MINDING BUSINESS—UI Caldwell facility helps food industry, mom & pop businesses

CONTACT DREW DALGETTY at dalgetty@uidaho.edu or JAMES TOOMEY at jtoomey@uidaho.edu

VISIT THE UNIVERSITY OF IDAHO’S CALDWELL FOOD TECHNOLOGY KITCHEN any weekday and you may find a dozen people canning spicy Dilly Beans while nearby another group packages Cowboy Tom’s pancake mix made with the freshest wheat, both for regional distribution. At any time, some 60 start-up Idaho food processing clients count on the fully equipped Caldwell facility for guidance in everything from processing and packaging, product development, safety, and testing to employee training and marketing.

“An individual can make and package her product here for $250 for 3 or 4 days use of the kitchen each month, compared to $2,000 at a comparable commercial facility,” says Drew Dalgetty, director of the UI Food Technology Center (FTC).

Pilot plant helps fund food start-ups. Next door in the pilot plant, opened in 2005, UI food scientists conduct research for large manufacturers including J.R. Simplot Co., Novozymes, DuPont, Bayer CropScience, BASF, and Syngenta. The plant also works with agricultural chemical companies to assess the fate of their products during commercial food manufacturing processes and to ensure that their products meet federal safety standards.

“The pilot plant generates enough income to make us self-sustaining,” says Dalgetty. Fees from big corporations help sustain smaller start-ups using the kitchen. The Caldwell complex has expanded from one employee in 2003 to seven today, four of them part-time.

Winemakers here, too. Three wine bays round out the university's Caldwell complex. “Winemaking is a capital-intensive business,” says James Toomey, director of the UI Business and Technology Incubator. “The incubator offers affordable access to climate-controlled production and storage space.” Newest tenant is Chuckar Cellars, a teaching winery operated by Treasure Valley Community College’s viticulture program. “As people complete the TVCC program, they can apply to rent one of the incubator wine bays,” says Toomey. Wines produced on site include signature wines of the Snake River Valley AVA, the Rhone varietals syrah, viognier, and reisling and wines such as chardonnay, merlot, and cabernet blends.

University of Idaho wins $20 million grant to head off climate change impact on NW grain

CONTACT SANFORD EIGENBRODE at sanforde@uidaho.edu. Also see www.uidaho.edu/edComm

A $20 MILLION GRANT—the largest in the history of the University of Idaho—funds Idaho, Washington, and Oregon scientists to better understand potential impacts of climate change on the Pacific Northwest’s wheat and barley production.

The three states produced more than $700 million worth of the two grains in 2009, according to U.S. Department of Agriculture statistics. The Northwest grew 13 percent of the nation’s wheat and 80 percent of the country’s soft white wheat exports.

One of three major regional agricultural investments announced February 18, 2011, by the USDA’s National Institute of Food and Agriculture, the grant calls on the University of Idaho to lead research into understanding and planning for changing climate patterns in the Pacific Northwest, which scientists believe could be both warmer and involve more variable precipitation patterns. Two other similar regional grants are based in Florida and Iowa. Scientists from all three projects will share resources and findings.

Vision. The long-term vision for the project is to create a comprehensive and extensive infrastructure to support research, outreach, and education that will sustain agriculture in the Northwest during and long continued on backpage

NW food processing businesses hold their own during recession

CONTACT DENISE SMITH at denisesmith@uidaho.edu

THE NORTHWEST’S FOOD PROCESSING industry weathered the worst of the recent recession in better shape than many industry sectors, said Denise Smith, new director of the School of Food Science operated jointly by the University of Idaho and Washington State University.

“We’ve come through the recession well because everyone has to eat,” Smith said. The recession also helped underscore the importance of a strong agriculture and food industry in both states. “It’s huge. Idaho, in particular, is focusing back on some of its core businesses, which include agriculture and food processing,” Smith said.

Since arriving on the job in November, Smith has traveled to the UI’s Food Technology Center at Caldwell and to Washington State University’s centers.

Smith took the job after leading Ohio State University’s food science department. She leads a combined faculty of 25 scientists. The UI-WSU food science program ranks among the nation’s Top 10, and nearly all graduates have found good jobs in recent years.

DID YOU KNOW?

$6.7 BILLION
ESTIMATED GROSS RECEIPTS FROM IDAHO’S FOOD PROCESSING SALES IN 2010. IN 2009, IDAHO’S 304 FOOD PROCESSING BUSINESSES EMPLOYED 16,184 PEOPLE.

Source: Idaho Department of Labor, 2011.
after the project's funded five-year term, said Sanford Eigenbrode, University of Idaho entomologist, who will lead the project.

Federal funding builds on the three states' investment in research and extension centers and a 35-year-old program that partnered scientists with farmers to sustain agriculture's role as an economic foundation for the region.

**Climate change WILL affect wheat regions.** Changing temperatures and precipitation will affect the Northwest and other prime wheat regions, according to the consensus of scientists. Research and extension centers operated by UI, OSU, and WSU agricultural colleges are poised to play key roles in the USDA-funded project. Their stations already have long-term agricultural research in progress that will expand benefits of the new effort.

**Focus on cereal production.**

Eigenbrode and the team will focus on cereal production systems of the Pacific Northwest and their management under projected climate change scenarios for the Columbia River basin, Columbia plateau, and the Palouse. Some areas are expected to get dryer and others to be warmer with more rainfall but less snowpack.

"The task is enormous and complex, but we have the resources to proceed and the validation of our peers for our concept and approach," said Eigenbrode, a member of Idaho's College of Agricultural and Life Sciences since 1995. "We are energized, galvanized, organized, and ready to work."

**22 investigators, many scientific disciplines.**

Eigenbrode's team includes researchers from Idaho, Washington State, and Oregon State universities, and the USDA Agricultural Research Service. In all, at least 22 principal investigators, aided by 14 graduate students, three post-graduate researchers, and several technical and administrative staff, will create a region-wide research, outreach, and education network to address the complex issues raised by changing climate.

The team's areas of expertise include agronomy, climate and atmospheric science, entomology, plant science, weed science, sociology, soil science, ecology, agricultural economics, education (K-12 through post-doctoral research), extension, and information science.

**How the project grew.**

The project grew from a collaborative research project launched nearly four decades ago to reduce soil erosion in Washington, Idaho, and Oregon. That effort, called STEEP—Solutions to Environmental and Economic Problems—coalesced as a cooperative effort by the three states in 1975.

"This new project will draw on the STEEP program, which cut soil erosion by 75 percent and helped farmers make their practices more sustainable to assure the future of Northwest agriculture," said John Hammel, Idaho agricultural and life sciences dean.

"The University of Idaho is committed to work that serves our state and our region," said M. Duane Nellis, University of Idaho president. "As the lead institution for this vital climate research, we welcome the USDA's investment in work that will study not just the effect of climate change on agriculture—a key industry in the region—but also will help us innovate and advance agricultural production and education for the future. This work will truly be a model that defines the power of collaborative research to transform our region and enables our knowledge and discoveries to better serve the global community," Nellis said.

Jack McIver, University of Idaho vice president for research and economic development, praises this new project for supporting agriculture, "which is fairly resilient and provides long-term economic stability for the Palouse and Columbia Basin." He added, "We expect great things to come."