

**Marie A Caudill, PhD, RD**  
*Professor*

**Division of Nutritional Sciences**

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**Education**

BA, 1990, Physical Education (Summa Cum Laude), College of Education, University of North Florida, Jacksonville, FL.

BS, 1992, Health Science (Summa Cum Laude), College of Health, University of North Florida, Jacksonville, FL

MS, 1993, Health Science, College of Health, University of North Florida, Jacksonville, FL

PhD, 1997, Nutritional Sciences, Food Science and Human Nutrition, College of Agriculture, University of Florida, Gainesville, FL (Lynn Bailey, Thesis Advisor)

**Additional Training**

Registered Dietitian, 1994, Dietetic Internship at Emory University Hospital, Atlanta, GA.

**Appointments**

Assistant Professor, Human Nutrition and Food Science Department, Cal Poly Pomona, 1997-2003

Director of Didactic Program in Dietetics, Human Nutrition and Food Science Department, Cal Poly Pomona, 1997-2000

Associate Professor, Human Nutrition and Food Science Department, Cal Poly Pomona, 2003-2007

Adjunct Associate Professor, Obstetrics and Gynecology, School of Medicine and Dentistry, University of Rochester Medical Center, 2007-2012

Adjunct Professor, Obstetrics and Gynecology, School of Medicine and Dentistry, University of Rochester Medical Center, 2013-Present

Associate Professor, Cornell University, Division of Nutritional Sciences, August 2007-May 2012

Professor, Cornell University, Division of Nutritional Sciences, May 2012 - Present

## **Honors and Awards**

- 1997-1998 Outstanding Alumni Award, University of North Florida, College of Health Science
- 1998-1999 Dietetic Educator of the Year, Cal Poly Pomona, CA
- 2000-2001 Outstanding Teacher Award, Cal Poly Pomona, College of Agriculture
- 2001-2002 Minority Student Mentoring Award, College of Science, Cal Poly Pomona
- 2002-2003 Minority Student Mentoring Award, College of Science, Cal Poly Pomona
- 2002-2003 Outstanding Researcher Award, Cal Poly Pomona, Gamma Sigma Delta, Honor Society of Agriculture
- 2003-2004 Minority Student Mentoring Award, College of Science, Cal Poly Pomona
- 2003-2004 Outstanding Researcher Award, California Agricultural Research Initiative
- 2006-2007 Diversity Champion Award, Cal Poly Pomona
- 2007-2008 Recipient of the 2008 Norman Kretchmer Memorial Award in Nutrition and Development, American Society of Nutrition
- 2008-2009 Greek Faculty Honoree of Distinction, Infraternity Council, Multicultural Greek Letter Council and Panhellenic Council, Cornell University
- 2009-2010 Omega Greek Honor Society, Outstanding faculty member
- 2011-2012 The State University of New York Chancellor's Award for Excellence in Teaching
- 2014- Stephen H. Weiss Presidential Fellow Award for distinguished teaching of Undergraduates, Cornell University

## **Research Program**

A primary goal of the Caudill laboratory is to generate data that will inform the development of nutrient intake recommendations that promote mother and child nutrition, health and well-being. An integrative approach which includes targeted and non-targeted assessments of genomic, epigenetic, biochemical and physiologic endpoints is employed.

## **Current Research Activities**

Impact of maternal choline intake during pregnancy on DHA delivery to the developing fetus

Effect of dietary choline intake and genetic variation on choline metabolism and partitioning during human pregnancy

Influence of the gut microbiome on choline bioavailability

## Bibliography

### Peer Reviewed Original Research Publications and Reviews

1. Caudill MA, Cruz AC, Gregory JF III, Hutson AD and Bailey LB. Folate Status Response to controlled folate intake in pregnant women. *J Nutr.* 1997;127:2363-2370
2. Caudill MA, Gregory JF III, Hutson AD and Bailey LB. Folate catabolism in pregnant women consuming controlled folate intakes. *J Nutr.* 1998;128: 204-208.
3. Bonnette RE, Caudill MA, Boddie AM, Hutson AD, Kauwell GP and Bailey LB. Plasma homocysteine in pregnant and nonpregnant women fed a folate controlled diet. *Obstetrics and Gynecology.* 1998;92:167-170.
4. Caudill MA. Current and emerging issues in folate nutriture. *Nutrition Today* 2000;35:1-8
5. Caudill MA, Le T, Moonie S, Torabian S and Cogger EA. Folate status in women of childbearing age residing in Southern California after folic acid fortification. *J Am Coll Nutr.* 2001;20:129-134.
6. Gregory JF, Caudill MA, FJ Opalko and Bailey LB. Kinetics of folate turnover in pregnant women (second trimester) and nonpregnant controls during folic acid supplementation: stable-isotopic labeling of plasma folate, urinary folate and folate catabolites shows subtle effects of pregnancy on turnover of folate pools. *J Nutr.* 2001;131:1928-1937.
7. Caudill MA, Wang J, Melnyk IP, Pogribny IP, Jernigan S, Collins MD, Santos-Guzman J, Swendseid ME, Cogger EA and James SJ. Intracellular S-adenosylhomocysteine concentrations predict global DNA hypomethylation in tissues of methyl-deficient cystathionine beta-synthase heterozygous mice. *J Nutr.* 2001;131:2811-2818.
8. Caudill MA, Bailey LB and Gregory JF. Consumption of the folate breakdown product para-aminobenzoylglutamate contributes minimally to urinary folate catabolite excretion in humans: Investigation using [13C5] para-aminobenzoylglutamate. *J Nutr.* 2002;132:2613-2616.
9. James SJ, Melnyk S, Pogribna M, Pogribny IP, Caudill MA. Elevation in S-adenosylhomocysteine and DNA hypomethylation: potential epigenetic mechanism for homocysteine-related pathology. *J Nutr.* 2002;132(8 Suppl):2361S-2366S. PubMed PMID: 12163693.
10. Torabian Esfahani S, Cogger EA and Caudill MA. Heterogeneity in MTHFR C677T and A1298C genotypes among women differing in ethnicity. *J Am Diet Assoc.* 2003;103:200-207.
11. Guinotte C, Axume J, Hata Hiroko, Urrutia T, Burns M, Alamilla A, McCabe D, Singgih A., Cogger EA and Caudill MA. Methylenetetrahydrofolate reductase C677T variant modulates folate status response to controlled folate intakes in young women. *J Nutr.* 2003;133:1272-1280. PMID:12730409

