

Mt. San Antonio College

ANNUAL REPORT

2015-2016 Edition

TO THE COMMUNITY



FEATURE

Expanding Students' Horizons

ALUMNUS PROFILE

Advancing Innovation at Nike

INNOVATING *for the* **Future**

Table of Contents



3 President's Message

4 News Briefs



6 Student Profiles

6 By The Numbers



8 Campus Construction

10 Expanding Students' Horizons

12 Cultivating STEM Education



16 Educating Through Innovation

18 Donor Spotlight

20 Alumnus Profile



21 Mt. SAC Foundation

22 College Celebrates 70 Years



Annual Report Staff

Editor:
Jill Dolan

Graphic Designer:
Linda Lundgren

Writers:
Mike Taylor, Jill Dolan, Uyen Mai,
and Jennifer Marquez

Photographers:
Mike Taylor and Jeff George

Distribution and Support:
Sue Hothi and
Annette Barrantes

The Annual Report is published by
Mt. San Antonio College and
is distributed to local leaders, donors
and friends of the college.

Contact us at: marketing@mtsac.edu,
(909) 274-4121, or mail to:
Office of Marketing & Communication
1100 N. Grand Ave., Walnut, CA 91789
www.mtsac.edu

*Printed on recycled paper. As part of our
commitment to green printing, the Annual
Report is printed on FSC-certified paper.
The Forest Stewardship Council (FSC)
promotes environmentally appropriate,
socially beneficial and economically viable
management of the world's forests.*

Our Mission

The mission of Mt. San Antonio College is to support all students in achieving their educational goals in an environment of academic excellence. Specifically, the College is committed to providing quality education, services, and workforce training so that students become productive members of a diverse, sustainable, global society. The College pledges to prepare students for lifelong learning through the mastery of basic skills, the achievement of associate degrees and certificates, and the completion of career and transfer pathways. The College will carry out this commitment by providing an engaging and supportive teaching and learning environment for students of diverse origins, experiences, needs, abilities, and goals. The College is dedicated to serving our community through improving economic achievement, advancing civic engagement, enhancing personal well-being, promoting critical thinking, and enriching aesthetic and cultural experiences.

President's Message



In 1957, I was just a 10-year-old kid living in La Puente when the Soviets launched a basketball-size object called Sputnik. A satellite in outer space orbiting the Earth seemed something out of one of my science fiction novels, but it was real. As President Obama noted in his 2011 State of the Union speech, the achievement unleashed a wave of innovation that created new industries and millions of new jobs in the United States. It also sparked my early interest in the sciences and would lead to my aspiration to become a chemistry teacher.

Southern California and the San Gabriel Valley have long held the reputation of

being the “go to” for advances in the science, technology, engineering and math (STEM) fields. Our region serves as the epicenter of the aerospace industry, pioneering medical research and unprecedented space exploration. It is critical that we continue that tradition of innovation and build upon our rich history if the nation seeks to remain competitive in our global economy.

Mt. San Antonio College is a key component in that effort and we are

proud of the innovative programs we offer across all the disciplines. In this 2015-16 Annual Report, you have the opportunity to read about a program designed to encourage students to become science and math teachers at a time when they are needed more than ever. You can also read about how journalism students have moved from the newspaper racks to the digital platform and the college's efforts to support the use of electric vehicles.

Eleven years before the Soviets beat the United States to space, back on *terra firma* the San Gabriel Valley marked its own special accomplishment: the opening of Mt. San

Antonio College, back then known as East Los Angeles County Junior College. More than 650 students registered for the first day of classes on what alternately was the site of an army hospital, a naval hospital, and a home for wayward boys. Its first graduating class in 1947 numbered 73 students and since then more than a million students have attended Mt. SAC.

This year, Mt. SAC celebrates its 70th anniversary of serving students from throughout our vast and diverse district with *excellence, distinction and innovation*. We hosted a carnival open to the entire community last month. You can see photos of all the fun on page 22.

In reaching such a milestone, one cannot help but marvel at the progress Mt. SAC has made over these 70 years. Today, we are the engine that puts our ever-growing populations to work in well-paying, high-demand jobs and prepares them well for university educations. It is important that we look forward as we embark on our next 70 years. And while none of us can completely predict the jobs or industries of the future, Mt. San Antonio College remains committed to doing its part to educate and inspire those students who dream of curing cancer, advancing computer technology or even, becoming a chemistry teacher.

Dr. William T. Scroggins
President & CEO

Board of Trustees

2015-16

Dr. David K. Hall, *President*
Judy Chen Haggerty, Esq., *Vice President*
Rosanne Bader, *Clerk*
Dr. Manuel Baca, *Member*
Jay Chen, *Member*
Robert F. Hidalgo, *Member*
Laura Santos, *Member*
Elizabeth Santos, *Student Trustee*

News Briefs

Mt. San Antonio College celebrated numerous accomplishments during the 2015-16 academic year. Below are just a few of the highlights.

—Mike Taylor

Mt. SAC & University of La Verne Sign Transfer Guarantee



Mt. SAC and the University of La Verne this summer signed off on a transfer admission program that will help Mt. SAC students transfer more easily from the community college to an undergraduate degree program at the University of La Verne.

On July 21, Mt. SAC President Bill Scroggins and University of La Verne President Devorah Lieberman signed a transfer admission guarantee (TAG) that provides the framework for assisting the transfer of students between the two institutions. Ultimately, the program ensures the successful transfer of Mt. SAC students to the University of La Verne and the completion of a four-year degree.



The program provides a number of benefits for students, including guaranteed admissions for students who meet the requirements, a waiver of the application fee, access to University of La Verne counselors, scholarships for students participating in the campus accelerated program for adults (CAPA), and a one-time \$1,000 scholarship that is applied to tuition costs.

In 2014, Mt. SAC and the University of La Verne signed a partnership allowing Mt. SAC students the opportunity to earn a bachelor's degree in business administration through University of La Verne classes offered on the Mt. SAC campus.

AANAPISI Program Awarded \$1.75M Grant

Mt. SAC's Asian American Native American Pacific Islander-Serving Institution (AANAPISI) Program was recently awarded a five-year \$1.75 million Department of Education grant.

The grant, funded at \$350,000 annually, will be used to provide instructional support, counseling, student development programming, professional development, and higher student success rates for students in the program.

AANAPISI is a support program for the college's Asian American, Native American, and Pacific Islander students to help them reach their educational goals. Approximately one-fourth of Mt. SAC's student population fits into those demographics.



Bridge Program Nominated for Excellence

Mt. SAC's Bridge Program was one of six community college finalists from throughout the country nominated for the Examples of Excelencia 2016 awards. The national award celebrates programs that promote Latino student achievement.



