

Undergrad Research, Winterkill, Washington Wine

Posted by [steven.reynolds](#) | January 14, 2009

Undergrad Co-authors Paper in Nature

WSU's commitment to undergraduate education and research paid off recently for former undergrad Kayla Ann Simons. She was one of seven coauthors of an article in *Nature*, the international journal of science, for her contribution to a WSU research project on disease resistance in plants.

To be named as an author in a scientific journal such as *Nature* is a great accomplishment for anyone, especially an undergraduate, said Joe Poovaiah, WSU Regents professor and director of the lab in which Simons worked. In his 33 years in the horticulture department, Poovaiah has had many undergraduate students work in his lab, but Simons is the only one who has earned an authorship in a *Nature* publication.

"Her dedication to details got everyone's attention in the lab," Poovaiah said. "The challenge of complicated experiments did not scare Kayla."

Simons earned a perfect score and became responsible for the safety of other students working with radiation in the lab. She received funding from WSU's Center for Integrated Biotechnology and Department of Horticulture as well as the National Science Foundation Research Experience for Undergraduates program to continue research through three summers.

Poovaiah said he and his colleagues were able to "nurture Kayla's talent" while

she assisted them in a “world–class project” on plant disease resistance. “I got lab experience early on in my undergraduate career,” Simons said. “When I took biochem, that lab experience really helped.”

The fact that students get paid to learn makes working in a university laboratory a “win–win” situation, she said. The experience taught her “critical thinking skills that transcend any discipline.”

Simons has yet to decide what she wants to do after graduating with her master’s degree in pharmacy, but she has thought about conducting research in clinical trials with human patients.

“I don’t think my thirst for knowledge will ever be quenched,” she said.

For more information on the Poovaiah lab’s work on plant–disease resistance, see the lead article in last week’s issue of *On Solid Ground*: <http://tinyurl.com/7p8kwc>.

–Bethany Carpenter, Marketing, News, and Educational Communications Intern



Joe Pooviah, left, Liqun Du and Kayla Ann Simons with some of the plants that have been the focus of their research on disease resistance. Photo by Robert Hubner, WSU Photo Services.

WSU Scientist Urges Concerned Wheat Growers to Test for Winterkill

Eastern Washington’s winter wheat crop experienced high winds and prolonged subzero temperatures during the third week of December.

“This is a big concern for farmers who did not have snow cover on their fields,” according to William Schillinger, a research agronomist at WSU’s Dryland Research Station here. “If the farmers had snow cover, they’re alright, but a lot of ground was not covered.”

If a grower wants to estimate cold damage, Schillinger recommends digging

up a representative sample of plants, making sure the crowns remain intact. Clip roots off within one-quarter of an inch of the crowns. Wrap plants in wet paper towels and place them in zip-lock bags to prevent dehydration. Put plants in a refrigerator for 24 hours, then remove from the refrigerator and leave at room temperature. If the wheat plant is alive, regrowth should begin within four days.

Although a particular wheat variety may achieve considerable hardiness by early winter, warm temperatures will cause plants to lose some of their winter hardiness, Schillinger said. “Winter wheat begins to grow as the temperature rises, taking up water from the soil. Water dilutes the cell solute concentration or antifreeze, rendering the plant more susceptible to cold injury. For this reason, rapid onset of arctic temperatures is more damaging to non-hardened plants than hardened plants.”

For more information, contact William Schillinger at schillw@wsu.edu.



Dead, damaged, and healthy crowns of winter wheat. (Photo: Timothy Smith, WSU Lind Dryland Research Station)

A Celebration of Washington Wines

The eighth annual “A Celebration of Washington Wines” black-tie dinner and gala auction takes place January 24 at the Chateau Ste. Michelle Winery in Woodinville.

Proceeds from the auction benefit the WSU Viticulture and Enology program.

Last year’s auction grossed over \$200,000, with proceeds dedicated to establishing an endowed chair for the V & E program. Internationally renowned enologist Thomas Henick-Kling was recently hired as director of the program.

To those of you planning to attend this year’s auction, CAHNRS Dean Dan Bernardo offers this advice: “Bid early and bid often.”

Tickets are still available for the gala. Learn more by visiting

<http://tinyurl.com/8cbwer>.



Bid early, bid often! Your participation in A Celebration of Washington Wines helps support research and education in WSU's viticulture and enology program.

For more information about viticulture and enology at WSU, please visit: <http://wine.wsu.edu/>.

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