12. Santos-Guzman, Arnhold T, Nau H, Wagner C, Fahr SH, Mao GE, Caudill MA, Wang JE, Henning SM, Swendseid ME and Collins MD. Antagonism of hypervitaminosis A-induced anterior neural tube closure defects with a methyl-donor deficiency in murine whole-embryo culture. *J Nutr.* 2003;133:3561-3570.
13. Perry C., Renna S., Khitun E., Ortiz, M., Moriarty D. and Caudill MA. Ethnicity and race influences folate status response to controlled folate intakes in non-pregnant young women. *J Nutr.* 2004;134:1786-1792. PMID:15226470
14. Caudill MA. The role of folate in reducing chronic and developmental disease risk: an overview. *J Food Sc.* 2004;69:SNQ55-67.
15. Yang TL, Hung J, Caudill MA, Urrutia TF, Alamilla A, Perry CA, Li R, Hata H, Cogger EA. A long-term controlled folate feeding study in young women supports the validity of the 1.7 multiplier in the dietary folate equivalency equation. *J Nutr.* 2005;135: 1139-1145.
16. McCabe DC, Caudill MA. DNA methylation, genomic silencing, and links to nutrition and cancer. *Nutr Rev.*2005; 63:183-195.
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19. Hung J, Yang TL, Urrutia TF, Li R, Perry CA, Hata H, Cogger EA, Moriarty DJ, Caudill MA. Additional food folate derived exclusively from natural sources improves folate status in young women with the MTHFR 677 CC or TT genotype. *J Nutr Biochem.* 2006;728-734. PMID:16524711
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## Chapters

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#### Textbooks Edited

*Biochemical, Physiological, & Molecular Aspects of Human Nutrition*  
 Martha H. Stipanuk and Marie A. Caudill (eds.) 3rd and 4<sup>th</sup> editions. St Louis, MO: Elsevier Saunders; 2012 and 2018.

#### **External Support (Competitive)**

##### ACTIVE

USDA/NIFA NYC –HATCH Program (Caudill, PI)

*Choline and omega 3-fatty acids: An opportunity for Agriculture*

Amount: \$25,000                      Start/End: 10/1/2017-9/30/2019

Balchem Corporation (Caudill, PI)

*Choline and Docosahexaenoic Acid: A Synergistic Approach to Improve DHA Delivery to Fetal Tissue*

Amount: \$262,314 (direct)                      Start/End: 10/1/2017-9/30/2020

NYSTAR Designated Center for Advanced Technology (CAT; Caudill, PI)

*Choline and Docosahexaenoic Acid: A Synergistic Approach to Improve DHA Delivery to Fetal Tissue*

Amount: \$75,000                      Start/End: 7/1/2019-6/30/2020

##### EXPIRED

NYSTAR Designated Center for Advanced Technology (CAT; Caudill, PI)

*Choline and Docosahexaenoic Acid: A Synergistic Approach to Improve DHA Delivery to Fetal Tissue*

Amount: \$50,000                      Start/End: 7/1/2018-6/30/2019

USDA-NIFA-AFRI-004797 (Fellowship, Heyjun Park, Project number NYC-399569)  
 Vitamin D metabolic profiling of human placenta  
 Amount: \$39,360 Start / End: 4/1/2016-9/30/2017 Acct #: 199-8329

Gerber Foundation Award (Hey Jun Park and Caudill)  
 Vitamin D status and metabolism in pregnant and nonpregnant control women  
 consuming controlled and equivalent intakes of vitamin D.  
 Amount: \$19,838 Start / End: 11/20/2014-5/31/2017 Acct#: 199-8326

NIH 1R03HD080824-01A1 (Heyjun Park and Caudill)  
 Vitamin D metabolism in pregnant women consuming controlled intakes  
 Amount: \$122,009 Start / End: 4/1/2015-3/31/2017 Acct #: 199-8328

USDA/NIFA NYC –HATCH Program (Sajin Bae and Caudill)  
 Vitamin B12 requirements during pregnancy and lactation  
 Amount: \$60,000 Start / End: 10/1/2014-9/30/2016 Acct #: 199-7402

American Egg Board/Egg Nutrition Center, Fellowship for Sze Ting (Cecilia) Kwan  
 Choline as a modulator of placental function for improving fetal development  
 Amount: \$ 90,821.00 Start / End: 8/1/2013-8/1/2016 Acct #: 199-8319

Sigma Delta Epsilon Graduate Women in Science (SDE/GWIS), Nell Mondy Fellowship  
 for Sze Ting (Cecilia) Kwan. A genome-wide survey of placental imprinted genes in  
 response to maternal choline supplementation.  
 Amount: \$10,000.00 Start / End: 7/1/2015-6/30/2016 Acct #: 199-8304

American Egg Board / Egg Nutrition Center (Caudill, PI) “Impact of Diet and Gut  
 Microbiota on Trimethylamine-N-Oxide Production and Fate in Humans” Amount:  
 \$86,068. Start/End: 12/18/2013-12/17/2015 Acct #: 199-8325

Beef Check-Off, National Cattlemen’s Beef Association (Caudill, PI) “Impact of Diet and  
 Gut Microbiota on Trimethylamine-N-Oxide Production and Fate in Humans”  
 1/1/2014 – 12/31/2015 Total support, \$75,000, PI. Acct #: 199-8327

Egg Nutrition Center (Caudill, PI) “Improving choline, DHA, and amino acid supply to  
 the infant during lactation” 12/19/2013 – 12/18/2015. Award: \$73,179. Acct #: 199-8318.

USDA/NIFA AFRI 2011-03436 (Caudill, PI) “Choline as a modulator of inflammation and  
 placental function” 1/15/2012 – 1/14/2015. Total support, \$470,000, PI.

