The Magic of the Physical Sciences Undergraduate Mentoring Program

The program that helps anteaters imagine and create brilliant futures is celebrating its 20th anniversary.

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UC Irvine alumnus Stephen Chen, who's a product of the UCI Physical Sciences Undergraduate Mentoring (PSUM) program, shakes hands with President Barack Obama at a White House state dinner. It was wisdom Chen received through PSUM that helped lead to this moment.

Picture Credit:
The White House

When you're a mentor and you give a mentee advice, it can be hard to know exactly how the advice you just gave will go on to help your mentee.

Not so with UCI Department of Chemistry alumnus Aaron Katzenstein and his mentee, Stephen Chen, who Katzenstein met through the UCI School of Physical Sciences' Undergraduate Mentoring (PSUM) program.

Chen wanted to apply for a competitive internship where Katzenstien works at South Coast Air Quality Management District in Diamond Bar, and, hearing this, Katzenstein encouraged Chen to not only submit an application through an online portal, but to also mail a paper cover letter and résumé to the AQMD board members involved in the intern selection process.

Chen took the tip to heart and he mailed a physical copy of his internship application.

Chen got the gig.

But, that's not where the impact of Katzenstein's mentoring ends.

Later, in 2014, President Barack Obama gave the commencement speech at UCI's graduation ceremony at Angel Stadium in Anaheim. Chen heard Obama's speech, and he was so moved by it that he wanted to show President Obama his appreciation.

But instead of writing an email, Chen pulled out his pen and hand-wrote a letter and sent it to the White House. He thanked President Obama for taking the time to speak at his graduation and shared that he would be working in the air quality space immediately after graduation.

"I told him he probably wouldn't get a response," Katzenstein recalled saying.

Indeed, over a year passed, and Chen all but forgot about the letter.

But then he got a call from the White House. They thanked him for his letter, and offered him an invitation to a White House state dinner where President Obama would be hosting dignitaries like the President of China, Xi Jinping and Facebook co-founder Mark Zuckerberg.

“I was so surprised,” said Chen, who now works as a Strategy Consultant in New York City. Chen found out later that “I was the first person to be invited to a state dinner during Obama’s administration as a result of a letter.”

Chen’s employer at the time, environmental engineering firm HDR, covered nearly all travel expenses for Chen and his mom to go.

“I give a lot of credit to that mentor program,” said Chen.

Such is the magic of mentoring. It’s part design, where a mentor like Katzenstein shares wisdom with a mentee he knows is useful, and it’s part alchemy, where a mentee like Chen takes that wisdom to heart and uses it to create a future that neither he nor Katzenstein could’ve imagined.

That magic was there at the start of the PSUM program, too, back in 2002 when Professor Ronald Stern was Dean of Physical Sciences. A UCI Department of Physics & Astronomy alumnus, Ryan Hill, received a letter from UCI asking Hill for a donation.

Hill had some ideas about how the university might engage more strategically with its alumni, and he emailed Stern about it. Stern invited Hill, who still lived in Southern California, to campus where the two met at the University Club and, in their exchange, discussed what would go on to become PSUM.

“What should alumni relations with the school even look like?” Hill recalled his meeting with Stern working to address. According to Stern, Hill was not the only Physical Sciences alumthat had similar thoughts. A few weeks later he brought about half a dozen alumni together along to begin creating the program.

For Hill, being a good mentor is more than just giving tips on résumé writing and network-building. It’s about building trust with your mentee and about helping them learn how to take care of themselves physically and emotionally before they turn their focus to their careers.

And for Hill, mentors get as much out of the program as mentees. “I’ve been in awe by how much I’ve been given back doing this,” he said.

PSUM mentor Tiffany Awischus, who graduated as a chemistry major in 2010, thinks being a good mentor means encouraging mentees to step out of their comfort zones – something she did when she was an undergrad. When she was a student, she explained, she showed up at the lab of one of her professors, Eric Potma, asked about his research and asked if she could be an undergraduate researcher in his lab.

“I think Eric saw the passion and interest I had and decided to take me into his,” said Awischus, who landed the position. “I am a believer in always stepping out of your comfort zone daily to foster growth.” It’s wisdom that Awischus now works to pass on to her own mentees when she encourages them to step out of their comfort zones.

PSUM fosters the transfer of inspiration between generations of Physical Sciences anteaters. Hill was there at PSUM’s beginning, and Department of Earth System Science alumna Nicole Larson is here 20 years later, just beginning her path as a mentor.

“PSUM has been a lot of fun so far,” said Larson. “One of my mentees is currently applying to graduate programs, and I just went through that process last year. My other mentee is looking to learn about different career paths within the environmental field. I hope to help ease their transition out of undergrad and be a source of encouragement. I also want to help prepare and encourage women entering male-dominated fields, and I’m sure I’ll also be learning a lot from my mentees.”

Perhaps the most important ingredient in finding the kind of success PSUM can help create is to “just show up,” Chen said. “Be present in what you do, and don’t turn away opportunities because you want to be comfortable.”

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