

CAL POLY

College of Agriculture, Food
& Environmental Sciences
Food Science & Nutrition

NEWSBITE


FOOD SCIENCE AND NUTRITION DEPARTMENT

2016-17

CULINARY SCIENCE *and* PRACTICE



FOOD SCIENCE AND NUTRITION

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*High-resolution photos provided by
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Welcome to this year's edition of Newsbite of Cal Poly's Food Science and Nutrition Department. The central theme of this year's newsletter is culinary science and practice. Culinary is an important component of both the nutrition and food science curricula. Our graduating nutritionists need to know how to prepare meals that are both attractive and appealing. Many of our graduates pursue careers in institutional food service linked to hospitals and schools. Our food science students gain deep insight in the fundamental principles of food science from cooking and culinary practice. In addition, the food industry trends toward fresher foods and on-site preparation demand that students now and those of future generations have a solid understanding of cooking.

In fall 2016, the nutrition faculty engaged in a fundamental discussion of the future of the teaching and research program. Following intense debate, in which all aspects of our current program were openly discussed, a new Strategic Vision was developed (p. 14). One of the aims of the Strategic Vision is to help us identify needs for recruitment of new faculty. We are currently recruiting for an assistant/associate professor in diet-related chronic diseases such as Type 2 diabetes. The food science faculty will develop a Strategic Vision later this year.

The 2016-17 academic year has been unusually busy in that both of our programs underwent their five-year review. These on-site reviews are important to know where we stand with respect to the quality and relevance of our programs. The review also provides important directions for the future. The reviewers were impressed with the quality of our programs and also noted that, for many years, our faculty and staff have been doing an excellent job with limited and outdated resources and facilities.

At the college level, there is a major drive to renew the facilities. Of particular importance to the FSN Department is the J.G. Boswell Agricultural Technology Center (p.16), expected to be completed in four or five years. This building will contain teaching and research labs for primary use by the food science and nutrition programs. At the department level, however, there is an urgent and immediate need to modernize some of our key facilities, particularly the kitchen, which is used by all of our 550 students.

Since coming to Cal Poly, I have witnessed the enormous dedication of our faculty in supporting our students on their path to becoming highly qualified professionals in the food and health fields. I have come to realize that we have a uniquely qualified and talented pool of teachers and researchers in this department. I am looking forward to working with this team of professionals to renew our teaching and research programs and make the FSN department the place to go for food and diet related issues in California.

Sincerely,

Johan B. Ubbink, Ph.D.
FSN Department Head



FSN Department Welcomes New Faculty

The FSN Department welcomed three new faculty members in fall 2016: Kati Fosselius, Michael La Frano and Johan B. Ubbink.

Michael La Frano *Ph.D., R.D.*

Background

I earned my Bachelor of Science degree in nutrition and dietetics from Loma Linda University and then became a registered dietitian. I continued at UC Davis, where I earned a doctorate in nutritional biology while studying the effects of processing on the nutrient content of food and their consequential effects on metabolism in the body post-consumption. Upon graduation, my postdoctoral training focused on analytical chemistry and metabolomics as I studied the metabolic response to nutrition and disease.

Cal Poly Position

I am an assistant professor in the Food Science and Nutrition Department.

Plans for Cal Poly

My teaching focus is molecular nutrition and thus includes instructing classes focused primarily on micronutrient and macronutrient metabolism. In terms of research, I plan to continue my previous graduate student and postdoctoral fellowship focus on the large-scale profiling of the nutrient composition of foods and metabolic response of biological systems to physiological and pathophysiological stimuli.



Kati Fosselius *M.S., R.D.*

Background

I'm a registered dietitian and lifelong educator with experience teaching audiences across the lifespan. My dietetics background emphasizes public health nutrition. As part of that work, I provided individual counseling as well as group education for youth and adults and was involved in implementing policy, systems, and environmental changes in my local community. When completing my M.S. in nutritional science with a concentration in nutrition education at San Jose State University, my graduate thesis focused on preventing eating disorders by teaching parents how to raise children to develop a healthy relationship with food. I was the director of the Cedar Crest College Dietetic Internship for five years prior to coming to Cal Poly. I was honored to receive an Outstanding Dietetic Educator Award in 2016, awarded by the Nutrition and Dietetic Educators and Preceptors group of the Academy of Nutrition and Dietetics.

