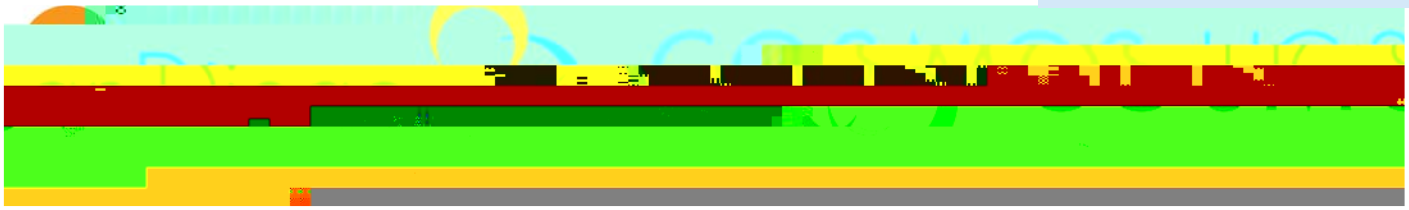

Alumni Newsletter Spring 2014

COSMOS Alumni: This is your newsletter, so let us know what you want to see! Send us your updates, your accomplishments, your photos, anything you'd like to share with your fellow alumni!

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Send us your photos or story for the next issue!

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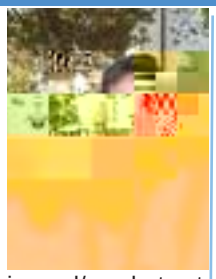
Important Upcoming Dates

COSMOS 2014 Summer Program
UCSD, UCD, UCSC—July 7-August 2
UCI—June 29-July 25

COSMOLYMPICS

Acceptance notifications for the UCSD COSMOS 2014 program were sent to anxious applicants on April 18th. 613 applications were completed for 184 student openings at UCSD. More than half of the accepted students are in 11th grade, overwhelmingly from California (one out-of-state and two international students accepted), slightly more female students and about one-third are receiving financial assistance. The most requested first choice clusters remain Clusters 1 (Computers in Everyday Life), 2 (Engineering Design and Control of Kinetic Sculptures), 7 (Bioengineering/Mechanical Engineering The Amazing Red Blood Cell) and 8 (Tissue Engineering and Regenerative Medicine). New for this year is Cluster 9: Music and Technology with Dr. Mauricio de Oliveira as lead faculty and Dr. Shlomo Dubnov as cluster faculty. Dr. de Oliveira continues as lead faculty for Cluster 7 in addition to Cluster 9. Dr. Robert "Skip" Pomeroy will be lead faculty for Clusters 3 (Living Oceans and Global Climate Change) and 6 (Biodiesel from Renewable Sources). COSMOS Director and ECE professor Dr. Charles Tu will be lead faculty for Cluster 5 (From Lasers to LCD's: Light at Work).

Jack Takahashi, COSMOS 2011, Intel STS 2013 Finalist



Currently attending: Stanford University;
Expected Graduation: 2017
Major: Undecided
COSMOS Year: 2011;
Cluster 8: The Molecular Biology Revolution

What kind of research are you currently involved in, and/or what extracurricular activities and organizations do you participate in?
I'm currently working in the de Jesus Perez lab in the Pulmonary and Critical Care department of the Stanford School of Medicine. My research is on PDGF-related beta cate activation in idiopathic pulmonary arterial hypertension (IPAH). On the side, I'm learning ballroom dance and writing for the Stanford Slipside, a satirical newspaper.
Did you participate in any science-relating competitions or fairs after COSMOS? How did you do?
Intel STS 2013 Finalist; I-SWEEEP 2012 Gold Medal; Synopsys Championship 2012, 1st Place Microbiology
How did COSMOS help prepare you for your undergraduate journey?
My COSMOS cluster gave me a solid foundation in molecular biology that allowed me to work with advanced techniques like qRT-PCR and western blots comfortably. This gave me a leg up when I started research in high school and continues to help me with my research at Stanford. At the same time, COSMOS introduced me to dorm life, so college wasn't a shock for me.
What are your future aspirations?
I plan on earning an MD or MD PhD. I'm not sure whether I want to work clinically or as a physician researcher, but I'm confident I want to be in the medical field.
Do you have any advice for your fellow COSMOS alumni who are still in high school?
Don't stress about where you end up going to college. What you do in college matters more than where you go.
Because of my participation in COSMOS, I am encouraged/inspired to…. explore the sciences an inch wide and a mile deep. COSMOS was great because it allowed me to learn at a high-level while my high school courses were still teaching the basics.

Connor Worley, COSMOS 2013, Macy's Thanksgiving Day Parade- FIRST Robotics

The Macy's Thanksgiving Day Parade® is the beginning of the American holiday season. More than 3.5 million people in New York and 50 million people around the country watch this holiday tradiəon. This year, there was something never before seen in the parade – ROBOTS! Five award-winning FIRST Roboəcs Compeəəon (FRC) teams opened the 87th annual event on November 28, 2013 in New York City, cuǩng the ribbon to signal the o cial start of the parade. The teams spent many hours retro-fiǩng their compeəəon robot from shooəng discs to shooəng confeǩ, and operaəng the scissors to cut the ribbon. One of the parəcipaəng teams, The Holy Cows from San Diego, included COSMOS alum Connor Worley. Following are his impressions:

This Thanksgiving break, I had the opportunity to lead the Macy's Day parade with my FIRST robotics team, The Holy Cows. Along with four other teams we were selected to cut the ribbon and shoot confetti, then drive two and a half mile-long parade route in front of millions of people. When first I heard that our team was selected I was thrilled, but the team quickly realized that we had a lot of work to do.

COSMOS 2014 Intel Scholars presented their projects to representatives from the Intel Corporation on Thursday, March 20, 2014 at an event in the Qualcomm Room at Jacobs Hall. One student from each cluster was chosen as an Intel Scholar during the summer COSMOS program, and all recipients had to reside in San Diego County. Students were paired with a UCSD engineering student mentor, through the Jacobs School of Engineering IDEA Center. Scholars and mentors met in advance of the presentation to polish their project posters and presentation skills. Scholars and mentors both proclaimed that the experience was more beneficial and rewarding than they thought it would be and definitely worth the time spent. The Intel representatives attending were Grace Davis, Director of Corporate Affairs and Sponsor of US Girls and Women Programs At Intel, and Wilberth Escalante-Tamayo and Daniel Ugarte, from the local Intel Office. Each Intel Scholar presented both an oral presentation and poster board of their project and exhibited confidence and knowledge to the audience. The Intel Scholars are: Cluster 1: Khelsey Gozum; Cluster 2: Cristabel Otero; Cluster 3: Joey Uy; Cluster 4: Diego Espinoza; Cluster 5: Marcella Marquez; Cluster 6: Angela Chen; Cluster 7: Brandon Nguyen; Cluster 8: Laura Leon.

By: Alex Rodriguez, COSMOS 2010

Sophomore Year

It was my sophomore year of college and like many Computer Science students, I was looking for a summer internship. I first heard about the

Rajesh Gupta, UCSD CSE Chair, Former Faculty COSMOS Cluster 1 an d COSMOS Supporter

In the movie “Her”, the smart phone operating system, “Samantha”, is so powerful it can carry on conversations that seem to tap into every-thing Theodore sees, th

Keep in touch! Look for our next issue in Fall 2014!

UCSD COSMOS is on Facebook! Link up with us at: