Academic Senate Chair André Knoesen Fall 2015 Convocation Remarks

- Hello everyone. Thank you friends, family and employees of UC Davis for participating in today's convocation.
- On behalf of the Academic Senate and its faculty, I welcome all the graduate, undergraduate students and faculty new to the Davis campus.
- It is an honor for me to have been asked to speak today and now Vice Chancellor Lewin has given us a bigpicture view of research at UC Davis, I wanted to say a few words about research from a faculty member's perspective.
- I came to UC Davis about 30 years ago because I knew it was a first-rate research university and a place where I

would not only be able to teach bright students, but that I would also be able to collaborate with other faculty in an new emerging area at the time known as molecular electronics.

- The fundamental discoveries that occurred in the late eighties in molecular electronics, led to the organic light emitting display now so widely used in electronic watches and other consumer electronics.
- I have had a wonderful career here, but I confess to getting a little frustrated at times because it seems a lot of people are confused about exactly what a faculty member at a research university like UC Davis does.
- Even Governor Jerry Brown, in public comments during last year's budget negotiations with the Legislature, suggested faculty spend too much time on research no one cares about and too little time teaching undergraduates in the classroom

- With all due respect, Governor, that is simply not the case.
- Let me first stipulate that the kind of basic research most of us at universities engage in is time consuming. In research, trial and error, failure and false starts go with the territory.
- But basic research at places like UC Davis had led to amazing discoveries with tremendous value to society.
- Breakthroughs like the laser, magnetic resonance imaging, the internet and so much more all were born in university research labs.

- At UC Davis, our researchers have found a strand of rice resistant to catastrophic flooding, our faculty have rapidly identified the compound in cat and dog food that was killing pets and infants in parts of the world, and UC Davis faculty have developed just about all the different strawberry varieties you see at the supermarket.
- Our researchers have made breakthroughs in how we treat cancer, HIV and other dangerous diseases and I am convinced if we ever find the exact cause and a cure for autism, it will be discovered at the Mind Institute on the Sacramento Health System campus.
- Our lab breakthroughs help humanity, create jobs, build companies and bring revenue into the university that allows us to be the land grant university of the 21st Century.

- A faculty member holds expertise in specific areas of a discipline and performs research to create new knowledge and understanding.
- And here is the part that sometimes gets overlooked in the media and elsewhere— in the process of doing research, we teach, a lot.
- As part of doing research at UC Davis, we are teaching our graduate and post-doctoral students how to become researchers and to excel at their work.
- It is exactly the interaction with our students in research that excites a faculty member at UC Davis.
- Faculty teach graduate students and postdocs how to become independent researchers in their chosen area of specialization.

- The teaching is done in small groups and typically oneon-one. In other words, not all teaching takes place in big undergraduate lecture halls.
- As faculty, we also teach our graduate students to know how to separate the wheat from the chaff when it comes to information and knowledge.
- With the Internet becoming as pervasive as it is today, there has been a flood of information and source materials.
- So there is a lot of noise out there that is not based on verifiable fact. One big role of the faculty researcher, now and in the future, is to cut through the noise and learn what is truly occurring and why, and to discuss our findings in an unbiased way.

- Imagine the shape we'd be in if we did not have researchers at public universities like UC Davis playing this role.
- We also train and teach our students to be comfortable collaborating across disciplines. This may sound like a small thing, but in reality it's really the entire ballgame.
- Virtually all the big challenges we face today, from fighting disease to climate change and feeding the world's growing population, require the ability to collaborate across disciplines.
- It is essential for graduate students to be able to explain concepts and advance ideas in their field of specialization in ways that transcend their own disciplines.
- UC Davis is becoming known for collaborative and multidisciplinary research.

- Along with the ability to think critically and ask the right questions in their area of expertise, learning how to work in multidisciplinary research teams maybe the most important skill our graduate students take with them when they leave UC Davis.
- The knowledge faculty develop in doing research is also translated to the undergraduate classroom because we use our expertise to inspire undergraduates with the curiosity and joy of discovering new knowledge.
- And while we make use of technology where it makes sense, in teaching, technology must never become a substitute for personal contact between faculty and students. In-person interaction between a faculty member and students is a necessary element in teaching and it's why students come to a school like UC Davis.

- So you see, research and teaching are not either-or scenarios. They go together. And together, they form the foundation of the strong scholarship that has given UC Davis a global reputation for excellence that attracts students from all over California and the world to our campus.
- After all these years, I still find it exciting to work with students because on a daily basis I interact with younger generation students who will develop new ideas, new ways to communicate, and new ways to seek, present and use information.

• This is what keeps me going and I could not be prouder about working at this outstanding public research university, where I still love searching for solutions to challenges and teaching bright students how to find their own answers to new questions.

Thank you all very much.