Since 1998, the Bridge Program helps first-time basic skills level freshmen succeed in college. Through the use of cohort groups, the program "bridges" the gap between high school and college by providing support services that address students' needs. Ninety-two percent of the students in the program are Latino.

Finalists for the award were selected from the 190 nominations received from 33 states, the District of Columbia, and Puerto Rico. The award is sponsored by Excelencia in Education, a national nonprofit organization that promotes Latino student success in higher education.

Staff & Student Represent Mt. SAC at Rio Olympics

Mt. San Antonio College was represented at the 2016 Olympics as hurdler Jordin Andrade and trainer Bill Ito both had roles in the Rio De Janeiro Games.

A Mt. SAC alumnus, Andrade, who was a Mountie in 2011 and 2012, competed for Cape Verde in the 400-meter hurdles. While he was a Mountie, Andrade was a 2011 U.S.A. Track and Field Junior National Champion and a Pan American Junior Championship silver medalist. In 2012, he continued his winning ways as a state community college champion for the Mounties.

He was the NCAA Division 1 Outdoor Championship runner-up in the 400-meter hurdles. At the 2016 Olympics, he placed 16th in the 400-meter hurdles with a 49.32 clocking. He placed third at the 2016 Mt. SAC Relays.



Ito served as a trainer for the U.S.A. Olympic Track and Field Team. He began as a trainer at Mt. SAC in 2008 and has served as a trainer for U.S. national teams at world championships since 2006. He said that being part of the Olympics has been his dream since the 1984 Olympics, when the Games were held in Los Angeles.



Cravon Gillespie Named CCCAA State Athlete of the Year

Mt. SAC sophomore sprinter Cravon Gillespie was named the 2015-2016 California Community College Athletic Association (CCCAA) Men's Athlete of the Year. The award is given annually to the state's top community college student-athlete, across all sports, offered by the CCCAA and voted on by the California Community College Sports Information Association.

Gillespie was the top sprinter in community college athletics during the 2016 season. He captured Southern California and California state titles in the 100 meters, 200 meters, and as a member of the 4x100-meter relay. He automatically qualified for the 2016 U.S. Olympic Trials where he ran 21.21 and finished in 35th place. Coming into the Olympic Trials, his 200-meter time was the 8th fastest time in the nation (overall) and 20th fastest time in the world this year. His 100-meter mark is the 7th fastest mark in the nation.

Gillespie is a resident of Monrovia and will be continuing his running and academic career at the University of Oregon.

Student Profiles



One of Mt. SAC's Youngest Grads is Nation's Top Speaker

speaking, and communication analysis. She added a silver medal in the impromptu speaking competition for good measure.

Jacqueline, who was also named a 2016 Mt. SAC Student of Distinction, competed against 500 other students from 64 community colleges across the nation. At one point in the tournament, she was the only female competitor in a room with all male competitors and judges as she gave a speech about feminism. Her other speech topics included gender fluidity and Japanese culture. With each topic, she found a passion and purpose to give a voice to those who are voiceless.

One of the lines from her tournament speeches dealt with being so young that no one would take her seriously, which seems ironic since she usually is the youngest in her classes and does everything at an accelerated pace.

Jacqueline graduated from Walnut High School at age 15 and started at Mt. SAC at 16. Once she started classes at Mt. SAC, Jacqueline tried a little of everything. She took classes in criminology, interior design, and theater.

"At first, I was hesitant to disclose my age in college," she said. "I was worried that my peers would look down on me or not take me seriously."

The reality of the situation was very different from what she expected. Instead, she would end up being asked to help students much older than her with their school work.

Then things started to snowball. She joined the honors club, the interior design club, the student newspaper, and founded the performing arts club. She was elected president of the Phi Theta Kappa honors society. Then she took a speech class.

"When I first started in speech, I didn't think I was really a very good speaker," she said. "I used to get so nervous before giving a speech."

Eventually she was recruited and asked to join the forensics team.

"It was at that point I realized the importance of my education," Jacqueline said.

"Joining the speech team changed my perspective, and changed my life."

—Mike Taylor



When Mt. SAC graduate **Jacqueline Yu** talks, people listen. Not only was the 18-year-old Walnut resident among the youngest graduates at commencement in June, she was also recognized as the nation's top community college speaker.

"When they called my name as the top speaker, I couldn't believe it at first," said Jacqueline, who won first place overall and the Bovero Top Speaker Award as the outstanding speaker at the 2016 Phi Rho Pi National Tournament in April.

She won the tournament by taking gold medals in informative speaking, after dinner

By the Numbers 2015-16

Data source: <http://datamart.cccco.edu>

Total number of students
59,185

Female **53.15%**

Male **44.48%**

Ethnicity

Hispanic	55.13%
Asian	17.58%
White Non-Hispanic	9.78%
Filipino/Pacific Islander	3.31%
African-American	3.47%
Multi-Ethnicity	2.13%

26,176

Number of students
who received
financial aid

\$70,609,921

Total dollar amount
awarded to students

REVENUE

State Revenue	\$140,412,151
Local Revenue	\$ 56,259,618
Federal Revenue	\$ 169,513
Other Sources	\$ 1,641,456

TOTAL REVENUE \$198,482,738

Veteran Battles PTSD to Walk at Commencement

It took two years after serving in Iraq for post-traumatic stress disorder (PTSD) to take over **Elliot McKenzie**'s life. But the former Marine was determined to not let it keep him from graduating in June.

"I went into the Marines because I wanted a big challenge," said Elliot, 31, who was a Marine from 2003 to 2008 and later served in the Army Reserves.

It turned out to be a challenge much different than he had imagined.

Deployed in Ramadi, Iraq in 2005 as an infantryman in the 1st Battalion, 5th Marines, Elliot saw and experienced many terrible things.

He saw a friend's leg blown off, was involved in six firefights, and had a car bomb explode 100 feet away from him, leaving him with a traumatic brain injury. He escaped combat with his life, and his PTSD remained dormant for two years. But eventually it came to the surface and manifested itself as rage.

He would snap at people for no apparent reason, punch holes in walls, and fight with his siblings.

"I was always close to going off," he said. "It took very little to get me angry."

It got to a point his mother bought him a punching bag.

Elliot, a resident of Pomona, attempted to resume a normal life. In 2010, he enrolled at Mt. SAC with the intention of majoring in communication. He struggled through three years, switching his major several times.

"I was passing only half of my classes, and my PTSD made it hard to focus," he said. Unable to concentrate on his studies, he dropped out of college.

"It was affecting my life. I couldn't function. Sometimes, I would just stay home in bed the whole day," he said.

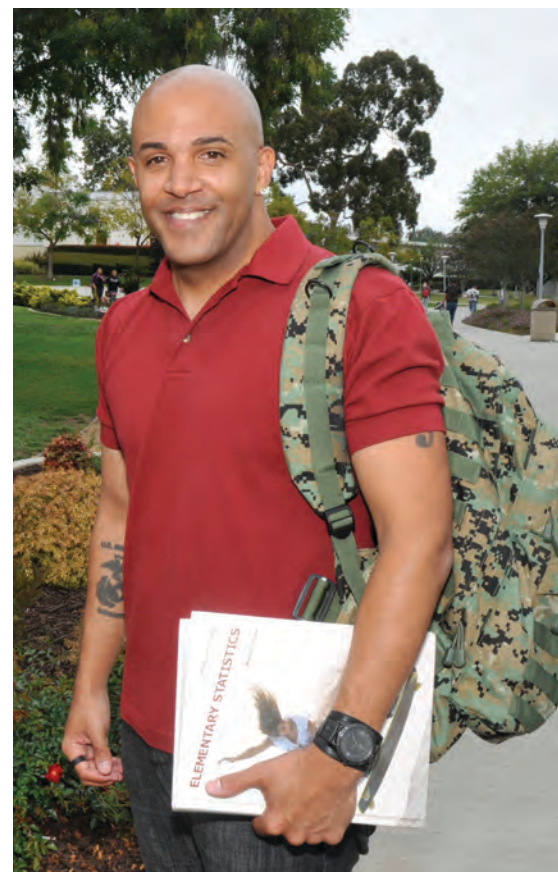
He sought help from the Veterans Center in Corona, and through counseling and therapy, discovered what was triggering his PTSD. He was also diagnosed with depression.

"The important thing is I got the help needed, and I figured out how to manage my PTSD," he said. "Once you get a grip on what triggers your PTSD, you can live life normally again."

After two years of counseling and therapy, he returned to college with added motivation and direction. It was in therapy where he realized his direction.

"Before I was taking a lot of classes, but I didn't know what I wanted out of all of it," he said. "But by the time I came back to school, I knew what I wanted to do."

Elliot re-enrolled as a behavioral science major and he made the dean's list his first semester back. He also took advantage of the services offered through the college's Veterans Resource Center, which provides support and community for student veterans.



This fall, Elliot transferred to Cal State Dominguez Hills to work on earning his bachelor's degree in behavioral science, with the goal of becoming a member of the FBI's behavioral science unit.

Earning his associate's degree in behavioral science meant so much more to him than just a degree.

"It means I've come over the hill," he said. "From where I was before to now, it's like night and day."

—Mike Taylor



EXPENDITURES

Academic Salaries	\$ 80,213,277
Classified Salaries	\$ 38,381,186
Employee Benefits	\$ 38,479,547
Contracts & Services	\$ 14,253,909
Supplies & Materials	\$ 2,670,115
Capital Outlay	\$ 3,080,932
Other Outgo	\$ 14,973,751
TOTAL EXPENDITURES	\$192,052,717

Campus Construction

Measure R-RR: The Mt. SAC Promise

The Mt. SAC Promise is our commitment to our students and community to provide quality facilities, current technology and a campus environment that fosters innovative instruction and learning well into the 21st century.

Measure R, the \$221-million state bond measure approved by local voters in 2001, gave us an excellent start and the promise continues through an extension bond measure — Measure RR — which was approved overwhelmingly by voters in 2008 and is expected to generate \$353 million.

From the beginning, we have made extraordinary efforts to design and construct quality facilities while achieving optimum functionality and aesthetic appeal. In doing so, we have relied on the watchful eye of the Citizens' Oversight Committee, which has dutifully carried out its fiduciary charge to ensure the prudent use of all construction funding.

For more information on Measure RR projects, visit: www.mtsac.edu/construction

Student Success Center

The 22,800-square-foot Student Success Center, opened in March and located next to the college's Student Services Center, is home to the Accessible Technology Center for Disabled Student Programs and Services, two TRIo Programs (ACES and Upward Bound), the Veterans Resource Center, and a Student Health Center satellite office. The majority of these programs had long been housed in portable buildings and now have permanent facilities in which to provide counseling, advising, instruction, and learning support services.



Mountie Café

The new food services building, also known as the Mountie Café, is a 13,500-square-foot facility that seats approximately 90 people inside and more than 200 outside. The building houses several new food stations, including room for a deli, a pizza location, a grill station, Asian cuisine, and a coffee shop as well as self-serve cold display cases.



Business and Computer Technology Building

Once it opens next year, the Business and Computer Technology Complex will provide 106,000 square feet of space to bring together accounting, business management, computer information systems, consumer studies, culinary arts, economics, fashion design and merchandising, hospitality management, interior design, paralegal studies, nutrition and foods, and real estate instructional programs. The BCT Complex will also feature the Language Learning Center, laboratory-based learning environments, state-of-the-art technology, and a student-run restaurant.

Physical Education Project

The Physical Education Project will bring big changes to the south side of the Mt. SAC campus and the historic Hilmer Lodge Stadium. The project has two phases: the Athletic Complex East (Phase 1) and the Physical Education Complex (Phase 2). The project replaces existing facilities that were built in the 1940s and renovated in 1957. Five athletic fields will be completed onsite during Phase 1 and a new Field House, which includes men's and women's locker rooms, offices, restrooms, two weight rooms, two lecture halls, conference/meeting rooms and learning labs. The Physical Education Complex (Phase 2) has three elements: Physical Education, Kinesiology and Wellness building, 2,800 rooftop bleachers and a 50-meter pool and a diving pool. The PEC will also house the basketball, volleyball, weight training, adaptive physical education and core training programs.



On the Drawing Board

Electric Vehicle Charging Stations

Keeping with Mt. SAC's commitment to reducing greenhouse gases, the campus plans to upgrade its existing electric vehicle charging stations and add an additional 30 starting next year. The college currently has 14 outlets on campus that can be converted into charging stations. The new stations will be located in Lot B, Lot G and Lot H. It is proposed that users will be charged \$2 per hour for the first two hours then increase to \$4 per hour.

Transit Center

Currently in the planning stages is a centrally-located Transit Center designed to consolidate campus bus stops and expedite service into and out of Mt. SAC. The center will also offer riders transit options while traveling to or from multiple destinations. The proposed site is the area north and west of the Welding and HVAC Building, near the intersection of Bonita and Temple avenues. The Transit Center is a cooperative effort between Mt. SAC and Foothill Transit, which has four bus lines that serve the campus.