NYC-199448 HATCH Program (Caudill) “Personalized Nutrition: Management of  
 functional genetic variation through nutrition” 10/1/2012 – 9/30/2014. Total support,  
 \$46,000, PI

National Institute of Health (R01CA120523-02, PI: Ulrich) “Relationship between plasma  
 choline metabolites and risk of incident colorectal cancer in the Women's Health  
 Initiative” 8/11/2012-12/31/2013. Total support- \$30,000, Co-PI of subcontract.

National Institute of Health (R01CA120523-02, PI: Ulrich) “Relationship between one-  
 carbon biomarkers and methylation in the Women’s Health Initiative Observational  
 Cohort” 8/11/2011-12/31/2012. Total direct support- \$48,400, Co-PI of subcontract.

U.S. Dept. of Agriculture / Egg Nutrition Center Dissertation Fellowship "The influence of choline intake on lipids" 8/01/2009-7/31/2012. Total direct support – \$120,000, Director

U.S. Dept. of Agriculture (Special Grants Program, PI: Patrick Stover) "Human Nutrition Requirements in Obesity, Pregnancy and Child Development" 6/29/2010-6/30/2012. Total direct support – \$147,000, PI of sub-contract.

Hartwell Foundation Postdoctoral Fellow "Effect of pregnancy on biotin status" 1/1/2010-12/31/2011. Total direct support – \$100,000, Director

U.S. Dept. of Agriculture (HATCH) "Personalized Nutrition: Management of functional genetic variation through nutrition" 10/1/2008-9/30/2011. Total direct support – \$90,000, PI

Bronfenbrenner Life Course Center "Lasting effects of prenatal and early postnatal choline supplementation on cognitive development during infancy and early childhood" 7/01/2010-6/30/2011, Total direct support – \$8,500, Co-PI

Beef Checkoff, through the National Cattlemen's Beef Association (NCBA) and the Nebraska Beef Council. "Optimizing choline status during pregnancy" 04/01/2009-3/31/2011. Total direct support – \$107,239, PI

Gerber Foundation "Effect of pregnancy on biotin status" 11/19/2010-3/3/2011. Total direct support – \$20,000, PI

California Agricultural Research Initiative "The effects of feeding eggs on plasma choline status" 3/1/2009-2/28/2011. Total direct support – \$150,000, Co-PI

U.S. Dept. of Agriculture (Egg Nutrition Center/American Egg Board) "Effect of controlled varied choline intake on fetal/maternal biomarkers of choline status" 2/1/2009-1/31/2011. Total direct support – \$167,167, PI

U.S. Dept. of Agriculture (Special Grants Program) "Biomarkers for Optimal Human Choline and Calcium Requirements During Pregnancy" 7/15/2009-1/14/2011. Total direct support – \$160,000, PI of sub-contract.

California Agricultural Research Initiative (ARI) "Choline flux as a function of folate, choline and MTHFR genotype in mice and humans" 6/1/2008-5/31/2010, Total direct support – \$149,221 Co-PI.

PCCW Affinito/Stewart "Effect of prenatal choline intake on maternal and fetal biomarkers of choline status" 4/1/2009-3/30/2010. Total direct support – \$10,044, PI

Institute of Social Sciences (ISS) Small Grants Program. Effect of maternal choline intake on neurocognitive development in infants. 6/30/2008-6/29/2009. Total direct support – \$3,176, PI

National Institutes of Health (NIH/SCORE) "The response of choline and folate status to controlled levels of choline intake in young men" 09/01/2004-8/31/2008. Total direct support – \$831,255, PI of sub-contract.

California Agricultural Research Initiative (ARI) "Gene expression as a function of folate intake, choline intake and MTHFR genotype in mice and humans" 6/1/2007-5/31/2008 ARI # 07-4-154-22. Total direct support – \$72,750, PI

United States Department of Agriculture (USDA-CSREES) and California Agricultural Research Initiative (ARI) "Influence of common genetic variants in one carbon metabolic genes on DNA methylation" 6/1/2007-5/31/2008 Project # 08-4-166-11, Total direct support – \$74,401, PI

California Agricultural Research Initiative (ARI) "Choline and folate status in Mexican American men differing in MTHFR C677T genotype: an observational study" 6/1/2005-5/31/2006. Total direct support – \$43,000 PI

California Agricultural Research Initiative (ARI) "Choline status response to varied dietary choline intakes in young women under controlled conditions" 6/1/2005-5/31/2007. Number: 06-4-121-13 Total direct support – \$181,128 PI

California Agricultural Research Initiative (ARI) "Influence of genetics and ethnicity on choline status in young women consuming controlled intakes" 6/1/2004-5/31/2006. Total direct support – \$117,126 PI

California Agricultural Research Initiative (ARI) "Choline status and genetic variations in autistic children". 6/1/2004-5/31/2005. Total direct support – \$20,000 PI

National Institutes of Health (NIH SCORE) "Effect of race and MTHFR genotype on folate requirements in women of childbearing age" 09/01/2000-8/31/2004. Total direct support – \$729,599, PI

California Agricultural Research Initiative, Equipment Grant. "Liquid Chromatographer Mass Spectrometer. 7/1/2002-6/30/2003. Total direct support – \$45,000, PI

U.S. Dept. of Agriculture / NRI "Effectiveness of natural dietary folate in improving folate nutriture. 8/1/2000-7/31/2003. Total support – \$250,000, PI

Research Scholarship and Creative Activities (RSCA), "Impact of folic acid fortification of the food supply on low income women of childbearing age", 01/01/2000-12/31/2000. Total direct support — \$20,000 (\$5,000 + summer salary), PI

UCLA Human Nutrition Center "Effect of S-adenosylhomocysteine on DNA methylation status" 1999-2000, Total direct support – \$10,000, PI

Research Scholarship and Creative Activities (RSCA), "Folate status in premenopausal women after folic acid fortification of the food supply" 01/01/1999-12/31/2000. Total direct support – \$20,000 (\$5000 + summary salary), PI

