

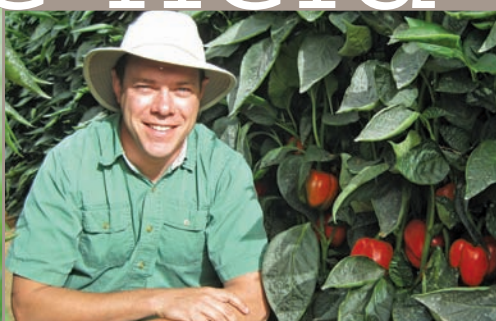
## in the field



Roger Freeman



Paul Gepts



Brian Just



John Navazio

**Roger Freeman** PhD'82 Plant Breeding and Plant Genetics • Roger Freeman, based in Brooks, Oregon, is the senior carrot breeder for Bayer Crop Science Vegetable Seeds. Since he began breeding carrots in 1982, Freeman has developed more than 50 carrot hybrids that have been used in the production of several billion dollars' worth of commercial carrot crops. In addition to developing new carrot varieties for the North American market, Freeman has developed hybrids for international markets around the world, including Europe, China and South America. "Food production is a common global language," says Freeman regarding his efforts. Freeman cherishes his time at CALS for the opportunity it gave him to learn about plant breeding and work alongside several esteemed faculty and staff members. In his free time he enjoys outdoor nature activities and especially spending time with family.

**Paul Gepts** PhD'84 Plant Breeding and Plant Genetics • As a professor of plant sciences at the University of California, Davis, Paul Gepts focuses his research and teaching on plant breeding. His bean breeding program serves as a platform for researching such topics as crop evolution and domestication. Gepts is interested in the transition from hunting and gathering to agriculture, and the effects of that transition on biodiversity. CALS' Plant Breeding and Plant Genetics program was Gepts' first choice for graduate studies, he says, noting that he was attracted to both the faculty and the broad spectrum of disciplines available for study. Teaching and research take up

most of his time, but Gepts has applied his interest in plants to his personal life as well. His family has recently converted the lawn of their home, which once served as grounds for their son's soccer training, into a flower garden that's attracting many local pollinators.

**Emily Haga** BS'08 Horticulture, MS'11 Plant Breeding and Plant Genetics • Based in Waterville, Maine, Emily Haga is a plant breeder for Johnny's Selected Seeds. Her work entails developing new varieties of tomatoes and lettuce to support the needs of small-scale farmers who participate primarily in local markets. The opportunity to apply her passion for food, farming and science to develop solutions for problems faced by local farmers has been most satisfying to Haga. As an undergraduate at CALS, Haga participated in two independent research projects—one concerning plant flowering times, the other an evaluation of pepper germplasm for adaptation to Wisconsin's short growing season—that gave her hands-on experience in her intended field. As a master's student, Haga conducted a multiyear field study on early blight resistance in potatoes. Haga's time at CALS exposed her to a wide range of disciplines within the field and provided her with skills that she draws on each day as a member of the seed industry, she says.

**Brian Just** PhD'04 Plant Breeding and Plant Genetics • Brian Just is a sweet pepper breeder for Monsanto. His work, based in Felda, Florida, aims at developing new varieties of sweet peppers with improved yield, quality and disease

resistance. Much of his time is spent in fields and greenhouses observing the development of different varieties of peppers, as well as conducting lab tests to analyze those varieties. Just's career has called for him to work in different markets around the world—and being a good plant breeder, he says, requires not only knowledge and experience but also strong cultural competence and compassion for diverse needs. Just maintains strong collaborative relationships with fellow Plant Breeding and Plant Genetics alumni. Outside of work, he enjoys spending time with his family and is eager to learn to fish the waters of southwestern Florida.

**Jason Lilly** MS'98, PhD'00 Plant Breeding and Plant Genetics • Jason Lilly serves as vice president of corporate development at the Neogen Corporation, a food security company in Lansing, Michigan, where he has worked for nearly a decade. Lilly is responsible for the company's mergers and acquisitions as well as identification of new technology platforms for the agrigenomic and diagnostics businesses. Lilly's knowledge of agriculture and genetics, and the laboratory experiences he gained at CALS have been vital to his ability to successfully oversee the company's identification and integration of new technologies and potential acquisition targets. Lilly credits his success in acquisitions to the broad knowledge base he developed at CALS. He also values the opportunities he had to learn how to troubleshoot complex problems, develop solid communication skills with other students and faculty, and be

# Alumni from Plant Breeding and Plant Genetics

—By Claudia Roen



Emily Haga

Jason Lilly

David Mies

Flor Rodriguez

Mark Sorrells

part of diverse teams—experiences that have helped him in both the academic and corporate worlds. Lilly and his wife, Dana Tatman MS'00, enjoy classic cars, gardening, and spending time hiking and rafting at national parks.