Cal Poly Position

I'm thrilled to serve as the director of the Cal Poly Dietetic Internship and to teach in the Food Science and Nutrition Department undergraduate program as a lecturer.

Plans for Cal Poly

I look forward to exploring new opportunities to enhance the Cal Poly Dietetic Internship and the learning opportunities available to its interns. In particular, I will be examining new strategies that promote the Learn by Doing model in all aspects of the program and working to ensure that the focus of interns' supervised practice experiences aligns with the strategic vision of the Cal Poly nutrition program. I am especially excited for the interns and me to get involved with research in their supervised practice communities, particularly in the areas of healthy eating for youth and families, promoting positive body image, nutrition counseling, disease prevention, and communitywide health promotion initiatives.



Johan (Job) B. Ubbink *Ph.D.*

Background

I earned my master's degree in physical chemistry from Leiden University and doctorate in chemical technology and materials science from Delft University of Technology, both in the Netherlands. I have 18 years of experience in the food industry as an R&D scientist, scientific expert and consultant. I was at the Nestle Research Center in Lausanne, Switzerland for 10 years, where I was mainly active at the interface between food materials science, food technology and nutrition. I then went on to teach food technology at the ETH Zurich, Switzerland, combined with numerous assignments as consultant to the food industry. I am also a visiting professor at the University of Campinas in Campinas, Brazil.

Cal Poly Position

I am the new Food Science and Nutrition Department Head. Next to my administrative duties, I will become active in teaching and research, with topics varying from food chemistry, culinary science, food sustainability to food habits and culture.

Plans for Cal Poly

I am looking forward to working with faculty and staff to make Cal Poly's FSN department the top place in California for teaching and research on food and diet. A specific objective is to guide the faculty in establishing a balance between teaching and scholarly activities such as research. I would also like the department to become a more equitable and integrated place for us to work as a team and use our diverse perspectives, competencies and interests to our advantage. We are all united by our interest for food and how people deal with it, and I would like to highlight its importance in everyday life beyond supplemental means, and focus on food as the basis for a healthy and culturally diverse life. I have seen the need for Learn by Doing in the mentoring of young scientists in the industry and I am excited to be at a university where this philosophy is put in action on a daily basis.



Papathakis Receives Award for Scholarship

Professor Peggy Papathakis was one of the three recipients of the Distinguished Scholarship Award for Cal Poly's 2015-16 academic year. Papathakis was nominated by her fellow faculty colleagues for the award and ultimately selected by them as one of three winners. Papathakis received the award Saturday, June 11, 2016, at the College of Agriculture, Food and Environmental Sciences commencement exercise.



Pictured: Papathakis (center) with President Jeffery D. Armstrong (left) and Provost Kathleen Enz Finken (right) receiving her award.

From Poly to Paris

Interview with Cal Poly alumnus Alex Early, (Food Science, '14) about his experience at Le Cordon Bleu Paris

COMPILED BY PAVAN SOHAL

Photos submitted by Alex Early

How was your experience at Cal Poly?

I really enjoyed my time at Cal Poly. Looking back on it, I would be sure to do it again if I had the chance. It taught me a lot about how people look at food, and it changed the way I thought about it, which is helping me now. I was deeply involved with the Global Food Tasters (formerly known as the Culinary Careers Club) as vice president, then president. The purpose of the club was to introduce students to all kinds of food from all over the world and to give them the knowledge to make these new foods for themselves. Food is one of the things that everyone can talk about; everyone has something to bring to the table so to speak.

Why did you choose to apply and ultimately attend grad school at Le Cordon Bleu?

I had wanted to be a pastry chef since high school, and while Cal Poly did wonders for my education, I wanted to learn the technical skills of how to be a chef. There's a debate over whether it's worth it to pay for culinary school rather than just starting off in the kitchen, but I believe going to culinary school really helped me out. It gave me time to get my feet under me, to ask questions in a safe environment, and to share the experience with my future colleagues. I chose Le Cordon Bleu Paris because of its long history of excellence, its incredibly impressive list of alumni, and because when one wants to be a pastry chef, there's no better place to learn than France.

How did Cal Poly prepare you for grad school at Le Cordon Bleu?

Food science at Cal Poly really helped me get an understanding of the food that I would be working with at Le Cordon Bleu. I was able to use that knowledge to find the answers to my questions in places where my colleagues who didn't have the same background, struggled. In addition, I learned how to study at Cal Poly and that greatly helped me with studying at Le Cordon Bleu.



Alex Early and his croquembouche creation.

How was your experience at Le Cordon Bleu?

In one word, intense. As the timeline for school at Le Cordon Bleu is nine months, just one school year, there's a lot of information to condense into that little time. Don't get me wrong, I absolutely loved it. I met the most amazing friends from literally all over the world who all shared the same passion as I did. I went on adventures and vacations I never thought I'd do with these new friends, and my eyes were opened to so many different things that I'd never even realized before.

Are there any similarities between your time at Cal Poly and your time at Le Cordon Bleu? What are the differences?

I believe so — but there are strong differences as well. Le Cordon Bleu had demos, where we would watch the chefs prepare multiple dishes. Cal Poly had labs as well,



where we got hands-on experience, but Le Cordon Bleu had “practicals,” where we then had to go do exactly what we had just watched the chef do. We couldn’t fall asleep in class because that was our instructions right there!

What are you doing now?

I’m working at a two-Michelin star restaurant called Sur Mesure par Thierry Marx located in the Mandarin Oriental Hotel in Paris. I’m one of two people responsible for the entire pastry section. My work involves preparing desserts, plating them and sending them out to the clients, as well as training interns and apprentices. My favorite part of my job is creating new ideas and dishes. I’m free to make whatever comes into my head, and the chef gives me feedback, and then, after a few tweaks, it gets put on the menu.

What advice do you have for students interested in applying to graduate school? What advice do you have for students who want to move abroad?

Do it! It’s amazing how much you realize you still have to learn after going to graduate school. I’m happy I went, and I feel like it gave me a leg up in the workplace. Rather than coming in not knowing what to expect and being hit by the brunt of it, I was able to ease into it — as much as anyone can ease into the controlled chaos that is a kitchen.

As far as moving abroad, I think it’s the best education I’ve ever had. I think everyone should do it. You gain such a worldly knowledge that there’s just no going back. Learning in your home country is one thing, but when you add a whole other culture, language, everything on top of it? You learn more than you ever have, faster than you ever have in your life. And without even noticing it all either. I’ve made the best friends abroad, both expats themselves and people still living in the same city where they were born. There’s no experience that compares to moving abroad, and you can tell which people have and which haven’t.

Any final comments or advice?

Find the benefit in everything. Whether you want to do something or not, it can benefit you if you find a way. Keeping a good attitude about something will carry you through. For example, I didn’t want to go to college after high school. I wanted to go directly to culinary school, but I went and I grinned and bore it. And now, after Poly, I wouldn’t have done it any other way.



Top: Rooftop of Mandarin Oriental Hotel in Paris where Early currently works.

Middle: Early receiving his culinary degree from instructors at Le Cordon Bleu.

Bottom: Early with friends and classmates.

From California to Montana

Interview with Cal Poly alumna Kate Girard, (Nutrition, '09) who is now the director of the State of Montana WIC program

COMPILED BY PAVAN SOHAL

Photos submitted by Kate Girard



Cal Poly grad Kate Girard.

How was your experience at Cal Poly?

My experience at Cal Poly was interesting. I felt incredibly fortunate to have received my education there because I honestly feel it is an extraordinary program. After graduating and working in the field, I felt that I had an edge as many other dietetics graduates did not have the vigorous, hands-on, experience that I had. However, it was also interesting in that I was an older student, nearly 30 when I attended Cal Poly. I definitely felt a bit old, but I still loved it. I transferred from community college and wanted to complete my B.S. as fast as possible. While professors Arlene Grant-Holcomb and Louise Berner thought I was a little nuts, I took about 21-23 units per quarter and did everything in about a year and a half. I have never worked so hard in my life, but I did it and had a decent GPA to boot.

How was the transition from California to Montana?