Research Scholarship and Creative Activities (RSCA), "Homocysteine and B vitamin status in Type 2 Diabetic Post-Menopausal women and controls", 01/01/1998-12/31/1999. Total direct support – \$20,000 (\$5000 + summary salary), PI

UCLA Human Nutrition Center "Effect of homocysteine on the development of liver cancer" 1998-1999, Total direct support – \$5000, PI

### **Scientific Advisory Services**

Balchem Corporation, New Hampton, New York, USA	2017-Present
Proctor and Gamble Health Germany	2018-Present
Natals, Inc (dba Ritual), Los Angeles, California, USA	2018-Present
Bayer, Whippany, New Jersey, USA	2018-Present
Nu Skin Enterprises (Pharmanex), Provo, Utah	2018
Better For You Nutritional, Inc., USA	2020-Present

### **Invited Scientific Presentations, Seminars and Outreach (most recent first)**

- Choline DC Briefings. TBD. Washington, DC. January 30<sup>th</sup> 2020.
- Invited Speaker, Nutrition During Pregnancy and Lactation: Exploring New Evidence – A Workshop for the The National Academies of Sciences, Engineering, and Medicine. Washington DC. January 29<sup>th</sup> 2020.
- Choline Briefing, Invited Speaker, WIC Nutrition Program. December 17<sup>th</sup> 2019.
- Invited Speaker and Chair, Choline Awareness During the Perinatal Period: Gaining Momentum in the United States Yet Overlooked in Europe. European Gynecology Society Congress Vienna, Austria. October 18<sup>th</sup> 2019.
- Invited Speaker, Choline Webinar for Medical Professionals, Live on MyCME.com. Oct 15, 2019.
- Invited Speaker, Shopping For Health Annual Conference, St. Louis, Missouri, July 14-16 2019.
- Dietary Guidelines Advisory Committee (DGAC) Public Comments Session (2020). Provided public comments to DGAC in an effort to raise awareness of the importance of adequate choline during the perinatal period. Washington, DC, July 11 2019.
- Invited Speaker, Bill & Melinda Gates Foundation. Nicotinamide and Choline Biology and Implications for Maternal, Newborn, & Child Health Convening. Seattle, Washington. December 14, 2018.
- Invited Speaker, Balchem Advisory Board Annual Meeting. Folate and Choline Interrelationships. Saint Louis, MO. October 31, 2018.
- Invited Speaker, NIH Office of Dietary Supplements (ODS). Choline: Exploring the Growing Science on its Benefits for Moms and during the First 1,000 Days. Washington DC. September 26 2018
- Today's Dietitian Webinar. Choline: exploring the growing science on its benefits for moms, during fetal development, and beyond. September 12, 2018.

Women's Health Dietetic Practice Group Webinar. *Choline: Exploring the Growing Science on its Benefits for Moms and during the First 1,000 Days*. June 6 2018

Choline DC Briefings: 1 hour meetings with the USDA Office of the Under Secretary for Food, Nutrition and Consumer Services, and the Division of Prevention Science in the Office of Disease Prevention and Health Promotion at the U.S. Department of Health and Human Services (USDHHS). Washington DC. May 30 2018

Choline Science and Communications Roundtable. Key Note Speaker. Washington, DC. February 21, 2018

Balchem TMAO Symposium. Fish or Foul. Saint Louis, MO. December 13th & 14th, 2017

Food & Nutrition Conference & Expo (FNCE) What's New on the Label: Choline, The Nutrient to Know, ADA Annual Meeting. Chicago, IL. 10/22/2017

Choline Event with Media RDs. Choline: The Unknown Essential Nutrient. NYC, NY September 27, 2017.

Conceive Baby Choline Webinar. <https://conceivebaby.com.au/webinar-series/>  
<https://www.youtube.com/watch?v=FsVAIFLhBmY&feature=youtu.be>  
<https://youtu.be/ZScEFQ3BiE0> July 11, 2017.

Choline and Docosahexaenoic Acid: A Synergistic Approach to Improve DHA Delivery to Fetal Tissue? Scientific Meeting sponsored by Balchem and DSM. Syracuse, NY. 12/15/2016.

The CHOLINE Information Council, Choline Women's Health Videoshoot, 6/4/15  
<http://cholinecouCncil.com/media/index.php>

Institute of Food Technologists Annual Meeting, "Choline: The Most Important Nutrient Most Overlooked" (ID number 10170), Chicago, IL, July 11-14, 2015.

CME-accredited initiative, "Choline: An Essential Nutrient for Improving Prenatal Development, Pregnancy Outcomes and Ongoing Health. Annenberg Center for Health Sciences at Eisenhower, Faculty Speaker. Towson, Maryland. March 12, 2014.

CME-certified initiative "Choline: An Essential Nutrient for Improving Prenatal Development, Pregnancy Outcomes and Ongoing Health" Annenberg Center for Health Sciences at Eisenhower. Faculty Presenter. October 16 2013 (live event)

"Choline metabolism in pregnancy" 9th International Conference on Homocysteine and One-Carbon Metabolism: Trinity College Dublin, Ireland, September 8th–12th, 2013.

"Little Things, Big Consequences: Microbes, Micro-Nutrients, and Neurotransmitters", Cornell reunion event, June 2013.

"Little Things, Big Consequences: Microbes, Micro-Nutrients and Micrometer Discoveries", CALS, Cornell University, October 2012.

"Nutrition and Aging: Can nutrient exposure make us remember more and stay healthy? Alumni Reunion, College of Ecology, Cornell University, June, 2011

- "Supplementing the maternal diet with extra choline alters placental and fetal epigenetic marks" FASEB SUMMER CONFERENCE: Folic Acid, Vitamin B12 & One Carbon Metabolism: Crete, Greece, July 22 – July 27, 2012
- "Varied maternal choline intake in humans alters metabolic, epigenomic and epigenetic marks" *International Conference on "Advances and Controversies in B-Vitamins and Choline"* University of Leipzig, Germany, March 05 - 08, 2012.
- "Pre and Post Natal Health: Evidence of an Increased choline requirement" Methyl Nutrients in Health and Disease. *Annual Canadian Nutrition Society Conference*. University of Guelph, Guelph, Ontario, Canada June 2, 2011.
- "Teaching Nutrigenetics to Undergraduate Dietetic Students: A Case Study Approach" Integrating Nutritional Genomics and Nutritional Genetics in the 21<sup>st</sup> Century Nutrition Curriculum. *American Society For Nutrition Symposium*, Washington DC, April 10, 2011
- "Pre and Post Natal Health: Evidence of an Increased Choline Requirement" *Nutrition Educators from Cornell Cooperative Extension*. Ithaca, NY, November 2010
- "Genetic variation in methyl metabolizing enzymes; impact on folate (and choline) bioavailability". *UC Davis Bioavailability Conference*, Asilomar, CA, September 2010
- "Pre and Post Natal Health: Evidence of an Increased Choline Requirement" *National WIC Conference 2010 Nutrition and Breastfeeding Conference* in San Diego, CA, September 2010
- "Pre- and Postnatal Health: Evidence of an Increased Choline Requirement" 55<sup>th</sup> *American College of Nurse-Midwives (ACNM) Annual Meeting & Exposition*. Marriott Wardman Park Hotel in Washington, D.C., June 2010.
- "Pre and Post Natal Health: Evidence of an Increased Choline Requirement" *Nutrition Adventure*, National Cattlemen's Beef Association, Kansas City, Missouri, May 2010
- "Folate bioavailability: Implications for establishing dietary recommendations and optimizing status" *NIH Office of Dietary Supplements*, Department of Health and Human Services, Bethesda, Maryland March 2010
- "Nutritional Genomics: Managing genetic variation with nutrition" *Southern Tier Dietetic Association Meeting*, Ithaca, NY October 2009
- "Choline intake, plasma riboflavin and the PEMT G5465A genotype predict homocysteine in folate deplete Mexican American men with the MTHFR 677TT genotype" *Experimental Biology*, New Orleans, LA April 2009
- "Pre- and Postnatal Health: Evidence of an Increased Choline Requirement" *Choline Science Summit*. U.S. Department of Agriculture (USDA), Economic Research Service, Waugh Auditorium, Washington, DC September, 2009
- "Choline and its relation to fetal development" *Florida Dietetic Association Annual Meeting*, Naples, Florida July 2009



- "Folate bioavailability: Implications for establishing dietary recommendations and optimizing status" *Micronutrient bioavailability: priorities and challenges for setting dietary reference values*. Barcelona, Spain, June, 2009
- "Folate intake at RDA levels is inadequate for Mexican American men with the MTHFR 677TT genotype" Molecular and Human Nutrition Seminar, *Cornell University*, Ithaca, NY October 2008
- "Customizing dietary recommendations by genotype" *Temple University*, Philadelphia, PA August 2008
- "Personalized Nutrition: Customizing nutrient recommendations by genotype" *Washington State Dietetic Association Annual Meeting*, Yakima, WA April 2008
- "Choline intakes at AI levels are sufficient in preventing liver dysfunction in Mexican American men but are not optimal in minimizing plasma total homocysteine increases after a methionine load" *Experimental Biology*, San Diego, CA April 2008
- "Folate intake at RDA levels is inadequate for Mexican American men with the MTHFR 677TT genotype" *Experimental Biology*, San Diego, CA April 2008
- "Genetic variation and nutritional requirements" *Center for Food Innovation Community of Practice in Health and Nutrition*, Cornell University, February 2008
- "Folate Intake at RDA Levels is Inadequate for Mexican Men with the MTHFR 677TT genotype" Nutritional Biochemistry Seminar, *University of North Carolina*, Chapel Hill, January 2008.
- "Customizing dietary recommendations by genotype: Folate, a case in point of the challenges and opportunities ahead" *General Mills, Cornell University*, Ithaca, New York. August 2007
- "Customizing dietary recommendations by genotype: folate, a case in point. *California Department of Food and Agriculture*, Pomona, CA. June 2007
- "Nutritional genomics as a potential tool for targeted medical nutrition therapy" 20<sup>th</sup> *Southern California Food Industry Conference*. Pomona, CA. February, 2007
- "Personalized Nutrition: Nutrigenetics as a potential tool for targeted medical nutrition therapy" 6<sup>th</sup> *International Phytochemical Conference*, "Phytochemicals: Aging and Health", Buena Park, CA. October 2006
- "Choline status is altered by folate intake and the MTHFR 677 C→T variant in young Mexican American women" *FASEB Summer Research Conference*, August 2006
- "The role of folate in reducing chronic and developmental disease risk: an overview" *International Union of Food Science and Technology (IUFOST)*, Chicago, IL July 2003
- "Folate and Genetics" *California Dietetic Association Annual Meeting*, Anaheim CA, April, 2002
- "Effect of Methylenetetrahydrofolate Reductase (MTHFR) C677T Polymorphism on Folate Status When Folate Intake Is Controlled" *Experimental Biology*, April 2002

"Spotlight on folate", *Loma Linda University*, Loma Linda, CA, March 2001

"Homocysteine and Heart Disease: The Roles of Folate, Vitamin B12 and Vitamin B6",  
*California Dietetic Association Annual Meeting*, Anaheim, CA April 1999

## **Public Engagement, Extension and Outreach**

### Goals

To increase the public's awareness of choline and its importance during pregnancy and lactation.

### Impact and Outcomes (Examples)

Quoted in "Choline is a little-known nutrient but its benefits to our health are huge".

Feb 2018. <https://www.sbs.com.au/food/article/2018/02/08/choline-little-known-nutrient-its-benefits-our-health-are-huge>

Research featured in the Cornell Chronicle. Adequate choline in pregnancy may have cognitive benefits for offspring. <http://news.cornell.edu/stories/2018/01/adequate-choline-pregnancy-may-have-cognitive-benefits-offspring> January 2018. Also see: <https://fasebj.altmetric.com/details/30122131/news>

Choline Event with the Media. Shining the Light on Choline. New York, NY. Sept 27, 2017.

Conceive Baby Seminar. Importance of Choline Preconception. The podcast version is on the [Conceive Baby Podcast Series](#) page as well as on [iTunes](#). 7/12/2017

The Washington Post. The nutrient you didn't know you were missing by Christy Brissette. [https://www.washingtonpost.com/lifestyle/wellness/the-nutrient-you-didnt-know-you-were-missing/2016/12/08/e4b1f922-b64f-11e6-b8df-600bd9d38a02\\_story.html?utm\\_term=.e5835e78f417](https://www.washingtonpost.com/lifestyle/wellness/the-nutrient-you-didnt-know-you-were-missing/2016/12/08/e4b1f922-b64f-11e6-b8df-600bd9d38a02_story.html?utm_term=.e5835e78f417). 12/9/2016

The CHOLINE Information Council, Choline Women's Health Videoshoot, 6/4/15  
<http://cholinecouncil.com/media/index.php>

[FitPregnancy.com](#) Interview with Kim Conte "Are You Getting Enough Choline?", July 28 2015

Choline- Moms Everyday TV show, July 29 2015

<http://www.momseveryday.com/test/health/headlines/What-is-Choline-351055561.html>

ESCONDIDO, Calif., July 28, 2015 /PRNewswire/ Research Shows Choline Plays Critical Role in Pregnancy and Women's Health. <http://www.prnewswire.com/news-releases/research-shows-choline-plays-critical-role-in-pregnancy-and-womens-health-300119541.html>

Huffington Post. Choline Consumption During Pregnancy May Lower Babies' Risk Of Diabetes: Study. [http://www.huffingtonpost.com/2012/05/04/choline-pregnancy-babies-diabetes-hypertension\\_n\\_1475479.html](http://www.huffingtonpost.com/2012/05/04/choline-pregnancy-babies-diabetes-hypertension_n_1475479.html)

### **Scientific Meetings Organized**

International Union of Food Science and Technology, 12th World Congress of Food Science and Technology "Folate: Problems and Solutions" Organizing Co-Chair, July 2003, Chicago, IL. Hosted by the Institute of Food Technologists

Experimental Biology Minisymposium "Folate, Vitamin B12 and one-carbon metabolism", Organizing Co-Chair, San Francisco, CA April 2006

Experimental Biology Minisymposium "One carbon metabolism nutrients", Organizing Co-Chair, Anaheim, CA April 2010

### **Advisory Boards and Committees**

Advisory Board, natalis, Inc (Los Angeles, CA) 2017-Present.

Advisory Board, Balchem, NY. 2017-Present.

NIH Folate Expert Panel working under the BOND (Biomarkers of Nutrition for Development), September 27-28, 2012, Bethesda Maryland.

### **Scientific and Professional Societies**

American Society for Nutritional Sciences, 1997-present

American Dietetic Association, 1994-present

### **Graduate Program Memberships**

#### **Graduate Field Appointments, Cornell University**

Nutritional Sciences, 1997-present

#### **NIH Training Grant Memberships, Cornell University**

Nutrition Training Grant, 2008-Present

Infant-Maternal Nutrition Training Grant. 2008-Present

ReproGenomics Training Grant, 2012-2018

## **Academic Trainees**

### **Postdoctoral Associates**

Cydne Perry, January 2009-May 2012

Allyson West, August 2012-March 2014

Jian Yan, January 2012- May 2014

Clara Cho, January 2014-July 2016

Melissa McDougall, January 2018-July 2019

### **PhD Students (Chair)**

Allyson West, PhD in Nutrition (Human Nutrition), 2008-2012 "Status and functional indicators of folate and choline metabolism among third-trimester pregnant, lactating, and nonpregnant women: A set of dose response studies"

Jian Yan, PhD in Nutrition (Human Nutrition), 2008-2012 "Choline metabolism in response to choline intake, pregnancy and polymorphisms of one-carbon metabolic genes in humans"

Xinyin Jiang, PhD in Nutrition (Molecular Nutrition), 2008-2013 "Influence of choline intake during pregnancy on maternal and fetal genomic markers in humans"

Heyjun Park, PhD in Nutrition (Human Nutrition), January 2013-2017 "Vitamin D Metabolism in Human Pregnancy with an Emphasis on the Placenta"

Ariel Ganz, PhD candidate in Nutrition, Molecular Nutrition, 2014-2017 (Co-Chair) "Common genetic variants in folate, choline, and vitamin D metabolic pathways influence vitamin metabolism in woman of reproductive age meeting nutrient intake recommendations"

Sajin Bae, PhD in Nutrition, Molecular Nutrition, 2012-2017 (Co-Chair). "Influence of B-vitamins on one carbon metabolism and associations with cancer risk and reproductive state"

Sze Ting (Cecilia) Kwan, PhD in Nutrition, Molecular Nutrition, 2012-2017. "Choline as a Modulator of Placental Function for Improving Fetal Development"

Julia King, PhD in Nutrition, Molecular Nutrition, 2012-2017. "Maternal Choline Supplementation in a Mouse Model of Placental Insufficiency"

Kevin Klatt, PhD Candidate in Nutrition, Molecular Nutrition, 2015-2018. "Phosphatidylcholines: Beyond the membrane".

Siraphat (Fay) Taesuwan, PhD candidate in Nutrition, Human Nutrition, 2014-2018. "Relationship of choline and trimethylamine *N*-oxide with metabolic and health outcomes in humans".

### **Current Graduate Students (Minor or Field Member)**

Min Ting Lee (Liz Johnson Lab), PhD candidate in Nutrition, 2019-

Heather Guetterman (Julia Finkelstein Lab), PhD candidate in International Nutrition, 2019-

Bonnie Patchen (Pat Cassano Lab), PhD candidate in Nutrition, Epidemiology, 2017-

Navika Gangrade (Tashara Leak Lab) , PhD candidate in Nutrition, Community, 2018-

William Myers (Joe McFadden Lab ), PhD candidate in Animal Science, 2019-

### **Degree Completed Graduate (PhD) Students (Field Appointed Member; n=4)**

Charlotte Bahnfleth, PhD in Human Nutrition, 2015-2019

Emily Riddle, PhD in Nutrition, Human Nutrition, 2015-2018

Wenbo Tang, PhD in Nutrition, Human Nutrition, 2010-2013

Eva Monterrosa, PhD in Nutrition, International Nutrition. "The influence of maternal fatness, knowledge, and diet on infant and young child feeding in Mexico"2007-2010

### **Degree Completed Graduate (MS) Students (Chair; n=1 Cornell University)**

Bailey Drewes, MS in Nutrition. 2016-2017

Crystal Davenport, MS in Nutrition (Molecular Nutrition), 2013, "Lactation and choline intake influence biomarkers of choline metabolism"

### **Degree Completed Graduate (MS) Students (Chair; n=25 Cal Poly Pomona University)**

Lilia Bolgov Winter, MS in Agriculture (Human Nutrition and Food Science Option), 2011, "Identifying cardiovascular risk factors relative to MTHFR genotype in Mexican American men residing in Southern California"

Sally Tran, MS in Agriculture (Human Nutrition and Food Science Option), 2009, "The influence of the MTHFR C677T genotype and controlled folate and choline consumption on red blood cell folate concentrations in Mexican American men"

Tina Chew, MS in Agriculture (Human Nutrition and Food Science Option), 2009, "The influence of MTHFR deficiency and folate intake on the expression of choline related genes in a mouse model"

Christian Abratte, MS in Agriculture (Human Nutrition and Food Science Option, 2009, "The influence of controlled intakes of folate, choline, and betaine and the MTHFR 677C→T polymorphism on plasma choline concentrations in young women"

Susan Nash-Barboza, MS in Agriculture (Human Nutrition and Food Science Option), 2008, "The influence of PEMT -744G→C on choline, folate and homocysteine change"

Jean Hung, MS in Agriculture (Human Nutrition and Food Science Option), 2008, "The influence of ethnicity and folate intake on choline status in young American women"

Sabrina Hinkis, MS in Agriculture (Human Nutrition and Food Science Option), 2008, "The PEMT G5465A genotype, alone and together with the MTHFR C677T genotype, influences plasma total homocysteine in Mexican American men"

William Shin, MS in Agriculture (Human Nutrition and Food Science Option), 2007, "The influence of the MTHFR C677T genotype and controlled choline and folate consumption on lymphocyte DNA damage in Mexican American men"

Claudia Solis, MS in Biological Sciences, 2007, "The influence of the MTHFR C677T genotype and controlled choline and folate consumption on homocysteine concentrations in Mexican American men"

Alexandre Ivanov, MS in Agriculture (Human Nutrition and Food Science Option), 2007 "The influence of the MTHFD1 1958G→A polymorphism on parameters of choline and folate nutriture in young women"

Tania Urrutia, MS in Biological Sciences, 2005, "The dietary folate equivalency of folic acid"

Aaron Alamilla, MS in Biological Sciences, 2005, "Urinary folate excretion and the dietary folate equivalency of folic acid in women consuming controlled folate intakes"

Cydne Perry, MS in Biological Sciences, 2004, "Effect of ethnicity on folate status response to controlled folate intakes in young women"

Tai Li Yang, MS in Agriculture (Nutrition and Food Sciences Option), 2004, "High consumption of natural dietary folate effectively improved folate status in women"

Elena Khitun, MS in Agriculture (Nutrition and Food Sciences Option), 2003, "Red cell folate response to controlled folate intakes in young women differing in ethnicity"

Stacey Renna, MS in Agriculture (Human Nutrition and Food Science Option), 2003, "Serum folate status response to controlled folate intake among women of childbearing age representing different ethnic groups"

Dale McCabe, MS in Biological Sciences, 2003, "The effect of controlled folate intake and the MTHFR 677C→T polymorphism on DNA methylation status"

Annie Fortuna Singgih, MS in Biological Sciences, 2003, "Association of serum creatinine and homocysteine status in women with the MTHFR C677T gene polymorphism"

Michael Burns, MS in Agriculture (Nutrition and Food Sciences Option), 2002, "Homocysteine status in women with MTHFR variations on a controlled folate diet"

Cheryl Guinotte, MS in Agriculture (Human Nutrition and Food Science Option), 2002, "Effect of MTHFR C677T genotype on folate status in women consuming controlled folate intakes"

Jennie Wang, MS in Agriculture (Nutrition and Food Sciences Option), 2001, "Effect of S-adenosylhomocysteine on global DNA methylation in mice"

Seterah Torabian Esfahani, MS in Agriculture (Nutrition and Food Sciences Option), 2001, "Two common mutations, C677T and A1298C, in the human methylenetetrahydrofolate reductase (MTHFR) gene, and their associations with plasma homocysteine and blood folate concentrations"

Thia Le, MS in Agriculture (Nutrition and Food Sciences Option), 2001, "Folate status in women of childbearing age post-folic acid fortification of the food supply"

Sheniz Moonie, MS in Biological Sciences, 2000, "Folate status in women of low socioeconomic standing post-folic acid fortification of the food supply"

Mary Kuehl, MS in Agriculture (Nutrition and Food Sciences Option), 1999, "Homocysteine concentration and B vitamin status in post-menopausal Type 2 diabetic women and non-diabetic controls"

### **Degree Completed MS Graduate Students (Minor Member)**

Karla Plesums, MS in Kinesiology, Cal Poly Pomona University, 2005, "Four weeks of panax notoginseng supplementation has no effect on blood glucose in non-diabetic adults" Minor Member.

Wendy Hawthorne, MS in Kinesiology, Cal Poly Pomona University, 2002, "The effects of aerobic and anaerobic exercise on post-exercise oxygen consumption" Minor Member.

