Director’s Message

It is hard to believe that we are in the final year of this grant project. As I reflect back on when we started \( (STEM)^{2} \) in 2011, I remember having to educate the campus on our mission and what we are all about. Now we have President Garcia highlighting our success in her monthly GarciaGram to the campus stating “(STEM)\(^{2}\) program is garnering national attention for its achievements in facilitating student success for underrepresented transfer students”. In a past (STEM)\(^{2}\) newsletter, I shared data on how we have succeeded in promoting more STEM transfers from our Summer Research Experience (SRE) program and retained more STEM majors through our Academic Transition Program (ATP). In addition, we have developed STEM cohort communities at our partner community colleges: Cypress, Citrus and Santiago Canyon. We have also built that community here at CSU Fullerton with the (STEM)\(^{2}\) Peer Mentors and Transfer Resource Center (TRC). But there is more work to be done. We want to build off of (STEM)\(^{2}\) success and proceed to write another US Department of Education Hispanic Serving Institution (HSI) STEM grant. Regardless of the outcome of the new grant, CSUF is committed to institutionalize a few program components and we find our partner community colleges are doing the same. It has given me great pride to see how (STEM)\(^{2}\) has impacted so many students’ lives and this is due to the partnerships we have developed both on and off campus to support our success over the years.

-Dr. Maria Dela Cruz, (STEM)\(^{2}\) Director

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Welcoming New Staff

We are pleased to introduce and welcome our newest staff members Sarah Elattar, Administrative Assistant, Tatiana Pedroza, Mentor/Outreach Coordinator and Carlos Amescua, Academic Transition Assistant. Please take a moment to read about our two newest staff members via their mini bios.

Sarah Elattar, B.S.
Having graduated from CSUF with a BS in Biological Science, I know how much our campus has to offer. Although my ultimate career goal is in the health care field, I love learning about different fields – especially languages and cultures. I recently spent two years teaching English and volunteering abroad. Now, I am so happy to be part of the (STEM)² program and to see how the collaborative efforts of faculty, staff, and students contribute to student success and growth.

Tatiana Pedroza, M.A.
As a first generation college student and a product of the community college system, I strongly believe in creating a path for students to succeed in their educational goals. After transferring from Fullerton College I double majored in Sociology and Women & Gender Studies at California State University, Fullerton. I also received my M.A. in American Studies at CSUF while working in the College of Natural Sciences and Mathematics advising student leaders as well as students on academic probation.

Carlos Amescua, B.A.
As a proud undergraduate Titan alum and a second year graduate student in the Masters of Sociology program at CSUF, I am thankful for the many opportunities I have had on campus. Serving students both in and out of the classroom has always been a passion of mine and am excited to continue to do so with our transfer population we serve at (STEM)².

Welcome, Farewell & Thank You

(STEM)² would like to thank Sandra Ponce, Graduate Assistant for (STEM)², for her hard work and dedication to mentoring (STEM)² students over the summer and fall. Sandra will be pursuing other ventures in order to advance her academic and professional careers at our partner community college, Citrus.

We wish her the best!
New Peer Mentor Corner

Tilly Duong
Major: Biology
Please to make your acquaintance! My name is Tilly, and I came to Cal State Fullerton as a biology major. I hope graduating cum laude at CSUF lies ahead in my future, as well as attending graduate school. I am intrigued by ecological studies and the implications it has in developing a sustainable future. While I like staying busy, sometimes you can find me enjoying quaint activities like drinking boba milk teas, snacking on mint and green tea-flavored food, and napping.

Jacqueline Ellis
Major: Biology
Hi, I’m Jackie! I am a transfer student from Citrus Community College. I’m a cellular biology major with aspirations of attending medical school in Portland, eventually becoming a pediatrician. I grew up in a small town in the Midwest. Coming to California was a huge culture shock from what I was used to seeing. That’s why I’m so passionate about helping transfer students with the transition process to a four-year college. I love the city life, but I love my friends and family the most. So in my free time I can be found hanging out with friends, watching movies, or cooking with my family.

Tiffany Rivas
Major: Biology
Hi everyone! My name is Tiffany Rivas. I am a transfer student from Citrus College, currently working towards my B.S. in Biological Science with a concentration in Cell and Developmental Biology. My goals include attending graduate school to obtain my Ph.D. and pursuing a job in biomedical research or work for a biotech company. Through being a Stem-squared student, I was able to get extremely involved on campus, and meet tons of new friends! I am currently the Fundraising Director for St. Jude Children’s Research Hospital, Up til’ Dawn on our campus and Secretary of Biology Club. I am passionate about helping others and making people laugh. In my spare time, you could find me in the lab, hanging out with my friends or reading a book!

CSUF Academic Transition Program

By Sandra Ponce, Graduate Assistant

As (STEM)² enters its final year of the grant, the project invited all Fall 2015 transfer students entering CSUF from non-partner community colleges with a STEM major, to participate in the Academic Transition Program (ATP). The pilot program is known as CSUF ATP provided services to a cohort of thirty-five participants this semester. Similar to (STEM)² ATP, students were assigned a Peer Mentor and encouraged to utilize the academic resources and support services within their respective College of Natural Science and Mathematics or the College of Engineering and Computer Science. As a benefit to participating in the program, students became more aware of campus resources and had a smooth transition to CSUF. With the success of the first cohort, the CSUF ATP program will serve a second cohort of STEM transfer students entering Spring of 2016.
Dr. Maria Dela Cruz, (STEM)² Project Director and Sam Barrozo (former Academic Transition Coordinator and current NSM Retention Specialist) presented at the Hispanic Association of Colleges & Universities (HACU) Conference in Miami, Florida on October 10-12, 2015. The title of their presentation was “(STEM)² as a Model for Hispanic Transfer Student Success”.

Dr. Maria Dela Cruz, (STEM)² Project Director, and Dr. Jennifer Coto, Professor of Counseling at Santiago Canyon College, presented at the first annual California Collaborative Academic Advising (CCAA) Conference held at CSU Dominguez Hills on October 20, 2015. The title of their presentation was “It’s All About Collaboration! A Successful STEM Grant Partnership Between Three Community Colleges and a Four-Year Institution”.

Dr. Maria Dela Cruz, (STEM)² Project Director, Tatiana Pedroza, (STEM)² Mentor/Outreach Coordinator and Carlos Amescua, (STEM)² Academic Transition Assistant, attended the National Association of Student Personnel Administrators (NASPA) Western Regional Conference in Oakland, CA on November 8-11, 2015.

Workshops at the Community Colleges

This past semester, Tatiana Pedroza and our community college partners; Cypress, Santiago Canyon and Citrus organized a variety of workshops both at our partner community colleges and at CSUF. The workshops were facilitated by Peer Mentors, through a series of presentations and career panels. Stay tuned for upcoming workshops in Spring 2016.

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<th>Fall 2015</th>
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<tr>
<td>CSUF Alumni Panel @ Cypress</td>
<td>Careers Workshop @ Citrus</td>
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<td>CSUF STEM Resources @ Citrus</td>
<td>SACNAS Workshop @ Cypress</td>
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<td>SRE Workshop @ Cypress &amp; Santiago Canyon</td>
<td>Fall Cypress Symposium @ Cypress</td>
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<td>CEP Training @ Santiago Canyon</td>
<td>STEM Week @ Santiago Canyon</td>
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<td>CSUF Transfer Workshop @ Santiago Canyon, Citrus</td>
<td>“What to do after graduation?” Panel @ Santiago Canyon</td>
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Campus & Community Outreach/Engagement

CSUF Preview Day
By Carlos Amescua, Academic Transition Assistant

On Friday, October 23rd (STEM)² welcomed students from Citrus, Cypress, and Santiago Canyon College to its annual Preview Day. Preview Day provides prospective transfer students an opportunity to visit California State University, Fullerton and visit either the College of Natural Sciences and Mathematics, and/or the College of Engineering and Computer Science. Many of the students in attendance had not been on campus before and through peer mentor-led campus tours, students not only gained access to campus life, but also met student success team, Assistant Dean, Dr. Colleen McDonough and Retention Specialist, Sam Barrozo. Following our welcome, Barbara Schiller, Assistant Director, University Outreach and New Student Programs facilitated a workshop on Admission/Transfer Process.

Lastly, students in attendance were able to gain “STEM Transfer-Insider Tips” through a peer mentor facilitated student panel where research projects, campus involvements, community college transition and helpful advice were discussed. For those applying for fall 2016, this was a great opportunity to learn why CSUF would be a good fit for them.

We would like to thank all those in attendance, who helped make this event a great success!

TRC Presents

By Sandra Ponce, Graduate Assistant

The Transfer Resource Center (TRC) is more than just a space for students to study. This past semester it played host to “TRC Presents”, a workshop series specifically designed to provide support and resources for STEM transfer students from both the College of Natural Science and Mathematics and the College of Engineering and Computer Science. This collaborative effort between (STEM)² and the Career Center proved to be successful in exposing students to various resources and opportunities in their respective disciplines as evident in the attendance for each workshop. (STEM)² Graduate Assistant Carlos Amescua and I co-facilitated the first workshop presenting information on "Study Skill and Time Management". We shared with the students suggestions and tips to successfully study and manage their time for STEM courses and provided schedules for students to practice prioritizing their week. The second workshop was the first of a two part series on Research Experiences for Undergraduates (REU). Part I of the series was co-facilitated by Carlos and myself, where we explained the different types of REU’s available to students and resources to find them. As a follow up, Michelle Ajemian Levy, NSM Career Specialist, presented Part II in the series presenting information on the process to applying for REU’s, providing tips for students preparing their applications and suggestions on how to improve their interviewing skills. (STEM)² looks forward to continue to provide informative workshops for students in the Spring 2016 semester.
I am pleased to introduce the fall 2015 Academic Transition Program (ATP) cohort. These students were active (STEM)² students at our partner community colleges, some participated in the (STEM)² Summer Research Experience program, and now they have successfully transferred to CSUF. Our ATP students major in the STEM fields from the College of Engineering and Computer Science and the College Natural Sciences and Mathematics.

This semester we focused on providing one-on-one advising, college resources, academic workshops, and peer mentorship. Students became familiar with support services at CSUF through our partnerships with Student Support Services, Diversity Initiatives and Resource Centers, Counseling and Psychological Services, as well as the College of NSM and ECS Student Success Teams. Thank you to our campus partners for supporting our ATP students.

We believe that student involvement on campus is critical to the success and retention of students in their majors. As part of ATP, we encourage our students to become an active member in a club within their respective colleges to engage them in campus life and student leadership.

Our ATP students are assigned a Peer Mentor within their major or college to help guide them through their first semester at a four-year commuter campus. Peer Mentors provide support, resources, and encouragement. Most of our Peer Mentors have gone through our multiple programs at the community colleges, Summer Research Experience, Academic Transition Program, and now have come full circle to mentoring other students like them. This semester our Peer Mentors have worked with over 80 students from both (STEM)² ATP and CSUF ATP cohorts.

We look forward to having our last ATP cohort in spring 2016 as we continue to see the community and resources that ATP provides to all incoming transfer students in STEM.

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(STEM)² would like to thank Felipe Salazar, Mentor/Outreach Coordinator, Sam Barrozo, Academic Transition Coordinator and Diana Serna, Administrative Assistant for their work and dedication to mentoring (STEM)² students. Felipe is now a Student Success & Support Program Coordinator at Orange Coast College. Sam continues to advise students as a Retention Specialist for the College of NSM and ECS Student Success Teams. Diana is the Development Coordinator for the College of HHD.

In addition (STEM)² would like to thank Peer Mentor’s Jeff Lopez and Andrea Kuipers for sharing their knowledge and skills to our STEM transfer students. Both Jeff and Andrea are continuing their studies at CSUF while advancing their academic and professional careers through research and other campus involvements.

