



## FACULTY SPOTLIGHT

# STEVEN KNAPP

I grew up on Nellis Air Force Base in southern Nevada and graduated from high school in Las Vegas. My mother and father were from White Creek, New York and Bennington, Vermont. My mother grew up on the family farm. Her generation was the last to live and work on the family farm and in agriculture, although one of my cousins operated a dairy farm and another 'tapped' sugar maples and produced maple syrup for many years, a source of great pride for me. When I was growing up I cherished rare visits to Vermont and spending time on the family farm with my grandmother. I suppose that was where I got my agricultural roots.

I spent a year or so at the University of Nevada, Reno drifting 'undeclared' before deciding to study horticulture and plant science. The summer after graduation I was looking for work and fortuitously landed part-time summer work with Boyd Hartman, an alfalfa breeder for the USDA-ARS. I had no idea what I was going to do with my life. When Boyd told me that I ought to go to graduate school and study plant breeding, I am pretty sure I had no idea what plant breeding was. Two months later I was enrolled in graduate school and studying plant breeding. Many colleagues have shared similar stories with me over the years.

I subsequently went to the University of Nebraska to study plant breeding with Bill Ross, a grain

sorghum breeder, Charlie Gardner, a corn geneticist, and Walter Stroup, a statistician and one of the founders of mixed model theory and SAS PROC MIXED. I was trained in classic quantitative genetics, biometrics, and plant breeding and gained experience in graduate school with genetic and cytoplasmic-genic male-sterility systems, inbred line development for single-cross hybrids, heterotic groups and patterns, recurrent family selection, and experiment design and analysis. The year I finished graduate school a new technology emerged that changed everything: restriction fragment length polymorphisms. RFLPs rapidly gained a foothold in plant genetics and became one of the cornerstones of the molecular breeding movement in plant and animal breeding. I got swept up in the movement along with everyone else and have been evolving along with the technology and concepts ever since.



Since graduate school I have lived and worked in California, Oregon, and Georgia. I was on the faculty at Oregon State University for 19 years and University of Georgia for five years. The last five years I worked as a research director in the vegetable seed industry in Woodland, California. This gave me the opportunity to travel and work with colleagues around the globe. I have collaborated and worked with several University of California, Davis faculty over the years and was honored to have the opportunity to return to academic life, lead the strawberry breeding program, and participate in teaching and research as part of the Plant Breeding Center and Department of Plant Sciences.

I am an avid cyclist and love sailing. Sherine and I have several sailing adventures planned in the tropics over the next several years, nothing too wild and no blue water.

- Steven J. Knapp  
[sjknapp@ucdavis.edu](mailto:sjknapp@ucdavis.edu)

## UC DAVIS NEWS

### HOW GENETIC ENGINEERING CAN FIGHT DISEASE, REDUCE INSECTICIDE USE AND ENHANCE FOOD SECURITY: PAMELA RONALD SPEAKS AT TED2015 TEDBLOG

Pamela Ronald is here to talk about her work as a plant geneticist, about her work “studying genes that make plants resistant to disease and tolerant of stress.”



But first, she'd like to introduce us to her husband. “This is Raoul. He's an organic farmer,” she says. “People say, ‘Really? An organic farmer and a plant geneticist? Can you agree on anything?’ Well, we can. Because we both have the same goal: we want to help nourish the growing population without further destroying the environment.”

[>>>read more](#)

## RELATED NEWS

### LEE FOUNDATION SCHOLARSHIPS AVAILABLE FOR PROMISING RICE SCIENTISTS SEEDQUEST

Ph.D. scholarships in fields allied with the rice sciences are now available for South and Southeast Asian students. Grantees will work with some of the world's leading agricultural scientists committed



to reducing poverty via food security in the rice-consuming and -producing world. These scholarships are made possible by support from the Lee Foundation Rice Scholarship Program through the International Rice Research Institute (IRRI).

Interested students must apply online on or before 30 April 2015.

“This exciting new program will offer students in South and Southeast Asia a unique opportunity to gain an excellent education in a key area of rice science and be part of helping ensure Asia will never have an empty bowl again,” said IRRI Director General Robert Zeigler, referring to projected massive famine in the region in the 1970s that was averted by farm productivity gains of the Green Revolution.

[>>>read more](#)

## OPPORTUNITIES AND EVENTS

### 2015 ANNUAL UC DAVIS PLANT BREEDING SYMPOSIUM APRIL 10TH, 2015 STUDENT COMMUNITY CENTER [Register here.](#)

---

### THIRD THURSDAY 4:00-5:30PM, APRIL 16TH, 2015 PROFESSOR EMERITUS CAL QUALSET AGRONOMY FIELD SITE BETWEEN HUTCHISON AND RUSSEL, NEAR OLIVE TREE LANE

This month, Cal Qualset will be leading our seminar at the old Agronomy field site. Cal will be showing wheat and barley genetic resources and talk about breeding strategies with some lessons learned during 40 years of cereal crop breeding. If you intend on taking a vanpool, **you must register** to ensure we have enough space. Others who find their own transportation need not register.



Register for vanpool [here.](#)

---

### PLANT BREEDING FOR FOOD SECURITY: THE GLOBAL IMPACT OF PLANT GENETICS IN RICE PRODUCTION THURSDAY, MAY 28TH, 2015 8:30AM-4:30PM UC DAVIS CONFERENCE CENTER

The Plant Breeding Center, and the Confucius Institute of UC Davis are pleased to announce the Khush Symposium: “Plant Breeding for Food Security: The Global Impact of Plant Genetics in Rice Production,” a symposium honoring Dr. Gurdev Khush.  
Register [here.](#)

---

### EUCARPIA WORKSHOP ON IMPLEMENTING PLANT – MICROBE INTERACTION IN PLANT BREEDING JUNE 25TH-26TH WEIHENSTEPHAN, GERMANY [MORE INFORMATION HERE.](#)

---

### NAPB 2015 WEBINAR SERIES THE SCIENCE OF SELECTIONS APRIL-MAY 2015 [FOR MORE INFORMATION CLICK HERE.](#)

If you'd like information featured in the newsletter, or would like to be added to the mailing list, send an email to:

Program Representative  
[Amanda Pietras](mailto:ampietras@ucdavis.edu) - [ampietras@ucdavis.edu](mailto:ampietras@ucdavis.edu)  
Director  
[Charlie Brummer](mailto:ecbrummer@ucdavis.edu) - [ecbrummer@ucdavis.edu](mailto:ecbrummer@ucdavis.edu)  
Associate Director  
[Allen Van Deynze](mailto:avandeynze@ucdavis.edu) - [avandeynze@ucdavis.edu](mailto:avandeynze@ucdavis.edu)