A. "An algorithm for finding nonnegative minimal norm solutions of linear systems" *International Journal of Numerical Analysis and Modeling*. 10 (3) 2013, 745–755.
- Baker, N.J.; Bancroft, B.A.; Garcia, T.S. "A meta-analysis of the effects of pesticides and fertilizers on survival and growth of amphibians" *Science of the Total Environment* 449 2013, 150–156.
- Baker, R. C.; Banks, W. D.; Brüdern, J.; Shparlinski, I. E.; Weingartner, A. "Piatetski-Shapiro Sequences" *Acta Arithmetica* 157 (1) 2013, 37–68.
- Blaustein, A.R.; Searle, C.L.; Bancroft, B.A.; Lawler, J.J. "Amphibian population declines and climate change". pp 29–54 in *Ecological Consequences of Climate Change: Mechanisms, Consequences, and Management*. Beever, EA and Belant, JL, eds. CRC Press 2012, Taylor and Francis Group, Boca Raton, FL, USA.
- Brandt, J "Classroom activities for introducing equivalence relations", *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies* 23 (2) 2013, 150–160.
- Cannon, J. W.; Meilstrup, M.; Zastrow, A. "The period set of a map from the Cantor set to itself" *Discrete and Continuous Dynamical Systems-A*, 33 (7) 2013, 2667–2679.
- Clayton, K. K.; Longhurst, G. R.; Luscher, W. G.; Senor, D. J. "In situ measurement of tritium permeation through stainless steel" *Journal of Nuclear Materials* 2013 437 373–379.
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## Documents, Books, and other Publications

Cozzens, R. "Autodesk Inventor 2014 Workbook"

Edwards, M. Instruction manual for Modern Arch Structures (whitepaper, internal document)

Hansen, L. S. "Autodesk Inventor 2014: A Tutorial Introduction", SDC Publications April 2013, ISBN 978-1-58503-821-3

Rowley, P.D.; Rutledge, E.F.; Maxwell, D.J.; Dixon, G.L.; Wallace, C.A. "Geologic map of the Sulphurdale geothermal-resource area, Beaver and Millard counties, Utah" Open-File Report 609, Utah Geological Survey, 2013 (CDROM) SDC Publications; September 2013, ISBN 978-1-58503-831-2

## Scholarly Presentations at Professional Meetings

Armstrong, S. "Numerical analysis of a Lotka- Volterra system with diffusion" MAA Intermountain Section Meeting, April 2013, Rexburg ID

Bahi, S. "Determinant of Service Quality in Higher Ed" IABE-2013 Winter Meeting, April 2013, Orlando FL

Barker, N.; Harris, L.; Nyman, C. "A comparison of student performance: traditional versus on-line in a skills based computer applications course" American Association of Behavioral and Social Sciences, February 2013, Las Vegas NV

Barker, N.; Nyman, C. "Adaptive curriculum in a computer literacy course" Frontiers in Education: Computer Science and Computer Engineering July 19 2012, Las Vegas NV

Barney M.; Keeler J.; Weeg, M.S. "Fire retardant as an environmental risk factor contributing to Parkinson's disease" 7th Annual Utah Conference on Undergraduate Research, February 22 2013, Logan UT

Borisova, I.; Cozzens, R.; Farnier, J.; Paskett, T.; Perez, E. "Development of an open-source concurrent enrollment course that introduces students to the Engineering Design and Documentation Process" 120th ASEE Annual Conference and Exposition, June 2013, Atlanta GA

Borisova, I.; Cozzens, R.; Kesar, S. "Bringing creativity into the classroom via technology: Using tech as a pedagogical tool" American Association of Behavioral and Social Sciences, February 2013, Las Vegas NV

Chisholm, J.R. "Dynamics of primordial black hole clusters", Annual Meeting of the Four Corners Section of the American Physical Society, October 2012, Socorro NM

Christiansen S.; Schmidt, M. "Using Study Abroad as a context for teaching Family and Consumer Sciences" 5th Annual Scholarship of Teaching & Engagement Conference, March 28-29 2013, UVU Provo UT

Clark, N. "The engaged campus: integrating Service- Learning into a community nutrition course" Utah Campus Compact Annual Faculty Institute, February 8-9 2013, Moab UT

Cleveland, C.E.; Hildebrand, T.; Hargrave, J.E.; MacLean, J. "Tufa insights into late Quaternary paleoenvironment of northwestern Arizona" 7th Annual Utah Conference on Undergraduate Research, February 22 2013, Logan UT

Cozzens, R. "Developing robust CAD curriculum by applying blended learning environment & technology" Ethicomp 2013, June 2013, Kolding Denmark

Gasser C. L. "Pubertal issues for beef replacement heifers", 2012 ADSA, AMPA, ASAS, CSAS, WSASAS Joint Annual Meeting, July 18 2012, Phoenix AZ

Gasser, C. L. "Investing in reproduction" 4th Annual Cowman's Reproduction Workshop, September 18 2012, Alton UT

Grady, M. "Gelman's subgroup counting theorem" 26th Annual Midwest Conference on Combinatorics, Cryptography and Computing; October 13 2012, Cedar City UT

Gubler, R; Grady, A; Croxall, K. "Keepers of the flame: connecting FCS professionals through annual in-service training meetings" AAFCS Annual Meeting, June 26 2012, Indianapolis IN