We wish them all the best.
Hello, my name is Stacy Schkoda; I am a transfer student from Cypress College and a scholar in the Southern California Ecosystems Research Program (SCERP), majoring in molecular biology and biotechnology. In October 2015, I attended and presented at my first national conference- the Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) in Washington DC. SACNAS hosted workshops in PhD preparation, interview skills, careers in industry, and a variety of scientific symposia, as well as hosted representatives from top graduate programs in the country. I was determined to make attending SACNAS the most rewarding and fulfilling experience I could, which could only be done by stepping outside of my comfort zone. Attending SACNAS reaffirmed the value of choosing the right mentors and never losing sight of your end-goal. I left Washington DC with a newfound sense of purpose for my personal, professional, and academic arenas by which I hope to inspire other students to pursue their dreams and follow their passion.

Hello, my name is Jorge Arturo Ibarra González, I am a Citrus College transfer student currently majoring in chemistry, but would like to change my major to Mechanical Engineering. I recently attended the Annual Biomedical Research Conference for Minority Students (ABRCMS) in Seattle, Washington. The conference is designed to encourage underrepresented minority students to pursue advanced training in STEM and provide faculty mentors and advisors with resources for facilitating students’ success. One of the biggest things that I learned from this conference is the importance of networking with professionals in different programs because they can share information on student experiences and how to get into the their programs. A counselor from a medical school shared with me that his school looks for students who not only have good grades but also look for community service hours and extracurricular achievements. Attending this conference was a great experience.

Hello, my name is Issac Magallanes, from October 26 to the 29th, I attended the Society of Vertebrate Paleontology (SVP) Annual Meeting 2015 in Dallas, Texas. At this conference, paleontologists from all over the world join together to present and discuss current research in the field of paleontology through oral presentations, poster sessions, and workshops. This year I presented a poster on my undergraduate thesis work: a study on a fossil walrus from Orange County and its implications for walrus evolution and diversity. In addition, I also attended several oral presentations whose topics ranged from evolution and diversity in the past, to functional morphology and taxonomy. One of the things that I enjoy about attending these meetings is learning about the research techniques and questions that my fellow colleagues engage in. The most exciting among these is the use of 3D technology and its applications for both research and education. Many presenters, including myself, use 3D prints of our specimens to teach and explain our research to each other. Overall, my experience was a great because I got the opportunity to present my research as well as learn from fellow researchers.
California State University, Fullerton (CSUF), a four-year comprehensive university and Hispanic-Serving Institution (HSI), in addition to three of its feeder community colleges, Citrus, Cypress and Santiago Canyon, also HSIs, have all created “(STEM)² - Strengthening Transfer Education & Matriculation in STEM”, a multifaceted project funded by the U.S. Department of Education.

This five-year grant project, awarded in October 2011, is designed to encourage Science, Technology, Engineering, Math (STEM) degrees, retain students in STEM fields, produce more community college STEM transfers to four-year institutions and ultimately, increase the number of Hispanic/Latino and low-income students attaining STEM baccalaureates.

**Cal State Fullerton**
- Dr. Maria V. Dela Cruz, (STEM)² Project Director
- Tatiana Pedroza, M.A., (STEM)² Mentor/Outreach Coordinator
- Carlos Armescua, B.A., (STEM)² Academic Transition Coordinator
- Sarah Elattar, B.S., (STEM)² Administrative Assistant

Dr. Jose L. Cruz, Principal Investigator, Provost and Vice President for Academic Affairs
Dr. Berenecea Johnson Eanes, Co-Principal Investigator, Vice President for Student Affairs
Dr. David Bowman, Principal Administrator, Dean (Interim), NSM
Dr. Mark Filowitz, Co-Principal Administrator, Associate Dean, NSM

**Citrus College**
- Dr. Marianne Smith, Principal Investigator/Project Director
- Karla Lopez, Coordinator
- Dr. My Chau, SI Coordinator

**Cypress College**
- Dr. Richard Fee, Principal Investigator/Dean of Science Engineering and Math
- Yanet Garcia, (STEM)² Program Director/Counselor

**Santiago Canyon College**
- Ruth Babeshoff, Principal Investigator/Dean, Counseling & Student Support Services
- Dr. Jennifer Coto, Coordinator/ Co-Chair of Counseling
- Dr. Phillip Crabill, Counselor/ Co-Chair of Counseling
- Anne Cass, Counselor
- Scott Sakamoto, Professor of Mathematics/ SI Coordinator