I lived in California for nearly 12 years and loved every minute of it. However, I am from the East Coast and ended up at graduate school and an internship in Asheville, N.C., following my stint at Cal Poly. I stayed in Asheville for almost four years and worked with the local WIC clinic there for almost three years. I then moved to Montana to take the position of state nutrition coordinator. Montana is a natural fit, as I love the outdoors, hiking, camping and climbing. There are great jobs here and an affordable cost of living, which I did not feel I could get back in California. After moving to Montana for the state nutritionist coordinator position, the Montana nutritionist director retired. After only five years in the field, and less than two years at the state, I decided to go for it. While I thought I might be reaching too high, I figured, why not? My desire was to take my passion for the program and lead with it. I wanted to

Left: Promotional artwork for State of Montana WIC program.



State of Montana WIC logo

take our program up a notch by making it easier for local programs to provide services, providing high-quality training to local staff, making our food package more appealing, and putting a positive face on the program for the public, the participants, and our partners/stakeholders. I did not want to “manage” a program, but to maximize the value of it to the extent possible. I ended up getting the position just over two years ago (and also had my first baby nine months later!), and I now feel like I have a lifelong career that will always be fulfilling and challenging. I love every second of it. And now that I have my own little toddler, I appreciate so much more what moms go through!

Did you go to graduate school?

I did. I applied for the internship and masters of health science at Western Carolina, so I could live in Asheville for a few years. I did not get into the dietetic internship (DI) the first year, which was devastating considering how hard I worked for it, but I did work at WIC for the first year and did some core graduate classes. The second year I did get into the DI and was able to substitute some of my time at WIC for the community rotation, so it all worked out! I also did my graduate research related to breastfeeding in the WIC program, so I was able to combine my education, DI and work all into two challenging years. I will say that going to Cal Poly made my graduate school a breeze; Cal Poly felt way harder to me than graduate school ever did!

How has it been working for WIC?

I love WIC. I knew I would work for WIC long before I even went for my nutrition degree. I started working for Social Services (Child Support and CPS) in my early 20s, and while I loved public service, the environment was very challenging. There were a lot of charged emotions and people did not want our services. With my passion for nutrition and public service, WIC was a natural fit. I love counseling, I love prevention, and I love that the people who come to WIC are (usually) open to information and so appreciative of the support. It is truly the best public health program out there. Who doesn't love moms and babies? Seriously though, I cannot think of a more fulfilling role than helping a mom to meet her breastfeeding goals or feel empowered to feed her child a little healthier. Every day in WIC feels like a blessing.

What advice do you have for students?

Know that all you are learning now is incredibly relevant in the field. You will be competitive in grad school, internships, and the workforce if you succeed at Cal Poly. Also know that your professors are second to none, take advantage of their expertise and dedication to your learning. And keep in touch with them; it has been so valuable to tap into professors as mentors, references, and now peers! Also, do not despair if you do not get into the DI the first time. This is not because you are not deserving; sometimes that extra time gives you exactly the experience you need to do better the next year.

CULINARY SCIENCE *and* PRACTICE

Learn by Cooking

How a Cal Poly professor is ensuring his students are getting the most out of their education

BY PAVAN SOHAL

Professor Samir Amin has always had an affinity for cooking. His earliest memories are preparing meals in the kitchen. At the age of 8, Amin received a cookbook and began cooking for his family during the holidays and other special occasions. In seventh grade, he discovered the Culinary Institute of America by his home in New York. The institute offered free classes several Saturdays of the year and Amin would attend them with his mother. After high school, Amin attended the Culinary Institute of America. Although he loved his time there and loved cooking, he wanted to educate himself further.

After the Culinary Institute of America, Amin attended the University of Nevada Las Vegas (UNLV), where he earned a degree in Hospitality Administration. After he graduated, Amin held many different positions such as sous-chef and pastry chef. He wanted to eventually move beyond the kitchen and venture into other food-related occupations. He discovered the master's in food science management at Michigan State and realized he was interested in product development. He also earned his doctorate there. Following Michigan State, Amin worked at Two Chefs on a Roll in Southern California. He started as a research chef in the product development department and went on to become the director of research and development for savory products. The task of research and development started to wear down Amin and he shifted his interest toward teaching.

