

#### 11 Talented Students and their Summers at USC Keck

This summer the Collaborative for Impact Internships (CII) launched its groundbreaking summer internship program at USC Keck, seeking to connect local high school students with faculty engaged in researching life-changing issues. 11 highly motivated and talented students were selected for the program. These are some of their individual stories about their transformative summer with CII.

"This was worth traveling across the world for... I found my professor inspirational and valued how this was a welcoming space"

# Edward Tran, Ashley Lin & Abraham Niu

Working in the mornings throughout the summer--- Edward, Ashley and Abraham have been working with Dr. Rayudu Gopalakrishna in researching connections between natural



compounds in green tea and stroke prevention. Abraham from Arcadia speaks for the group when he notes just how liberating the new knowledge has been. Ashley describes how "inspiring it is to see his passion for his research... it has motivated me to continue to pursue my dreams". Ashley attends Morrison Christian Academy in Taiwan and notes how CII was worth traveling across the world for. Edward from Gabrielino, notes how he has gained a powerful motivation to learn science and see first hand what were once only dreary tables and repetition. Abraham adds to this, when he laughs describing how he is finally understanding the pesky ATP cell energy cycles that haunted him in freshman year. Dr. Krishna is now encouraging his students to write their own research papers and submit them to the Siemens Competition which holds a \$100,000 scholarship for the winner. He vividly recalls how the first two high school students he mentored became semifinalists and went on to graduate from MIT and CalTech.



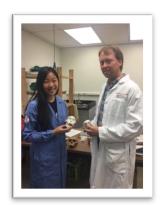




### **Celine Cheng and Sara Maung**

With a delighted face Sara Maung exclaims how she has learned so much in the few weeks since she has begun working with Dr. Kristian Carlson. As a specialist in biomechanics and human anatomy, Carlson connects the study of ancient fossils to our modern day understanding of how the human body functions and develops. Carlson reflects on the delight he gains from seeing how motivated Celine and Sara are in performing the tasks assigned to them. They quickly became core members of his lab and now produce material that help Carlson advance his own research. Carlson is now co-publishing a paper with one of the students, and is enthusiastic about writing them both letters of recommendation. Celine Cheng from Alhambra High School expressed that she finds this to be a great experience in developing her understanding of why she has been working so hard in school.

Celine works with Dr. Carlson to diaitalize his research from East Africa.





"I've learned so much in so many different ways over the past several weeks. This has been an amazing experience."

#### Bianca Lee and Isabella Lau

As an avid computer programmer before she joined CII, Isabella Lau from Gabrielino had no difficulty transitioning into researching with Professor Tea Jashashvili. Working in the Molecular Data Imaging Lab, Isabella has learned how to use numerous programs such as VG studio and other 3D modeling program to assist in research. These programs are used to analyze bones and view cross section of bones. Bianca Lee from Gabrielino has spent her afternoons assisting Jashashvili on a separate project that includes running CT scans, analyzing bones and observing coworkers performing ultrasounds on mice. For her part, Jashashvili has noted how she been inspired to see how hard Bianca and Isabella are working. She is committed not only to mentoring them inside the classroom, but has also decided to teach Isabella how to cook in the department kitchen. She is also planning on taking both Isabella and Bianca on a field trip to the La Brea Tar Pits Museum. This is an example of how an internship at CII can become a very personal experience that extends far outside of the laboratory.



Isabella Lau in the Digital Molecular Imaging Lab.

## Akhil Paladugu, Veronica Yu and Alyssa Liu

Akhil, Veronica and Alyssa work with Dr. Gopalakrishna in the afternoons. Akhil from Arcadia High School immediately noted the real connections he found between the lab work and what he had learned in AP Biology. Veronica from Arcadia noted how the experience made her look forward to possibly attending USC, and echoed the statement of many students when she noted how she valued being able to shadow the undergraduates. Working alongside these individuals who are several years ahead of them was a very valuable experience to hear their experiences. Alyssa Liu noted how the experience was very different from what she had experienced in AP Biology. The research is much more task-driven, and requires learning what the professor already knows. Through literature reviews and marking up sources, the goal is to build a background that can have practical utility in the lab.









Throughout the summer, we watched our students having fun as well as becoming immersed in a graduate university setting. We crafted our placements, so most students were in close proximity to each other, and also so students had access to USC undergraduates as mentors. All CII internees get a well-rounded, balanced experience and we are proud of making it accessible for ordinary families.