Han, J. "A method for numerical analysis of a Lotka- Volterra food web model", International Conference on Mathematical Modeling, Analysis and Computation, July 2012, Xiamen, China

Han, J. "A nonlocal evolution equation" MAA Intermountain Section Meeting; April 2013, Rexburg ID

Hargrave, J.E. "Can birds be used as a proxy to determine paleoclimatic conditions?" Utah Friends of Paleontology State Meeting, April 6 2013, St George UT

Hein, D. "Decompositions of  $\lambda$  Kn on Stanton-type graphs: a small case", MAA Intermountain Section Meeting; April 2013, Rexburg ID

Hein, D. "Stanton-type decompositions of  $\lambda$  Kn", 26th Midwest Conference on Combinatorics, Cryptography and Computing, October 2012, Cedar City UT

Hildebrand, T; Tufte, M.J.; Manwill, P.; Kansagra, H. "Antimicrobial properties of essential oils isolated from Anthoxanthum species against soil bacteria", 7th Annual Utah Conference on Undergraduate Research, February 22 2013, Logan UT

James, A. "Flight Nursing" Utah Student Nurses Association (USNA) Conference, February 2013, Sandy UT

Kesar, S. "How do we decide what is right: using triple-loop learning in context of management of computer crime" Ethicomp 2013, June 2013, Kolding Denmark

Kesar, S. "Rethinking education: STEM becomes a STEAM project" Ethicomp 2013, June 2013, Kolding Denmark

Kesar, S. "The STEAM project" American Association of Behavioral and Social Sciences, February 2013, Las Vegas NV

Larson, P.R.; Lohrengel, C.F.; Covington, R.L.; Elder, J.R. "Climate map for Utah" 2013 Annual Meeting of the Association of American Geographers, April 12 2013, Los Angeles, CA

Longhurst, G.R. "History of the Beryllium Technology Workshop Series" 10th IEA Workshop on Beryllium Technology, September 2012, Karlsruhe, Germany

Longhurst, G.R. "Measuring the Permeability of Hydrogen in Metals" 4th North American Materials Education Symposium, March 2013, Philadelphia, PA

Lunt, J. "The story of mathematics: using definitions in teaching", International Institute for SoTL Scholars and Mentors, June 2013, Los Angeles, CA

MacLean, J.S. "Geology field camp in southern Utah's National Parks" 2012 Geological Society of America Annual Meeting & Exposition, November 7 2012, Charlotte NC

MacLean, J.S.; White, B.J. "Honors and the National Parks: assessing the academic rigor of Experiential Education" National Collegiate Honors Council Annual Conference, November 2012, Boston MA

Miller, S.; Spruell, P. "Ability of Wolf Spider's (Lycosidae) to assess their nutritional needs and deficiencies" 7th Annual Utah Conference on Undergraduate Research, February 22 2013, Logan UT



Murray, J. "DesignBuildBLUFF: Coyote Architecture on the Colorado Plateau" AAAS 94th Annual Meeting of the Pacific Division, June 2013, Las Vegas NV

Pearson, A. "Achieving outcomes embracing constructivist development theory" 13th Annual Nurse Educator Institute, April 2013, Branson MO

Rasmussen, R.S.; Sanderson, S. "Using Popular Culture as a Teaching Strategy to Promote Critical thinking" 39th Annual National Conference on Professional Nursing Education and Development, October 2012, Philadelphia PA

Samha, H. "Study of the chemical environment inside free volume holes in halogenated styrene polymers using positron annihilation spectroscopy" 245th American Chemical Society National Meeting & Exposition, April 2013, New Orleans, LA

Shumway, H.; Govedich, F.R.; Bain, B.A. "Feeding strategies and prey preferences in predacious leeches" 7th Annual Utah Conference on Undergraduate Research, February 22 2013, Logan UT

Winward, D. "Weed dissemination: how did it/they get there" Arizona Strip/Southern Utah Invasive Weed Workshop, August 22 2012, St. George UT

Wood, T.; Govedich, F.R.; Spruell, P. "Strength in numbers: behavioral response of speckled Dace and Virgin Spinedace to invasive crayfish" 7th Annual Utah Conference on Undergraduate Research, February 22 2013, Logan UT

Wright, C.B. "Using online video demonstrations in a culinary arts class" Annual Meeting of the SNEB, July 15 2012, Washington DC

Wu, D. "Fostering professional learning communities through knowledge sharing: the role of user-centeredness and school website usability" International Conference on Information Systems (ICIS 2012) SIG Cognitive Research Workshop, December 2012, Orlando FL

Wu, D. "IT professionals' time management strategies for value-added knowledge creation in projects" Northeast Decision Science Institute 2013 Annual Conference, April 2013, New York NY

Wu, D. "M-learning on iPad: an exploration of user learning experiences on road safety" International Conference on Information Systems (ICIS 2012) SIG Cognitive Research Workshop, December 2012, Orlando FL

Wu, D. "Time management quality and temporal structure usage in calendar systems" International Conference on Information Systems (ICIS 2012) SIG Cognitive Research Workshop, December 2012, Orlando FL

Wu, D. "Understanding learners' social and psychological needs in a mobile learning environment" International Conference on Information Systems (ICIS 2012) SIG Cognitive Research Workshop, December 2012, Orlando FL

Wu, D. "Virtual labs: experiencing internet-based 3D spatial training" International Conference on Information Systems (ICIS 2012) SIG Cognitive Research Workshop, December 2012, Orlando FL