The Sky is **NOT** the Limit

... for Students Learning from Retired NASA Scientist

In the past six years, Dr. Robert “Bob” Nelson, a retired, award-winning NASA principal scientist, has volunteered more than 5,000 hours to help Mt. SAC’s students in the earth sciences and astronomy program see learning in a whole new light. He assists students with advanced-level research projects and writing conference papers, prepares them for research competitions, and invites them to world-renowned scientific events.

Nelson has generously provided students access to more than \$250,000 worth of top-notch scientific equipment, which allowed the college’s Natural Sciences Division to establish a research laboratory that is one of only five labs in the world and the only one in the United States that has a Goniometric Photopolarimeter (GPP) – in simple terms, an instrument used to better understand planetary surfaces.

“There’s a big difference between learning about astronomy and doing astronomy. Dr. Nelson gives us a chance to see what working in science is really like.”

—Christina Vides, physics student

“The type of science we’re talking about is where we use images or data that are taken remotely by spacecraft, and we duplicate those conditions in a laboratory to get an idea of what’s going on with the physical and chemical composition of planetary surfaces,” explained Nelson, now an employee of the Planetary Science Institute in Pasadena.

Nelson realizes how unique the experience is for Mt. SAC students to work alongside him.

“A student typically does not get to work one-on-one with a fully educated and funded research advisor until he or she is well into a graduate education and working on a dissertation,” he said. “But, at Mt. SAC, we believe it’s much better to put undergraduate students in this kind of learning environment early because it allows them to learn more and move faster in their careers.”

Christina Vides, a physics sophomore, said she realizes she would not have the same learning opportunities at another community college or even another university as an undergraduate.

“There’s a big difference between learning about astronomy and doing astronomy. You can sit in a class all day and learn about it,

but you will never know how to apply it," said Vides, the recipient of Mt. SAC's 2016 Kepler Scholarship, which is awarded to outstanding astronomy students. "Dr. Nelson is teaching us how to apply the concepts we learn in class in the laboratory, and how the equipment works. He's giving us a chance to see what working in science is really like, and it's getting me more excited about entering a career in physics," she said.

"We realize the importance of authentic research in the undergraduate experience. We're giving Mt. SAC students the advantage."

*—Dr. Mark Boryta
Earth Sciences and Astronomy professor*

Nelson's connection to Mt. SAC began in 2004 when Dr. Mark Boryta, earth sciences and astronomy professor, was selected to receive a faculty summer internship at the Jet Propulsion Laboratory in Pasadena. He worked with Nelson, a principal investigator, on the Cassini mission to explore Saturn. The internship evolved and the two of them worked together on nights, weekends and holidays for the next 8 years.

When Nelson retired from JPL, with NASA's support, he moved the research equipment he'd used to experiment for the past 30 years to Mt. SAC. The college was able to create a state-of-the-art laboratory for students. Because the equipment is still owned by NASA, all of the research conducted by Nelson and the students is published by NASA and shared with scientists across the globe.

The mentorship has allowed Boryta to create a class model to lead group research projects — something that is nearly unheard of at a community college.

"This is the kind of science that is cutting edge," Boryta said. "It's not a couple of test tubes that you pour together. These are results that are being published in research papers worldwide."

As a result of the research Mt. SAC students have conducted under Nelson, many of them have won monetary awards and scholarships, and secured admission to top four-year universities.

"We realize the importance of authentic research in the undergraduate experience," said Boryta. "We're giving Mt. SAC students the advantage. Students elsewhere often do a lot of book learning but don't know what they're doing out in the field."

Adaaze Nebedum, a former physics researcher in Nelson's on-campus lab and a graduate in Applied Earth Sciences from Stanford University, says she is grateful to Nelson for giving her the opportunity to present a research paper to scientists from all over the world at the American Geophysical Union Meeting last year.

"Dr. Nelson and Dr. Boryta were so wonderful. I always had a research interest, and they took me under their wing and taught me so much about physics and astrophysics," she said.

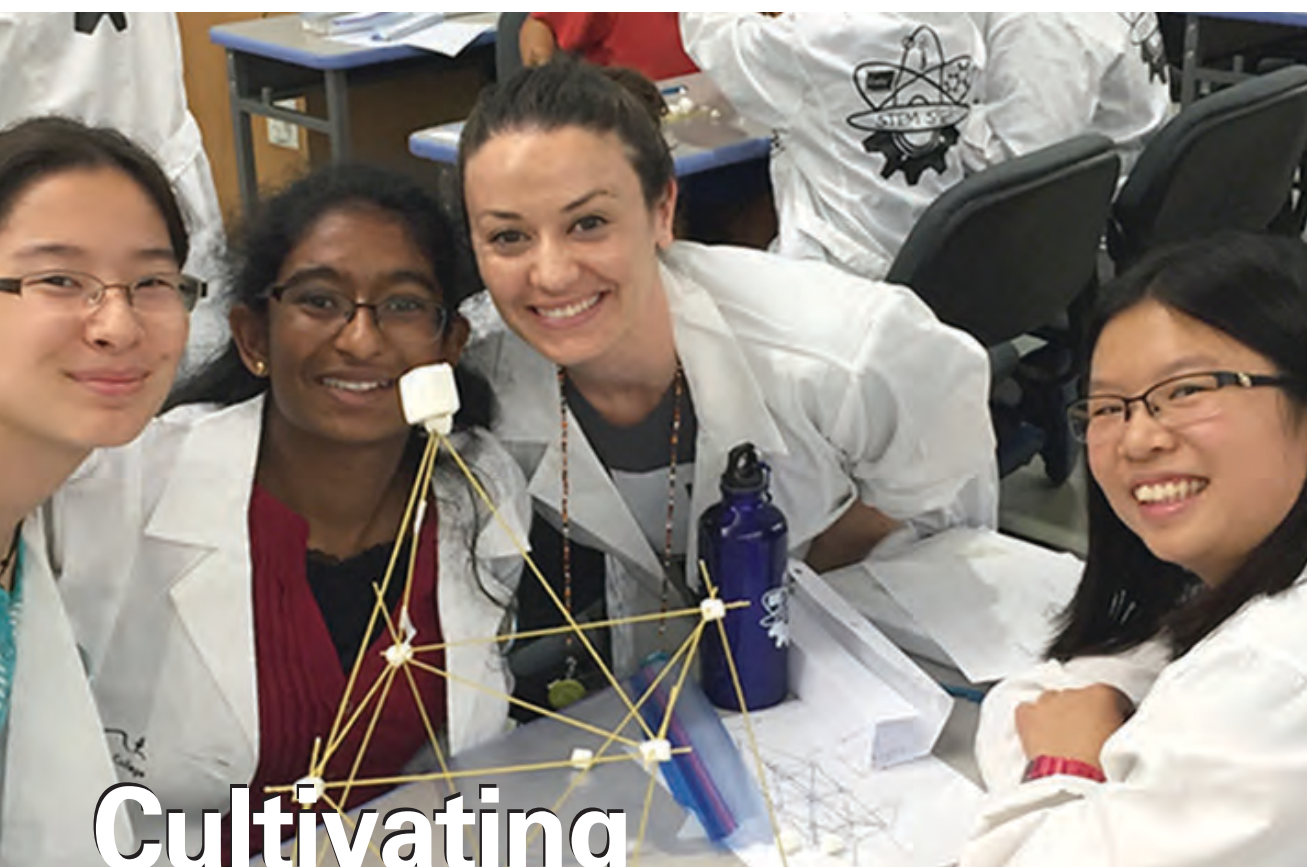
While Nelson thoroughly enjoys the three days each week he spends in the lab with students who are eager to learn, it goes even deeper than that.

"All scientists want to save the planet, and the answers to the problems of tomorrow are known by the students of today," he said. "When it comes to education, there's no cookie cutter way in which it's done, especially for scientists. Galileo had many students and each of them learned in a different way."

—Jennifer Marquez



Dr. Robert Nelson spends three days a week in the lab with students. Pictured with him are, (l to r) JPL scientist Ken Manatt, student Juan Quinones, and Dr. Mark Boryta, Earth Sciences and Astronomy professor.



Cultivating

STEM Education

Innovative program grows future science and math teachers

Mt. SAC, already home to a multi-million dollar state-of-the-art science and math complex, continues to bolster its efforts to improve education in the sciences and math through a program to encourage students to become science and math teachers and the establishment of a Science, Technology, Engineering, and Math (STEM) center.

The STEM Teacher Preparation Program presents a unique opportunity for students to gain hands-on and research experience to

become future science and math teachers. The program places emphasis on recruiting students of color, females, veterans and first-generation college students who have a strong desire to teach math or science at the middle school or high school levels.

"Initially, not too many students are interested in teaching," says Dr. Iraj Nejad, chemistry professor and co-principal investigator for the program. "Starting salaries are relatively low and it's a long road to gaining a bachelor's

Dr. Charles Newman
Chemistry Professor

Dr. Iraj B. Nejad
Chemistry Professor



degree and teaching credentials. Plus, teaching is hard work!"

However, it is through programs like the STEM Teacher Preparation Program that today's educators hope to enlighten and encourage tomorrow's teachers.

"This program is unique in terms of advanced technology, innovative teaching methods, and the breadth of activities and experiences offered to prepare community college students to become future STEM teachers," Nejad says.

A collaborative effort with the University of California Irvine, Cal State Fullerton, and the Walnut Valley Unified School District, the STEM Teacher Preparation Program is believed to be one of the first of its kind at a community college.

"Most teaching programs are at a four-year university and begin when students are at a junior level. But, by then, most students have already decided what they want to do, and it may or may not be teaching. Our program is meant to capture students' interest early and cultivate their interest in teaching math and science," Nejad says.

The program takes students who are interested in teaching in math or the sciences and places them in a cohort as they work their way through a 15-month program that includes

student teaching experience at an elementary school and as a supplemental instructor at Mt. SAC, coursework in teaching specifically for math and science, and research experience both at Mt. SAC and UCI.

"It's a win-win situation for both institutions," says Dr. Charles Newman, chemistry professor and co-principal investigator for the program.

Through the collaboration, the students have an educational opportunity that is unlike anything else at the community college level. One of the highlights is an eight-week paid summer research opportunity to work in the STEM laboratories at UCI. Students join a research group that best matches their major and interests, and are mentored by faculty, post-doctorate and graduate students.

Another opportunity the program offers is for students to co-enroll in a UCI course entitled, "Introduction to Math and Science Teaching." Through this course, students gain an understanding of effective discipline-specific teaching strategies, California science standards, classroom management and learning assessment. Students who participate in the UCI course also gain classroom teaching experience at local elementary schools.

Math major Karina Galvan, 22, says taking the UCI course and being in the classroom confirmed her desire to teach.



"It's opened my eyes to all the things I can do

with a math degree. I'm starting to see the bigger picture and influence math has on the world."

—Karina Galvan, math major

"After being in the classroom, I knew I wanted to do this," says Galvan, who plans on transferring to Pomona College. "It's a challenge and it's hard, but it's fun. I think that is what a career should be about — doing something you enjoy."

Galvan says in high school, a teacher told her she didn't belong in an honors math class and that she was not good at the subject. "It wasn't that I was bad at it," she says. "People just kept telling me I was. Growing up, I hated math and it was the subject to avoid."

When Galvan first came to Mt. SAC, she chose psychology as her major, believing she shouldn't pursue math. In fact, it was one of the last courses she took.

"Math doesn't come naturally to me, but I completely loved the class and it was all because of my professor," Galvan says. "She changed my whole outlook on it. She challenged me but the way she spoke to me was encouraging. She knew I could do it and I was good at it."

Galvan took to helping her classmates and discovered that she found assisting others to be a satisfying experience. "I found material I enjoyed and I found my passion," she says. "I felt, 'This is it. This is me.' I changed my major that semester."

Galvan says she has come to realize the impact one teacher can have in closing the door on a whole sea of career opportunities, but thanks to Mt. SAC's program, she has a whole new feeling about the future.

The STEM Teacher Preparation Program also addresses a very real need. It is estimated that, due to the retirements of Baby Boomers, California schools will need 33,000 new math and science teachers by 2025. The Obama Administration in 2011 issued a call for adding 100,000 STEM teachers to the nation's schools over the coming decade and launched the 100Kin10 initiative to spur that effort.

According to a 2012 report by the President's Council of Advisors on Science and Technology, the United States will need to produce approximately 1 million more STEM professionals over the next 10 years if the country wants to remain competitive globally in science and technology. To reach this goal, the report states, the United States will need to significantly boost its retention rates as

fewer than 40 percent of students who enter college as a STEM major actually complete a STEM degree.

"The jobs of the future are in science and technology," says Natural Sciences Associate Dean Karelyn Hoover, "and we're trying to feed the pipeline."

Funded through a three-year \$624,000 National Science Foundation grant, Mt. SAC's program is now entering its third year, and one thing is sure—students are sticking with the program. Of the first cohort, 13 of the 15 have transferred to pursue their bachelor's degrees in math or science and earn their teaching credentials. Presently, there are another 10 students in the program.

