

Amy Marie Lammert, Ph.D.

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Education

2011	Cert	Applied Sensory and Consumer Science Certificate Program (One Year Program, Completed October, 2011)	Univ. of California-Davis
1997	PhD	Food Science (Research Area: Food Chemistry) <u>Dissertation Title:</u> Physical Aging, Solubility, and Water Activity of Selected Disaccharides	University of Illinois at UC
1993	MS	Foods and Nutrition (Research Area: Sensory) <u>Dissertation Title:</u> Water Imbibition and Texture Analysis of the Hard-To-Cook and Reversed Hard-To-Cook Defect in Three Varieties of Cowpeas (<i>Vigna Uniguiculata</i>)	University of Illinois at UC
1991	BS	Food Science	Michigan State University

Academic Positions

California Polytechnic State University – Assistant Professor	San Luis Obispo, CA
09/12 – Pres Department of Food Science and Nutrition	
California Polytechnic State University – Assistant Professor	San Luis Obispo, CA
09/09 – 09/12 Department of Dairy Science & Dairy Products Tech. Center	
Dairy Products Technology Center – California Polytechnic State Univ.	San Luis Obispo, CA
12/08 – 09/09 Senior Dairy Ingredients Applications Specialist	
California Polytechnic State University – Lecturer	San Luis Obispo, CA
09/08 – 12/08 Department of Food Science and Nutrition	
University Of Illinois At Urbana-Champaign - Teaching Assistant	Urbana-Champaign, IL
08/91 – 08/97 Teaching Assistant, Dept. of Food Science & Nutrition	

Industry Positions

Consultant	
06/08 – Present	San Luis Obispo, CA
Pepsico- Chicago (Formerly Quaker / Tropicana / Gatorade)	Barrington, IL
11/06 – 5/08 Sr. Functional Nutrition Technology Applications Scientist II	
Conagra Grocery Products (Formerly Hunt Wesson)	Fullerton/Irvine, CA
08/99-12/00 Product Development Leader	
08/97-08/99 Chemist Leader	
Kraft Foods	Pinconning, MI
06/90-09/90 Summer Intern	
Dow Chemical	Midland, MI
07/87-12/89 College Co-op - Methocel Food Group	
07/86-07/87 High School Co-op – Dowpon-Agricultural Chemical	

Curriculum Vitae – Amy Lammert

Undergraduate Supervised Student Activity

- 2010 – 2012 Los Lecheros Club Advisor
2012 Western Region SAD-ADSA Meeting
- Erin DeSnayer was elected to as President
 - Meredith Frisus was elected as 1st Vice President
- 2011 Participated in Inaugural Western Region SAD-ADSA Meeting
- Cal Poly received the 2011 Chapter of the Year Award
 - Tyler Kamper was elected to the 1st Vice President *and* 3rd Vice President of the National SAD-ADSA Officer Team.
- 2009 – 2012 Cal Poly Dairy Products Judging Team Coach
- 90th Annual Collegiate Dairy Products Judging Competition, Glenview, IL
- 1st Place Individual in Milk – Stephanie Amador
 - 2nd Place Team in Milk
- 88th Annual Collegiate Dairy Products Judging Competition, Glenview, IL
- 1st Place Individual in Milk – James Moreda
 - 3rd Place Individual in Cottage Cheese – Jeanette McClure
 - 2nd Place Team in Cottage Cheese

Graduate Student Advising

Lauren Collinsworth	Chair	MS Winter 2013 (Expected)
Tiffany Taylor	Committee Member	MS Fall 2012 (Expected)
Jenifer Tharani	Chair	MS Spring 2012
Joshua Goldman	Committee Member	MS Spring 2011
Megan Cleveland	Committee Member	MS Winter 2011
Michelle Allen	Committee Member	MS Spring 2010
Ricardo Anguiano	Committee Member	MS Spring 2010

Published Works

US Patents

- 6,808,728. Hashisaka, A. E. A., Sethi, V., Lammert, A., Mikula, M. Method for reducing color migration in multi-layered and colored gel-based dessert products and the products so produced.
- 6,743,455. Hashisaka, A. E. A., Sethi, V., Lammert, A., Mikula, M. Multi-layered food products.
- 6,645,540. Hashisaka, A. E. A., Sethi, V., Lammert, A., Mikula, M. Method for reducing color migration in multi-layered, caramel colored, gel-based dessert products and the products so produced.
- 6,488,975. Sethi, V., Lammert, A., Mikula, M., Sandu, C. Cocoa powder for use in multi-layered, gel-based dessert products and method for making the same.
- 6,294,213. Hashisaka, A. E. A., Sethi, V., Lammert, A., Mikula, M. Method for reducing color migration in multi-layered, caramel colored, gel-based dessert products and the products so produced.

Refereed Publications

- Collinsworth, L., Lammert, A., Leidheiser, M., Garza, J., Keener, M., and Ashman, H. 2012. Collinsworth, L., Lammert, A., Thomas, J., Leidheiser, M., Garza, J., Keener, M., and Ashman, H. 2012.
- Lammert, A. M., Lammert, R. M., and Schmidt, S. J. 1999. Physical Aging of Maltose Glasses as Measured by Standard and Modulated Differential Scanning Calorimetry. *J. Thermal Analysis*. 55:949-975.
- Lammert, A. M., Schmidt, S. J., and Day, G. A. 1997. Water Activity and Solubility of Trehalose. *Food Chemistry*. 61:139-144.
- Schmidt, S. J. and Lammert, A. M. 1996. Physical Aging of Maltose Glasses. *J. Food Sci.* 61(5):870-875.

Conference Posters

- Collinsworth, L., Weber, J., Lammert, A., Thomas, J., Leidheiser, M., Garza, J., Keener, M., and Ashman, H. Testing emotions in orange soda, flavored milks, and convenience cheese: men vs. women. Society of Sensory Professionals, Jersey City, NJ, October, 2012.
- Collinsworth, L., Weber, J., Lammert, A., Thomas, J., Leidheiser, M., Garza, J., Keener, M., and Ashman, H. Development of a novel method to evaluating emotions: imagery versus language. Eurosense, Bern, Switzerland, September, 2012.
- Collinsworth, L., Weber, J., Lammert, A., Thomas, J., Leidheiser, M., Garza, J., Keener, M., and Ashman, H. A method for relating texture and emotion: a first look. Eurosense, Bern, Switzerland, September, 2012.
- Tharani, J., Phinney, D., Singh, R. P., Marco, M. L., and Lammert, A. M. Survivability of *Lactobacillus acidophilus* La-5 in ice cream during its passage through the in vitro model stomach. IFT Annual Meeting, Las Vegas, NV, June, 2012.
- Collinsworth, L., Weber, J., Lammert, A., Thomas, J., Leidheiser, M., Garza, J., Keener, M., and Ashman, H. Evaluating the Changes in Emotions During The Consumption Experience of Carbonated Orange Soda, Dairy Beverages, and Convenience Cheese. IFT Annual Meeting, Las Vegas, NV, June, 2012.
- Fake, G., Keener, T., Collinsworth, L. A., Lammert, A. M., and Howard, J. 2012. The Production and Sensory Evaluation of the Natural Sweetener Brazzein. IFT Annual Meeting. IFT Annual Meeting, Las Vegas, NV, June, 2012.
- J. Tharani, D. Phinney, R. P. Singh, M. L. Marco, and Lammert, A. M. Effect of ice cream on the survivability of *Lactobacillus acidophilus* La-5 during its passage through the in vitro model stomach. Dairy Ingredients Symposium, San Francisco, CA, March, 2012.
- Lammert, A. M., Hui, A., Vink, S., and Tong, P. Sensory properties of chocolate flavored, protein fortified, fluid milk recovery beverages produced using indirect and direct thermal processing. ADSA Annual Meeting, Denver, CO, July, 2010.
- Lammert, A. M., Olabi, A., Brooks, K., Vink, S., and Tong, P. Development of protein fortified fluid milk recovery beverages. IFT Annual Meeting, Chicago, IL, July, 2010.

- Lammert, A. M. and Schmidt, S. J. Modeling of the Physical Aging Process of Maltose Glasses Aged at Different Temperatures. Presented at ISOPOW-7, Helsinki, Finland, June, 1998.
- Lammert, A. M. and Schmidt, S. J. Physical Aging of Maltose Glasses Measured by Standard Differential Scanning Calorimetry and Modulated Differential Scanning Calorimetry. Presented at the Second Girton Working Conference on Amorphous Carbohydrates, Girton College, Cambridge University, Cambridge, England, September, 1996.
- Lammert, A. M. and Schmidt, S. J. Physical Aging of Maltose Glasses Measured by Standard Differential Scanning Calorimetry and Modulated Differential Scanning Calorimetry. Presented at IFT, New Orleans, LA, June, 1996.
- Lammert, A. M. and Schmidt, S. J. Water Activity, Solubility, ¹⁷O NMR Response Surface of α,α -trehalose. Presented at IFT, Anaheim, CA, June 1995.

Conference Presentations

- Collinsworth, L., Weber, J., Lammert, A., Thomas, J., Leidheiser, M., Garza, J., Keener, M., and Ashman, H. 2012. Development of a novel method to evaluating emotions: imagery versus language. Eurosense, Bern, Switzerland, September, 2012.
- Collinsworth, L., Lammert, A., Taylor, T., Lathrop, A., Arnold, M., and Farkye, N. F. 2012b. Antimicrobial selection for a low sodium mozzarella cheese using a sensory evaluation approach. ADSA Annual Meeting, Phoenix, AZ, July, 2012.
- Taylor, T., Lathrop, A., Farkye, N., and Lammert, A. Screening of antimicrobials and salt substitutes for use in low sodium dairy products. ADSA Annual Meeting, Phoenix, AZ, July, 2012.
- Collinsworth, L., Weber, J., Lammert, A., Thomas, J., Leidheiser, M., Garza, J., Keener, M., and Ashman, H. 2012. Evaluating the Changes in Emotions During The Consumption Experience of Carbonated Orange Soda, Dairy Beverages, and Convenience Cheese. IFT Sensory Evaluation Division Rose Marie Pangborn Presentation, IFT Annual Meeting, Las Vegas, NV, June, 2012.
- J. Tharani, D. Phinney, R. P. Singh, M. L. Marco, and Lammert, A. M. 2012. Effect of ice cream on the survivability of *Lactobacillus acidophilus* La-5 during its passage through the in vitro model stomach. Cal Poly San Luis Obispo Finalist, CSU Student Research Competition, Long Beach, CA, May, 2012.
- Jimenez-Flores, R., Lammert, A. M., and German, J. B. Food structure and its implications in food digestion and nutrition. Dairy Ingredients Symposium, San Francisco, CA, March, 2012.
- J. Tharani, D. Phinney, R. P. Singh, M. L. Marco, and Lammert, A. M. 2012. Effect of ice cream on the survivability of *Lactobacillus acidophilus* La-5 during its passage through the in vitro model stomach. CSU Student Research Competition, Long Beach, CA, May, 2012.
- J. Tharani, D. Phinney, R. P. Singh, M. L. Marco, and Lammert, A. M. 2012. Effect of ice cream on the survivability of *Lactobacillus acidophilus* La-5 during its passage through the in vitro model stomach. Finalist for CSU Student Research Competition, San Luis Obispo, CA, February, 2012.

- Tharani, J., Laubscher, A., Lammert, A. M., and Jimenez-Flores, R. 2011. The Effect of UV Light Treatment and Processing Method on the Microbial Reduction of Pasteurized Whole Milk. ADSA Annual Meeting, New Orleans, July 2011.
- Lammert, A. M. Milk Beverages: Recovery Milk and Creamy Milk. DMI Innovation Forum, Scottsdale, AZ, February, 2009.
- Lammert, A. M. The Heat Capacity of Aged Maltose Glasses Measured by Standard Differential Scanning Calorimetry and Modulated Differential Scanning Calorimetry. Presented at the 213th ACS National Meeting, San Francisco, CA, April 1997.

Grants & Contracts

Funded Projects as PI

<u>Title</u>	<u>Sponsor</u>	<u>Amount</u>
2012		
Linking Emotion to Texture: A New Consumer Perspective on the Sensory Properties of Cheese - PI	CSU-ARI	\$130,811
Emotions and Texture in Dairy Foods: A New Perspective	Cal Poly San Luis Obispo Grants Development Office – Extramural Funding Initiative	\$15,000
Measuring Textural Properties of Dairy Foods - PI	Southern California IFT Educational Research Grant	\$9,000
2011		
Expanding Dairy Foods Learning Outcomes	Southern California IFT Educational Research Grant	\$15,817
Factors that Influence Probiotic Survival in Ice Cream	UC/CSU/CC Collaborative Research	\$10,000
Emotion and Texture of Foods and Beverages	Private Sponsor	\$6,000
Improving the Quality of Dairy Foods Learning Outcomes	Cal Poly – College of Agriculture, Food, & Environmental Resources	\$2,000
2010		
Factors That Influence Probiotic Survival In Ice Cream	CSU-ARI	\$40000
Developing A Sensory Evaluation Research Program	CSU-ARI	\$5000
The Impact of Food Form on Gastric Breakdown, Satiety, and Bacterial Binding	California State Faculty Support Grant	\$5000
Developing A Sensory Evaluation Program	Southern California IFT Educational Research Grant	\$7755
2009		
Developing Expertise in Sensory Evaluation	CSU-ARI	\$4650

Funded Projects as Co-PI

<u>Title</u>	<u>Sponsor</u>	<u>Amount</u>
2011		
Improving the Sensory Attributes of Low Sodium Mozzarella Cheese Co-PI's Farkye & Lathrop	CSU-ARI	\$172,718 (AL: \$75,000)
2010		
Sensory Analysis of Milk Treated by UV and Pasteurization Co-PI Jimenez	Surepure South Africa	\$125,000 (AL: \$40,000)

Effect of Salt Substitutes & Anti-microbial Intervention Methods on the Sensory Properties of Low Sodium String Cheese and the Survival of Pathogenic & Spoilage Microorganisms Co-PI's Farkye & Lathrop	Dairy Management Inc. Chicago, IL	\$236,200 (AL: \$79,000)
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Professional Affiliations and Activities

Membership in Professional Societies

- Institute of Food Technologists
- American Dairy Science Association
- Society of Sensory Professionals
- American Society of Testing Materials

Honors and Awards

- 2011 Cal Poly College of Agriculture, Food, and Environmental Sciences Ag Council Club Advisor of the Year
- 2010 Dairy Ingredients Symposium (San Francisco, CA) – Session Moderator for Bioactive Milk Components
- 2009 Dairy Ingredients Symposium (San Francisco, CA) – Session Moderator for Improving Performance of Dairy Ingredients

Service

- 2011 - Present Taught a One Day Course, Milk Types and Quality, for Artisan Cheesemakers at the College of Marin, October 28, 2011 and March 30, 2012.
- 2011 - 2012 Department of Dairy Science, Faculty Representative to the Cal Poly Faculty Hearing Panel.
- 2012 Technical Research Abstract Reviewer for Product Development Division. IFT Annual Meeting 2012.
- 2010 – Present Institute of Food Technologists Product Development & Ingredient Innovations Contributing Member - This team that defines and prioritizes the product development agenda the 2011 Scientific Program for the Annual Meeting.
- 2010 – Present Institute of Food Technologists Sensory Science Contributing Member – This team that defines and prioritizes the sensory evaluation agenda the 2011 Scientific Program for the Annual Meeting.
- 2010 – 2012 Los Lecheros Dairy Club Advisor
- 2010 – 2012 California State FFA Representative - Dairy Products Judging Contest
- 2010 – 2012 Department of Dairy Science Scholarship Committee Member
- 2009 – 2012 Department of Dairy Science Curriculum Committee Member
- 2009 – 2012 California Polytechnic State University Dairy Products Judging Team Coach

2008 – 2009 California Polytechnic State University IFT Product Development Team Coach

Activities

2011 American Dairy Science Association Dairy Foods Graduate Poster Competition Judge. New Orleans, LA. July, 2011.
2011 – Present Reviewer – Journal of Food Science
2010 – Present Reviewer – Journal of Food Science Education
2009 – Present Reviewer – Journal of Dairy Science

Professional Development

LiveClicks 2 Hour Webinar. Project Management Fundamentals: Managing Projects That Succeed. January 19, 2012. Franklin Covey.
LiveClicks Full Day Webinar. Focus: Achieving Your Highest Priorities Microsoft Outlook Edition. December 15, 2011. Franklin Covey.
Applied Sensory Science and Consumer Testing Certificate Program. October 2010 – October 2011. UC Davis Extension.
Advancements and Applications of Measurement of Glass Transition in Foods. September 27, 2011. Webinar. Institute of Food Technologists.
LiveClicks 2 Hour Webinar. Time Management for Microsoft Outlook: Increasing Your Productivity Through The Effective Use of Outlook. August 19, 2011. Franklin Covey.
Food Safety Act. Webinar. March 3, 2011. Food Seminars International.
ADSA: Navigating the Media Landscape. Webinar. November 18, 2010. American Dairy Science Association.
Proposal Writing Targeted to the National Institutes of Health (NIH). Webinar. November 2, 2010. Institute of Food Technologists.
Grant Writing 101 For Members of the Institute of Food Technologists. Webinar. September 14, 2010. Institute of Food Technologists.
Sensory Evaluation: Current Developments and Applications. July 16 – 17, 2010 Chicago, IL
WINGED Program – Writing in Generally Every Discipline. September, 2009. California Polytechnic State University – San Luis Obispo.
Effective Questioning and Meeting Skills. Baker Communications Inc. Rosemont, IL. July 21, 2009.