

December 19, 2008  
Alumni, USU Food Sciences Program

Dear Alumni,

Once again it is time for reflection on the year gone by, and time to look forward with anticipation to the new year. 2008 was busy here in NFS. We graduated another group of sharp students, including Cory Worwood (BS in Food Technology Management), Sara Hansen, Michael Young, and Doug Hollist (BS in Food Science). Graduate students finishing in 2008 included Shaun Adams (MS with McMahon), Megan Tippetts (MS with Martini), and Ranjeeta Wadhvani (MS with Cornforth).



(Left to right – Dr. Silvana Martini, Ranjeeta Wadhvani, Subash Shrestha)

The sounds of construction were part of the background during summer and fall of 2008, to install new internet connections, computers, and overhead projectors in the conference room and classrooms 201 and 202, facilitating instant access to the internet. Lectures are now a bit more lively and colorful with the advent of this

technology. Via Blackboard Vista, registered students now have internet access to lecture materials for most classes, to view and/or print at home.

Also this fall the old fruit and vegetables lab (room 248) was re-modeled (photo on right) for use by the Western Dairy Technology Innovation Laboratory (DTIL). The new area includes a small classroom, dairy products evaluation area, and offices for Donald McMahon (DTIL director), Carl Brothersen (associate director), Dave Irish (dairy processing specialist), Randall Bagley (Associate Director for the Gary Haight Richardson Dairy Products Laboratory), and an additional scientist position yet to be filled. Others associated with DTIL include Brian Pettee (research technician), Bill McManus (microscopist), Kimberly Rasmussen (staff assistant), and Curtis Maughan (sensory specialist).



The **Grand Opening** of the Food Product Innovation Lab (Dr. Brian Nummer, Director) was held August 19, 2008.

Innovation Lab associate Subash Shrestha assisted more than 25 start-up companies with nutrition label development and food safety evaluation in 2008.



## Faculty News

**Karin Allen** was very busy with the 3 largest food science classes (Science of Food Preparation (55 students), Culinary Basics (60 students), and Food Technology and Health (95 students). She also gained fame for her interview on Channel 13 (Fox News) evaluating the effectiveness of “Green Bags” to extend shelf life of fruits and vegetables.

In addition to their administrative duties, **Jeff Broadbent** (Associate VP, Research), **Chuck Carpenter** (Dept Head), and **Becky Thompson** (Micro Lab Supervisor) published their work the Journal of Food Science demonstrating effectiveness of sodium levulinate to suppress growth of *Listeria* in ready-to-eat meat products. MS student Jeff Smith is evaluating antimicrobial effects of levulinic acid washes of beef and chicken. Craig Brighton uses electroporation to transform *Brevibacterium linens*, to enhance flavor properties of cheese. Taylor Oberg is studying factors affecting stress response in bifido-bacteria.

**Carl Brotherson**, associate director of the Western Dairy Center, was instrumental, with Drs. McMahon and Walsh, in planning for the new Dairy Technology Innovation Lab.

**Daren Cornforth** taught food chemistry, and delivered invited presentations this year at IFT in New Orleans (modified atmosphere packaging of fresh meats with carbon monoxide) and at the BEHAVE meetings in Park City, Utah (nutritional evaluation of grass-fed beef). Graduate student Ranjeeta Wadhvani gave presentations at Bonneville region and national IFT meetings on prevention of liver flavor in beef muscles. Rossarin Tansawat completed her thesis evaluating stability of milk mineral and sodium tripolyphosphate as antioxidants in cooked meat products.

**Conley Hansen** will be the invited keynote speaker at an international conference on waste utilization in England April 2009. He continues work on renewable energy from organic waste. He is part of a team including research professor **Carl Hansen** that is demonstrating biological removal and reuse of nitrogen and phosphorus from the Logan, UT wastewater treatment system using algae.

**Don McMahon**, director of the Western Dairy Center, worked this year to expand service of “Aggie Ice Cream” into the “Marketplace” cafeteria in the Taggart Student Center, working with dairystore accountant Kathy Mildenerger, dairy plant manager Randall Bagley, dairy production specialist Dave Irish, and dairy plant coordinator David Campbell. He was instrumental in efforts to establish the new USU Dairy Technology Innovation Lab. He teaches dairy processing.

**Silvana Martini** taught sensory analysis and NFS 1000 (Introduction to Food Science), and continues her collaboration with Don McMahon, Carl Brotherson, and Jeff Broadbent to follow changes in cheese flavors during aging. Graduate students Megan Tippets and Jennifer Thurgood), lab technician Andreia Suzuki, and several undergraduate students also worked on this project.

**Brian Nummer** teaches Food Microbiology, in addition to his extension duties. He traveled to Lisbon, Portugal in November to co-host the World Conference on Food Safety, as the USA representative to the planning committee for this event. His Food Safety program details can be found at <http://foodsafety.usu.edu>. His student Subash Shrestha is currently conducting research on hot water cooking to more uniformly and safely cook hamburgers in retail food establishments.

**Marie Walsh** taught the senior capstone product development course in 2008, and was very active as always in her role as food science club advisor. Her lab uses high-pressure liquid chromatography to identify and quantify cheese flavor compounds associated with ageing, with assistance of new graduate students Amrita Dubey and Ashwini Wagh.

**Robert Ward** again taught food analysis and the graduate course “Lipid Analysis and Metabolism”. MS student Ankur Jhanwar just completed his thesis work describing the composition and nutritional characteristics of the newly recognized ultra-small milk fat globules. He and his wife Lisa welcomed their second son, Micah, in November. Mike Young (BS, 2007) began his MS in Dr. Ward’s lab this fall, along with undergraduate researcher Jesse Campbell.

**Dick Whittier** manages the Meat Research laboratory, used for teaching and research of muscle foods. Dick teaches NFS 1250 “Food Safety and Sanitation” and team-teaches NFS 5020 with Dr. Carpenter. Each year Dick and Dr. Dale Zobell teach a beef quality assurance short course (Beef 3910) for 25 intermountain area cattle producers.

**Paul Savello** teaches Food Laws/Regulations from Iraq, where he is on assignment for the US Department of State as advisor to the US Embassy and the Iraqi Ministry of Agriculture on food processing and distribution issues. (Good to see you, Paul, during your visit to campus in October!)

**Secretaries Pamela Neilson, Pam Zetterquist, Carolyn Adams, and Gayla Johnson** did a great job as always keeping everything running smoothly again in 2008.



Carolyn Adams (left) and Pam Zetterquist

Great job also with the Christmas tree!  
Merry Christmas and Happy New Year!

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