**David Mies** PhD'78 Plant Breeding and Plant Genetics • David Mies recently retired from a 35-year career with Syngenta. Throughout his time there, Mies' knowledge as a plant breeder and geneticist was instrumental to projects that included global corn breeding efforts, control of European corn borers through transgenic processes, and the development of Syngenta's corn breeding program in China. Mies fondly remembers opportunities to collaborate with Chinese scientists. Interviewing, hiring, training and empowering prospective members of the Syngenta Corn Breeding Program offered Mies not only the opportunity to learn "passable" Mandarin, he says, but also the chance to foster international professional relationships. Mies is still very much involved in international agriculture as a plant breeding consultant. Mies' time at CALS instilled in him an ability to think outside the box as well as the value of continuing education, which he notes is mandatory to staying relevant within the field. In his free time Mies says he enjoys "creating things and fixing things that are broken."

**John Navazio** MS'94 PhD'94 Plant Breeding and Plant Genetics • John Navazio is a senior scientist with the nonprofit Organic Seed Alliance, which seeks to promote the ethical development of genetic research within the seed indus-

try. He's also an Extension specialist with Washington State University. Both positions entail training farmers and students in organic seed production and in participatory, on-farm plant breeding. Navazio works in partnership with farmers and students to develop crop varieties that have been adapted to resist environmental stresses. His work also aims to improve vegetable crop varieties in terms of nutrition, texture, and heat and drought resistance. In his spare time Navazio plays guitar for The Pheromones, a rock band that plays local barn dances and organic farming conferences.

**Flor Rodriguez** PhD'08 Plant Breeding and Plant Genetics • Prior to beginning her doctoral program, Flor Rodriguez served as a research assistant for the International Potato Center (Spanish acronym: CIP) based in her native Peru. After receiving her degree, she moved to Chile to work at the Instituto de Investigaciones Agropecuarias (INIA-Chile). As a potato molecular breeder, she was responsible for implementing molecular marker-assisted selection for resistance to potato pests and diseases as well as for nutritional and health-promoting components. Later she returned to CIP as an international scientist. In that position she supports CIP's mission to improve food security and community well-being, primarily by working with impoverished farmers in developing countries. Her work involves assessing and improving the genetic diversity of eight Andean roots and tubers, in addition to potatoes and sweet potatoes, using molecular tools to increase the

## About *In the Field*

These alumni represent the depth and breadth of alumni accomplishments. Selections are made by *Grow* staff and are intended to reflect a sample of alumni stories. It is not a ranking or a comprehensive list. To read more about CALS alumni, go to [www.cals.wisc.edu/alumni/](http://www.cals.wisc.edu/alumni/)

Know a CALS grad whose work should be highlighted in *Grow*? E-mail us at: [grow@cals.wisc.edu](mailto:grow@cals.wisc.edu)

quantity and quality of crops and yields. CIP's efforts include research to combat vitamin A deficiency by introducing orange-fleshed sweet potatoes to communities that would otherwise continue to consume mainly white sweet potatoes. These varieties grow quickly and prolifically under most agroecological conditions—and they taste good to children, who are most vulnerable to malnutrition.

**Mark Sorrells** PhD'77 Plant Breeding and Plant Genetics • Mark Sorrells serves as a professor and chair of the Department of Plant Breeding and Genetics at Cornell University. As a teacher, researcher and Extension educator, Sorrells seeks to improve the nutritional quality of grains, including wheat. Sorrells has released or co-released more than a dozen grain varieties, including barley, wheat and oat, for the northeastern region of the United States. As a CALS student Sorrells developed a depth of knowledge of breeding methods under the direction of corn breeder John Lonnquist, whose training provided a strong foundation for the work Sorrells continues today. Although his work keeps him very busy, Sorrells enjoys gardening and participating in triathlons.