Amin had a friend in the Culinology Department at Southwest Minnesota State University who needed someone to cover a course for two semesters. Amin used this as a test run in the teaching profession to see if it was something he wanted to pursue. He enjoyed teaching and decided it was something he wanted to continue. He taught in Minnesota for another three years and Cal Poly Pomona for a year before moving to Cal Poly, San Luis Obispo.

At Cal Poly SLO, Amin teaches FSN 121: Fundamentals of Food. In the lab for FSN 121, he has his students prepare six different dishes. The entrees range from Swiss steak with mashed potatoes and glazed carrots to carrot, butterbean and chia pita sandwiches with tzatziki. The students are put into lab groups of four and each group prepares a different dish each week. Amin wanted to ensure that each student had the opportunity to prepare full entrees and cook with different types of ingredients each lab. This is why he strayed from the traditional setup of the class. In the past, each lab would focus on one part of an entrée; one lab dedicated to meat, another to vegetables, etc. By having six dishes rotate among the lab groups, Amin hopes each student will have a more hands-on and complete experience preparing food. He is also interested in revamping FSN 304: Advanced Culinary Principles and Practice. He wants to gear the class more toward technical and functional ingredients.

Amin's FSN 121 lab is a fun, laid-back learning environment. Laughter and conversation fill the kitchen along with the aroma of great food. Students say it is their favorite lab and they look forward to it all week. After all the groups have completed their dishes, the class comes together and has a tasting party where they try each other's dishes. The students love this and love the hands-on experience they gain from lab.

Amin is truly embracing Cal Poly's philosophy of Learn by Doing. By changing up the content of lab so his students get a more thorough experience is not only more beneficial to the students, but also more enjoyable, too. Everything Amin has done for his students and the FSN 121 lab ensures that his students truly are learning by doing.



A student during her FSN 121 lab preparing batter for fried chicken.



Amin helping students during lab.



A student peeling potatoes for his lab group's dish.



Culinary science plays an important role in teaching food science and nutrition. Many graduates are hired in leading positions in the food service area, working as dietitians and nutritionists in institutional kitchens. Graduates also may evolve to manage large kitchens and culinary operations, which requires good insight and broad experience in the large-scale preparation of food, food safety and the creation of healthy and tasteful meals within constrained budgets. Food service is becoming ever-more important as more meals are enjoyed outside the home, and the food industry is catering to those needs by proposing new culinary formats. Culinary science is important as it ties in with innovation in the food industry, with an emphasis on healthy eating experiences. Many product development efforts start in the kitchen by experimenting and prototyping innovative ideas. Successful concepts can then be developed on an industrial basis and be scaled up. A lot of the growth and added value in the food field today is found in such initiatives. Culinary science helps students connect to their food and the way it is prepared and allows to tie into the cultural diversity of foods in relation to the basic methods of preparation.

Students working in the department's kitchen fill it with laughter and conversation as they prepare food.

Nutrition Faculty Member Retires

Nutrition faculty member Lisa Nicholson will retire at the end of spring quarter in June. Dr. Nicholson has been a registered dietitian since 1987 and still enjoys reading the latest research, learning, and sharing about nutrition as much today as when she first started. She joined the FSN Department in 2001 and served as the Director of the Didactic Program in Dietetics from 2003-11. During her time at Cal Poly, she has taught multiple nutrition classes and particularly enjoys teaching the Nutrition Counseling class. In addition, Nicholson developed the first online FSN 210 Nutrition class, coached the Nutrition College Bowl for two years, and has received awards for teaching, service learning, and curriculum development. She says that working with her graduate students over the years has been deeply rewarding. Another highlight of her time here at Cal Poly was teaching nutrition in Brisbane, Australia in 2007 for International Programs. The department will greatly miss Dr. Nicholson and thanks her for her time here at Cal Poly and her dedication to the program and students.



2016-17 FSN Advisory Council

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Jim Zion

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Advisory Council Update

After four years of service, Jim Zion will be stepping down as chair of the Advisory Board, and Merijane McTalley will succeed him as chair. Rob Neenan will be stepping in as the vice chair. The department thanks Zion for his efforts and support of the department and wishes McTalley and Neenan all the best in their new positions.

