



**Academic Innovation and the American Research University  
Symposium**

University of California, Merced  
November 13, 2009

**Panel 1: Undergraduate Education and the Research University**

[Sung-Mo "Steve" Kang, Ph.D.](#)

Chancellor

School of Engineering, Distinguished Chair Professor  
University of California, Merced

**UC MERCED  
FORMER ACTING  
CHANCELLOR,  
RODERIC PARK,  
PH.D.**

Next we will hear from Chancellor Kang.

**CHANCELLOR;  
PROFESSOR OF  
ENGINEERING, UC  
MERCED.  
SUNG-MO "STEVE"  
KANG, PH.D.  
CLOSING REMARKS**

Thank you. I already made my pitch in the beginning, but as a research university, I do believe that undergraduates included. The research Merced is getting even undergraduate students involved in professors' research lab, working side by side with graduate students, and in many, many cases, in my own faculty experience, students build the bridges. I remember one student I had, a brilliant female student, and she worked with three professors. And she was able to communicate with all three professors, correcting some professors even. So I think that is the right environment for students to really become a pioneer student, to learn new things. And such students can explore in their world what other people have not discovered.

So that's the spirit that I like to promote on our campus as a research university, still small environment. And I give you one example, for instance. Sometimes even unstructured learning can be very significant learning. When I was department head at Illinois, we invited distinguished alumnus, and then invite them to a lecture. One of them was army research labs, the director. And there was a major general. And he came and related this experience. When he was a student, he, in the middle, had to be drafted. And then went to army and then came back. When he came back after several years, his experience was upside down. What he took was no longer valid as a prerequisite. He had to beg his professors, you know, to allow him to enroll in some courses. And they kindly did.

And what he did in the meantime was soon after lecture is finished, he was not really prepared. He rushed to the library, did all the literature search, and then made up what was deficient in his background. That experience was enormously successful. When he went out and worked in army, he was the first one who find new information. That's how he advanced himself, to become, really, research head in the army research lab.

And I think that's the opportunity that UC Merced is providing. We are still not structured. Yes, we, we lack many areas, but our students as pioneer students, have a unique opportunity to create, you know, student activity chapters or even some study groups. Also welcoming a lot of different professors.

I think I would hire them if I'm the lab, the HP lab director, because these are students who really pioneered and went through discovery courses. So it's important that, as a research public university, we really encourage students learning even outside the classroom in our professors' lab. So, you know,

by giving, really, direction, and then encouraging them to explore a lot of things, and they will be the one who can really be good to contributing citizens of tomorrow's world. And even I was at Illinois with Mark Kushner who is now at Michigan, he was eminent scholar in this one field. Some of you may know he's a Cal Tech and a private physicist and he had 20, 30 students in his research group. But every research meeting he had on a weekly basis, he would invite students to teach in them, although he probably knew a lot of stuff. And you know, this is like a common research thing that we should promote, including undergraduate students and graduate student. And what I remember to this day, is like a project idea as an undergraduate. I never forget that. But other lectures I learned in the classroom, I forgot all. So as we promote research, I think students will have in-depth learning, in-depth remembrance of what they have done and that is really building the basis for their future career. Thank you.