***James Choe
changed his
major from music
to science after
participating in the STEM Teacher
Preparation Program. "Science
was always in my head."***



James Choe, 25, was a member of the first cohort and is currently studying biochemistry at UC Riverside, where he is involved in the university's California Teach Science and Math Initiative program.

Not unlike Galvan, Choe didn't come to Mt. SAC majoring in math. Instead, he

was pursuing a degree in music. But it wasn't long before Choe changed his major. "Science was always in my head," he says.

As a supplemental instructor in the Learning Assistance Center, Choe tutored fellow students in general chemistry and enjoyed it.

"I like to study in a group and to teach others to understand concepts fully," he says. "That experience got me thinking that I like this and I like explaining things to people."

Choe, like Galvan, found the UCI teaching course to be his favorite experience of the program, especially because it exposed him to the many responsibilities of teaching and the varied types of methods. "I was able to prep for the lecture, have it reviewed by a faculty mentor and I taught the lecture," he says. "It gave me a different idea of what teaching is and how to better relate the subject to students."

Future plans for Mt. SAC's STEM Teacher Preparation Program are to seek a one-year extension of the grant and possibly the pursuit of a second grant and expansion to other universities and community colleges.

Choe encourages students who are not quite sure about teaching to keep an open mind and to explore the program.

"I always thought I wanted to teach but I wasn't sure until I joined the program and got the hands-on experience," he says. "If I was close minded, I probably wouldn't have explored this route. This program opened up a whole world of potential opportunities."

—Mike Taylor and Jill Dolan

Why **STEM** Matters

About 3 million jobs are unfilled because Americans lack the basic technical skills to fill them. With many positions in science, technology, engineering, and mathematics being filled by people born outside the country, the U.S. is stepping up its efforts and making STEM education a top priority.

20% of all STEM jobs require an advanced 4-year degree or more in engineering



80% of the fastest growing careers are in STEM fields

+11%

Difference in STEM wages vs. same-degree counterparts in other jobs



48% STEM jobs that today are in computers and mathematics

62% Projected growth in biomedical engineering jobs through 2020



STEM CENTER

Place to Belong for Science Students



"We welcome anyone, and we're open to everyone."

—Karelyn Hoover
Associate Dean, Natural Sciences

Augmenting Mt. SAC's efforts to produce science and math teachers of the future is the campus STEM Center, a dedicated space with resources and support for students that opened in 2015.

"We want to be a hub for all things science and want to be a place where students feel a sense of community and have the type of support they need," says Karelyn Hoover, Associate Dean of Natural Sciences. "This has been my dream. I felt the students needed a place to gather to be with other students who have the same interests and goals."

The STEM Center, located on the third floor of the campus' Math and Science Building, provides tutoring, peer-to-peer coaching, counseling, and general support services. Faculty members from both the physical and biological sciences serve as mentors and Hoover says their presence is significant for the students.

"The students have access to resources they would never have at home," says Hoover, who led the effort to establish the center. "And having a strong faculty influence increases retention and success rates across the disciplines."

Students who visit the center will find a study area stocked with microscopes, laptop computers, and even skeletons for anatomy students. "We were full immediately," Hoover says. "Within three weeks of opening, we were at capacity. It was like the students were just waiting to get in. The place is packed all the time."

The center is available to any math, science, or engineering student. But, it is also used by the STEM Teacher Preparation Program, Robotics Team members, and students in two of the campus engineering clubs. Approximately 200 students use the center each day.

For students to be successful, a sense of belonging is right up there with academic support services and encouragement. The center promotes an environment of congeniality among science students.

In terms of support services, the center also offers seminars on topics of interest, including how to be successful in class. Services are expected to increase with the recent hiring of a STEM Center coordinator.

—Mike Taylor and Jill Dolan

Educating Through Innovation

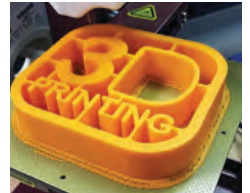


Think It, Print It

The Industrial Design Engineering Program obtained its latest 3-D printer a year-and-a-half ago and today boasts seven 3-D printers in its lab for students in computed aided drafting (CAD) classes.

The college's Stratasys 3-D printers, which range in cost from \$2,500 to \$25,000, enable students to design and produce parts in a faster and more cost effective manner than previously. The printers also allow students to perform complicated geometric shapes that were much more difficult to achieve before. Mt. SAC's CAD students have used the machines to create a myriad of items, including parts for machines such

as air compressor to—yes, parts for another 3-D printer. The only limitation is the designer's imagination.



And while other schools may have a few 3-D printers lying around, what's unique about the lab equipment in Mt. SAC's program, according to Industrial Design Engineering professor Stephen James, is how students use the technology and its applications. Nearly any field you can think of from aerospace to archeology to the medical field is using 3-D printing technology today, James said.

Robotics Workshops *Take the Fear Out of Science*

Ever felt intimidated by math or science? Well, welcome to robotics!

Since early this year, the Mt. SAC Robotics Team, through the STEM Center, has been hosting free community workshops on robotics for students ages 8 and up. Open to the public, the workshops are part community outreach, part science friend-raising.

"Robots are fun, and they're fun to build," said Physics Professor and Robotics Team advisor Daniel Anderson. "No prior experience necessary."



With help from faculty and Robotics Team members, workshop participants learn about building robots as well as robotics competitions, building components, and design. The workshops also introduce children to concepts in science and engineering that are quite palpable.

"These workshops are designed to take the fear out of engineering and technical things," said Anderson.

And judging from the attendance of these Saturday sessions and the growing community interest, the plan is working.

Also earlier this year, Mt. SAC's Robotics Team qualified to compete at the VEX International World Competition in Kentucky. The competition hosts teams from around the world. Mt. SAC was one of only four community colleges in the nation at the competition.

"The field of robotics is doubling every year as interest in robots grows," said Anderson.





After ditching their newspaper, students are **blowing up campus news** all over again

More than a year ago, the students of Mt. San Antonio College decided they were tired of seeing their college newspaper lying untouched on the racks.

So, in a bid for increased readership, the newspaper tried an experiment: It stopped publishing the print edition and ran all its coverage online. Then, students launched a new website, Sac.Media, on Medium, joining the handful of professional publications that were already using the platform full time.

How'd they do? Seventeen months later, after taking a look at the data, they're getting ready to reinvent their approach to campus news for a second time.

Faculty adviser Toni Albertson and her students made two big changes this fall: Their current site, Sac.Media, will be replaced with a BuzzFeed-style publication that serves up college-focused content aimed at students around the world, not just in Southern California.