Nutrition Strategic Vision

Nutrition faculty come together to make a plan for the future

CONTENT PROVIDED BY NUTRITION FACULTY

COMPILED BY PAVAN SOHAL

Given the growing challenges of creating a healthy, balanced, available and affordable diet, the importance of teaching and research in the field of nutrition is continuously increasing. Under-nourishment, over-eating, changes in lifestyle and diets are increasingly having an impact on the population. Cal Poly's well-established nutrition program has for many years played an important role in addressing these issues, principally via the well-recognized, accredited dietetics program. In order to stay on the forefront of developments in the field of nutrition and to renew the program, the nutrition faculty recently has engaged in an assessment of strengths, weakness and opportunities for future development and growth of Cal Poly's nutrition program.

The teaching and research program at Cal Poly will be organized into three strategic areas to address the need for high-quality trained professionals in California and the U.S., consider the career perspectives of its graduates, and develop opportunities to sustain an ambitious research program.

These three strategic areas will strongly impact future developments in the nutrition curriculum. Some of the teaching areas are further developments of current strengths at Cal Poly, such as community nutrition, sports nutrition, and the dietetic internship, and some are areas that the department would like to develop from a relatively minor existing base. In addition, the faculty intends to emphasize several elements relating to food and food service management, and to highlight several developments in the larger food field.

3 Strategic Areas

Community and Global Nutrition

Obesity, Type 2 Diabetes and other Diet-Related Chronic Diseases

Muscle Health and Balanced Body Composition



1. Community and Global Nutrition

This area includes a range of activities connecting to the relevant communities in California, the U.S., and internationally. Central elements include the dietetic program and the dietetic internship, through which highly qualified professionals are trained in the spirit of the Learn by Doing philosophy. These graduates embark on health-related careers and work to help improve the health of the population via an optimized diet and adapted life style.



2. Obesity, Type 2 Diabetes and other Diet-Related Chronic Diseases

This second area will be developed in the coming years into a teaching and research program to promote aggressive solutions to chronic disease challenges in a way that is consistent with Cal Poly's polytechnic mission. Given the incidence of Type 2 diabetes, which has reached epidemic levels in the U.S. and elsewhere, it will be the first key focus, which will be addressed with a tenure-track recruitment which is now underway. This research area will be maximally developed in a continuously modernized teaching program for Cal Poly students. Further themes to be explored in this strategic area are obesity and the metabolic syndrome. While the research in this area will be directed to mechanistic studies at the cellular level and at the level of the individual, learning from these studies will strongly impact the teaching and reaching in community nutrition.



3. Muscle Health and Balanced Body Composition

Based on an established and successful foundation in sports nutrition, this strategic area will be developed into a strong teaching and research program on the effects of nutrients on muscle health, body composition and metabolism in specific groups. Using a research basis in muscle health and body composition, this area will target nutrition in relation to optimal physical performance in athletes, the retention of muscle and body weight in elderly people via a combination of diet and exercise, and the regeneration of muscle health and body weight in undernourished populations in the U.S., and in selected regions worldwide.

A Place for Applied Sciences and Innovation

New J.G. Boswell Agricultural Technology Center strives to advance the Cal Poly tenet of Learn by Doing

GRAPHICS AND CONTENT PROVIDED BY ANNMARIE CORNEJO

COMPILED BY PAVAN SOHAL

For the past several years, it has been evident that a dedicated center of excellence for applied research and training in food science and nutrition is needed at Cal Poly. That's why the College of Agriculture, Food and Environmental Sciences is planning one of the most advanced educational and experimental facilities on campus — the J.G. Boswell Agricultural Technology Center: A Place for Applied Sciences and Innovation.

This new state-of-the-art facility will provide students, faculty, and industry partners in the Food Science and Nutrition Department, as well as students and colleagues across the college, with facilities as technologically advanced as the professional world they will soon enter.

The new J.G. Boswell Agricultural Technology Center, which will feature 11 applied research labs determined as critical in agriculture and the food production industry, will be specifically designed to foster an environment where students, faculty, and industry partners can collaborate and experiment like never before.