And they'll be launching a new website, SacOnScene.Media, which will focus largely on community news from three communities near campus: Pomona, Covina and Walnut. Unlike Sac.Media, which was launched on

Medium, the new site will be powered by Arc, The Washington Post's proprietary content management system.

The decision was driven by a deep-dive into analytics data, which showed people just weren't clicking on the typical 14-inch college newspaper story, Albertson said. After the spring semester, Albertson and her students looked at the metrics, which revealed a few types of stories had very low engagement. Among them: game recaps, stories about on-campus political rallies (a write-up of Bernie Sanders' visit bombed) and stories about faculty.

A few big stories did well like those about the college's ongoing battle to erect a parking structure and evocative profiles of interesting students. But when stories didn't do well, they tanked — some stories about faculty garnered a mere 25 pageviews.

What do students want to read, and where do they want to read it? According to polling and focus groups conducted by Albertson's students, the students are reading (and watching) Vice and BuzzFeed when they're not getting their news via Snapchat and Twitter. So, the BuzzFeed-esque content will be a bid to get them to pay attention.

Meanwhile, Albertson said, there's a serious gap in coverage of news in cities around the college — and a wealth of potential readers who care about news in their community. So why not cater to them with a separate site and take the occasional deep dive into campus news when the story warrants it — rather than produce stories that few people are reading?

A dozen or so students will be working on coverage of surrounding communities, and a strong emphasis will be placed on covering campus news on social networks such as Twitter, Albertson said. She and the students don't see the strategic shift as an abandonment of their mission to serve the campus, rather a doubling-down of producing news that people actually want to consume.

"We're trying to reach out and shake people and say, 'What do we need to do to get you to care?'" Albertson said. "We're not giving up on college news."

—Benjamin Mullin
Reprinted with permission
from The Poynter Institute.
www.poynter.org

Donor Spotlight



Mt. SAC employees Desiree Marquez (left) and sister Windy Lozano (right) established a student scholarship in honor of their parents, Gabriel and Sonia Campos.



It's easy to see that giving of time and money is a family affair for Desiree Marquez and Windy Lozano.

The sisters, both Mt. SAC employees for the past 10 years, can be found helping students in the Student Services Division. Marquez is the manager of Financial Aid and Special Programs, where she assists with the oversight of the Scholarship Program Office and the Veterans Resource Center. Lozano is an educational advisor.

Back in 2007, the sisters, along with their brother, were searching to honor their hard-working parents on the occasion of the couple's 35th wedding anniversary. They decided the best gift would be to create a scholarship benefitting first-generation college students who have overcome hardship.

"After 35 years, we wondered 'What are we going to give them?' We wanted to honor them while they could truly be a part of us celebrating the love and support they have for our family," Lozano says.

"We wanted them to be honored while they were still here," Marquez adds. "Our success is not our own. Our success is our father's and our mother's. It was built on their love and hard work. There is no way we could really ever show them how much we appreciate them, but this is the closest we can get to getting it right. Up until that point in our lives, we never got to tell them in a big way that we appreciated all they did for us. They didn't get to go to college but they made many sacrifices to make sure we did."

**ALL
IN THE
FAMILY**
*Sisters establish scholarship program
in honor of parents*

The \$500 Gabriel and Sonia Campos Scholarship was first awarded in the spring of 2007 at the college's annual scholarship ceremony and both were in attendance. "Our dad was so proud and said he wished he could do more," Lozano says. Today, Gabriel, a 20-year Mt. SAC employee in the Athletics Department, and Sonia, a secretary at Cal Poly Pomona, both contribute to the scholarship.

Jill Dolan, director of Public Affairs, spoke with Marquez and Lozano about this special scholarship.

Both of you are from a working class family and were first-generation college students. How does a scholarship like this make a difference in a student's life?

DM: *Money should never be the reason a student isn't successful. If it hadn't been for financial aid and scholarships, I wouldn't be the success I am. Financial aid, work-study and scholarships changed my life. The students we serve everyday are like us. In selecting winners for our award we look for those students who have drive, perseverance and work ethic. We look for young men like my dad and young women like our mom, both*

who had the potential and drive to graduate from college but for various reasons were not able to.

WL: *Not everyone had what we had. We wanted to make sure that if a student had that potential that we could help inspire them to continue.*

Why is this scholarship so meaningful to you both?

DM: *Our dad always had two full-time jobs. His winter job paid for spring tuition and his summer job paid for fall. We grew up with an intense emphasis on having a strong work ethic and we saw how hard our parents worked as classified employees. They didn't get to fulfill their college dreams due to financial and social barriers. It is a very personal piece of my life's work to encourage students to pursue higher education regardless of economic and societal roadblocks.*

WL: *We had always talked about giving back once we made it in our careers, and we can really make a difference here at Mt. SAC through scholarship giving. When we meet*

the recipients for the first time, I see me in them and hopefully they see themselves in us. This scholarship demystifies that you have to be "wealthy" to give. When they meet us, they see real people who know where they've come from. We share our stories of college success and thank the students for allowing us to be a part of their success.

The scholarship is now \$500 to one student each year. What are your goals for it?

WL: *Every year, we wish we could do more. Our goal is to create an endowment.*

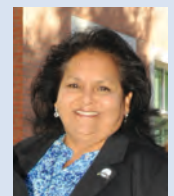
DM: *The amount I give through payroll deduction is such a small piece but it makes a big impact for students. If we can make their journey less stressful through this small donation, it's humbling.*

WL: *I'm proud to be here at Mt. SAC as a classified employee and as a scholarship donor. It's a great place to work and a great place to give. Every day we ask each other as we leave the office, 'Did we make a difference today?' and we can say we did.*



Honestly, that each and every day our children spend their lives helping others, that they respect hard work, have become amazing parents themselves, that they have not forgotten where they come from...this is how they truly honor us. Now that we also give to the scholarship it has become a shared giving experience. We can't even put into words how amazing it feels to meet the Gabriel and Sonia Campos scholars each year. My wife keeps the scholarship winners' thank you notes in her office and she says their words inspire her every day! The Mt. SAC students who receive our award give us hope for the future. That has been a great realization as a donor, that giving is a two way street...meeting the recipients, hearing their words of thankfulness and receiving letters from them is one of the most rewarding aspects of being honored. We only wish we had more to give."

—Gabriel Campos



"Mt. SAC has been very good to us. We are proud that each of our four children have attended here at one point in their educational journey. We couldn't be more prouder of them as great people and giving professionals. Each of them has chosen a serving profession...our son as a LA County Sheriff and the other as a United States Marine Veteran now working in the Health Field. And of course, we are super proud of our daughters who both work here in Student Services, working to serve students each and every day. They truly love their work and we couldn't ask for more for them. As parents we just wanted to give them a better life and wished for them to be good people. I am humbled that my children have honored us by naming a scholarship in our honor."

—Sonia Campos

Alumnus Profile

Going for the **GOLD**

Tobie Hatfield advances innovation at Nike



It's been 20 years since the Atlanta Olympics, when American sprinter Michael Johnson ran the 200-meter dash in an unfathomable 19.32 seconds. In two decades, people still remember Johnson's jaw dropping speed, his world record, and his gold track shoes bolting towards the finish line.

Those golden shoes – the ones that inspired Johnson's nickname "The Man with the Golden Shoes" – are among a long line of achievements by Mt. SAC alumnus Tobie Hatfield.

As Athlete Innovation Director with the Nike Corporation, Hatfield is an icon in the athletic shoe industry, working directly with famous athletes to help create designs and innovations.

For his legacy at the college and contributions to his field, Hatfield was inducted into the Athletics Hall of Fame and named Distinguished Alumnus of the Year in 2016.

Hatfield's own story also starts on the track field. A gifted athlete, he captured the Oregon State Pole Vault Championship as a high schooler. He found his way to Mt. SAC in 1982.

"I knew of Mt. SAC growing up in Oregon because of the Mt. SAC Relays," Hatfield recalls. "I was awed by this place. It was so big. But I felt at home. I got close with my teammates, and my mentors on the track were like father figures for me. They were people who poured into your life when they didn't have to. When you see someone who cares about you, you gravitate towards that."

Hatfield quickly captured the Mt. SAC Relays Community College title in 1983, becoming the Mounties' No. 1 vaulter and one of the top three pole vaulters in the nation. He later transferred to Abilene Christian University, where he earned All-Academic All-American honors.

Hatfield joined Nike in 1990. He quickly made an impact and developed some of Nike's signature models, including the Michael Johnson Olympic gold shoe, the ACG Trail Running Line, the Nike Free and PV Lite. By 2000, he helped launch Nike's celebrated Innovation Kitchen.

Today, Hatfield works closely on product design with many sports superstars, including Maria Sharapova and Tiger Woods.

But, perhaps even more exciting, is Hatfield's involvement in driving a number of the company's advances in sneaker and apparel technology. One of his latest projects involves developing sneakers for physically challenged athletes.

"We do such a great job helping athletes perform better, run faster, jump higher and all that kind of stuff," says Hatfield. "But, what about performing better just in the sense of quality of life? When we say 'if you have a body you're an athlete,' that means everybody."



His latest design utilizes a cutting edge wrap-around zipper system that empowers people with limited hand movement to put on their own shoes. And while those athletes probably won't win any Olympic medals, their newfound independence is as good as gold.

—Uyen Mai

Foundation Report

The Mt. San Antonio College Foundation is a 501 (c) (3) not-for-profit organization whose mission is to mobilize financial and non-financial resources to support Mt. SAC programs that enrich students' learning environment and education experience. In the 2015-16 Fiscal Year, the Foundation raised \$672,072. We are proud to report that 84% of all dollars raised went directly to support programs and scholarships.

To donate, call the **Foundation Office at (909) 274-5438** or visit **www.mtsac.edu/foundation**.

Scholarships for Mountie Students



Financial hardship remains the largest obstacle our students face in pursuit of their educational dreams. The Mt. SAC Foundation addresses that challenge head-on by providing scholarship support to hardworking and deserving students. Thanks to the generous contributions of our donors, in the 2015-16 fiscal year we awarded more than \$324,000 to 370 students. These awards often are the difference between being enrolled in college or not. The impact these awards have is substantial in the lives of our Mountie students!

Reynolds Buick Mt. SAC Foundation Golf Classic a Huge Success

In May, Mt. SAC took over the Pacific Palms Resort and held its annual Reynolds Buick Mt. SAC Foundation Golf Classic. Based on high demand, and for the first time in our 29-year history, we expanded the tournament to two courses. It was a wonderful day of celebration and fun. More



importantly, and thanks to the hard work and involvement of dozens of volunteers, friends and our generous sponsors, we raised over \$158,000! Proceeds from the tournament helped fund the Mt. SAC Athletics program and provided essential operational resources for the Foundation. We are grateful to everyone who helped make this one of our most successful tournaments in history. We will be back at Pacific Palms for our 30th tournament on May 12, 2017. We look forward to seeing you there!

Private support from our community allows the Foundation to assist Mt. SAC in its mission of providing unparalleled educational opportunities for our students. Thanks to the generosity of our donors, in 2015-16 we helped provide assistance for a wide range of campus projects and initiatives. Among them included:

- \$100,000 to the Nursing and Health Professions programs to upgrade equipment and technology in the simulation center and skills lab
- 5,000 to benefit the Mt. SAC Veterans Resource Center
- \$50,000 to establish an On Campus Student Internship program which provided students resume building part-time jobs in their field across the Mt. SAC campus
- \$15,000 for the TRiO program and continuing efforts to identify, recruit and support students from historically disadvantaged backgrounds
- \$20,000 in scholarship opportunities for students majoring in the area of science, technology engineering and mathematics (STEM).
- \$10,000 in additional scholarship dollars earmarked for brave men and women who have served our country in the Armed Forces and are at Mt. SAC making the transition back into civilian life.



Mt. SAC Foundation Alumni Association **focus on reaching out to, and engaging the Mountie Nation!**

As the largest single-district community college in California, in its 70-year history Mt. SAC has provided high quality educational opportunities for more than 1.2 million people. In 2015-16, the Mt. SAC Foundation Alumni Association embarked on a bold mission to reconnect with our former Mounties. If you are a Mt. SAC alumnus and would like to get involved as a volunteer, a donor or would just like to see how the campus has changed since you were here, please reach out to the **Alumni Office at (909) 274-5438**.

70th Anniversary Carnival

Mt. SAC celebrated its 70th anniversary on November 5 with a Community Carnival and Open House. More than 5,000 people attended and enjoyed free rides. Entertainment was provided by the college's talented students and staff, and tours of the Farm, Planetarium, Aeronautics Flight Simulator and the Wildlife Sanctuary were also offered. Guests were also able to learn about the many programs, services and resources Mt. SAC provides to the community and help support campus clubs by visiting student-run game booths.



70th Anniversary Carnival



Mt. San Antonio College
1100 North Grand Avenue
Walnut, CA 91789-1399

RETURN SERVICE REQUESTED

NONPROFIT
ORGANIZATION
U.S. POSTAGE
PAID
COVINA, CA
PERMIT NO. 45

TO:



www.mtsac.edu • (909) 274-7500