The new facility will incorporate students and faculty from three Cal Poly colleges. The College of Agriculture, Food and Environmental Sciences; the College of Liberal Arts; and the College of Science and Mathematics will all work together in a cluster of state-of-the-art labs, where they will be able to explore, discover and find new solutions in an energizing, stimulating environment.

The facilities will provide students with what they need to get ahead in the industry. With its many amenities, such as research labs, the Boswell center will give Cal Poly students the edge they need to be successful in the industry.



Example of the Culinary Lab.

"The J.G. Boswell Agricultural Technology Center will advance the interdisciplinary nature of Cal Poly's Learn by Doing philosophy and keep our agriculture programs at the leading edge."

**– ANDREW J. THULIN
DEAN**



Model of the Food, Nutrition and Metabolism Analytics Lab

To learn more about the J.G. Boswell Agricultural Technology Center or to make a donation, contact:

Russ Kabaker | Assistant Dean of Advancement and External Relations

805-756-6235 | rkabaker@calpoly.edu

THE CENTER WILL CONTAIN

- Plant Pathology Lab
- Physiology and Genomics Lab
- Soil, Water and Air Quality Lab
- Food Safety Teaching and Research Lab
- Food, Nutrition and Metabolism Analytics Lab
- Culinary Lab
- Sensory Analysis Lab
- Food and Beverage Analytics Lab
- Health and Performance Lab
- Animal Physiology Lab
- Product Development Lab



Below: Food and Beverage Analytics Lab.

Above: Digital rendering of inside of the J.G. Boswell Agricultural Technology Center.



For more information on ways to help with current equipment and faculty needs, please contact:

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805-756-2660

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Apple to Glass...

Food Science students ferment some award-winning hard cider

INTERVIEW WITH THEI SOE (FSN ALUMNA)

COMPILED BY PAVAN SOHAL

Photos submitted by Thei Soe

How did you hear about the cider competition?

I heard about the cider competition through Professor Amanda Lathrop.

What kind of cider did you make?

We made a hard cider using Lodi apples.

How did you make the cider? What resources from the department did you use?

We first juiced the Lodi apples using the press. Then we fermented the apple juice using five different yeast strains. Once fermentation was done, we racked and bottled the cider. We also made the cider go through secondary fermentation to produce carbon dioxide, which makes the cider fizzy.

We used the pilot plant and quality lab as our main resources. We conducted most of our cider making in the pilot plant. We also used cider books from Lathrop.

What did you think of the overall experience?

It was a new and interesting experience for me. I learned more about fermentation, different yeast strains and apple varieties.

What did you enjoy most about the experience?

The anticipation of getting the nice final product was the most enjoyable experience. Getting awarded second place was also nice.

Would you recommend participating in the competition?

Yes, absolutely!



Top: Student participants in the Cal Poly Crops Unit gathering Lodi apples for their cider.

Bottom: Cider final product.

In Support of Excellence

The Food Science and Nutrition Department is honored to recognize those people whose contributions to the department enable us to continue to provide students with the opportunity to learn and grow at Cal Poly. Thank you for all that you do.

Lois A. Barton
Charles R. Bell and Margaret Stanley Bell
Darren N. Blass
Michelle L. and Nicholas R. Bonfilio
Richard A. Brockington
Lynda R. and S. J. Campbell
Mark Carbone and Grisel Monserrat
Gerald W. Carlson
Rodney Carpenter
Pamela L. Cekola
John P. and Karen S. Crass
Andrea J. Curran
Kimberley C. Dein
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FSN faculty and staff at the annual Fall Conference meeting at the Inn at Morro Bay. Pictured (back row from left) Peggy Papathakis, Lisa Nicholson, Aydin Nazmi, Julie Herring, Dwayne Jones, Samir Amin, Department Head Johan B. Ubbink, Robert Kravets, Pamela Montalban, Doris Derelian, Michael La Frano, Stephanie Jung, Scott Reaves. (Front row from left) Amy Lammert, Shohreh Niku, Bree Hugins, Kati Fosselius, Arlene Grant-Holcomb, Gour Choudhury, Luis Castro, Kari Pilolla, Molly Lear.