## **Undergraduate Research Mentees**

### **Honor Students**

Vlad Fomin, Honors in Nutritional Sciences, *"Impact of maternal choline on biomarkers of placental function in a mouse model of placental insufficiency; 2014-2015*

Anita Ganti, Honors in Nutritional Sciences, *"Impact of choline exposure on the expression of angiogenic genes in human trophoblast cells" 2012-2013*

Margaret Dennin, Honors in Nutritional Sciences, *"Urinary excretion of folate in response to consumption of a normal mixed diet plus a prenatal vitamin among nonpregnant, pregnant and lactating women" 2011-2012*

Kelsey Shields, Honors in Nutritional Sciences, *"Impact of genetic variation on biomarkers of choline metabolism in women" 2011-2012*

Meghan Kusko, Honors in Biological Sciences, *"Dose-Response Analysis of Red Blood Cell Folate Suggests "Supra-physiologic" Folate Status in Lactating Women Consuming a Prenatal Vitamin Supplement" 2010-2011*

Melissa Lumish, Honors in Nutritional Sciences, *"Consumption of a Normal Mixed Diet Plus a Folic Acid-Containing Prenatal Vitamin Yields Supra-Normal Folate Status in Third Trimester Pregnant Women" 2009-2010*

### **Leadership Alliance Summer Research Mentor**

Valerie Latimore, Scripps College, Pomona, California, Summer 2010

### **Howard Hughes Scholars**

Bradley Carrier, Summer 2009

Amanda Lusa, Summer 2008

### **Design Your Own Internship Scholars**

Hannah Westfall, Summer 2011

Alyson Flaker, Summer 2009

Christine Dharshaney Subryan, Summer 2008

### **McNair Scholars (at Cal Poly)**

Hiroko Hata, 2000-2001

Brenda Burns, 1999-2000

### **Minority Biomedical Research Scholars (at Cal Poly)**

Jozabeth Silva, 2006-2007

Monica Ortiz, 2002-2003

Tania Urrutia, 2001-2002

Juan Axume, 2001-2002

Aaron Alamilla, 2001-2002

## Graduate Mentee Awards / Honors

- Sze Ting (Cecilia) Kwan, Sigma Delta Epsilon Graduate Women in Science (SDE/GWIS), Nell Mondy Fellowship *A genome-wide survey of placental imprinted genes in response to maternal choline supplementation*. Start / End: 7/1/2015-6/30/2016 Amount: \$10,000
- Sze Ting (Cecilia) Kwan, Foundation's Commission on Dietetic Registration Diversity Scholarship, Dietetic Internship 2015-2016, Award: \$5000
- Heyjun Park, USDA-NIFA-AFRI-004797 Pre-doctoral Fellowship, *Vitamin D metabolic profiling of human placenta*, 2015-2016, Total support -\$38,360
- Hey Jun Park, Gerber Foundation Award, Vitamin D status and metabolism in pregnant and nonpregnant control women consuming controlled and equivalent intakes of vitamin D. 6/15/2014 to 6/14/2016. Total support - \$19,838
- Sze Ting (Cecilia) Kwan, Egg Nutrition Center Dissertation Fellowship "Choline as a modulator of placental function for improving fetal development" 8/1/2013 to 8/1/2016 Total direct support – \$90,821
- Jian Yan, Invited Speaker "Future Leaders in Nutrigenomics", the Nebraska Gateway to Nutrigenomics (NGN) Retreat, University of Nebraska-Lincoln, May 12-14, 2013
- Jian Yan, Harris fellowship, DNS, 2012
- Crystal Davenport, Human Ecology Alumni Association (HEAA) Student Grant Awardee (\$340), "Analysis of Gene Expression Changes Caused by Different Levels of Choline Consumption in Lactating Women and Applicability to Choline Guidelines and Mother/Child Well Being" November, 2011
- Jian Yan, Finalist of the Graduate Student Research Awards Competition, American Society for Nutrition's Scientific Sessions, Experimental Biology April, 2011
- Xinyin Jiang, Graduate Women in Science Fellowship (\$4,333), "Effects of varied maternal choline intake on placental gene expression", 10 out of 266 of the applicants were awarded funding, 06/1/2010-5/30/2011
- Xinyin Jiang, Cadbury Predoctoral Fellowship (\$5000), Influence of choline intake on DNA integrity, DNA methylation and gene expression during pregnancy, April 2010
- Jian Yan, Division of Nutritional Sciences Small Grant, 4/20/2009-4/19/2010
- Xinyin Jiang, Division of Nutritional Sciences Small Grant, 4/20/2009-4/19/2010, \$2000
- Xinyin Jiang, Andrew W. Mellon Student Research Grant, 3/11/2009-3/11/2010, \$750
- Allyson A. West, Egg Nutrition Center Dissertation Fellowship "The influence of choline intake on lipids" 8/01/2009-7/31/2012. Total direct support – \$120,000



### **Undergraduate Mentee Awards / Honors**

Vlad Fomin, Undergraduate Summer Research Hatch Grant Award, USDA Experiment Station, College of Ecology, Cornell University, 6/2/2013-8/12/2013, \$4,000

Yusnier Sonora Lopez, Cornell University Agricultural Experiment Station Award to support mentors HATCH project, 10/1/2012-9/30/2013, \$1000

Antoinette Gayle, Undergraduate Summer Research Hatch Grant Award, USDA Experiment Station, College of Ecology, Cornell University, 6/2/2011-8/12/2011, \$3500

Bradley Carrier, Cornell University Agricultural Experiment Station Award to support mentors HATCH project, 10/1/2009-9/30/2010, \$1000

Amanda Lusa, Cornell University Agricultural Experiment Station Award to support mentors HATCH project, 10/1/2008-9/31/2009, \$1000

## **SERVICE**

### **Academic Committees (most recent first)**

#### **University Committees**

HE Representation on the University Tenure Appeals Panel, July 1 2017-June 30 2022

Stephen H. Weiss Fellows Selection Committee, July 1, 2016-June 30, 2019 (Chair in 2018)

Research Council, 2001-2007 (Chair in 2005-2007; Cal Poly Pomona University)

Institutional Review Board for Human Subject Use, 2004-2007, Cal Poly Pomona

Honors Program Advisory Committee, 2002-2004, Cal Poly Pomona

#### **College Committees**

Biology Curriculum, DNS Representative, 2017-2018, Cornell University

CALS Curriculum, DNS Representative. 2017-2018, Cornell University

CALS Strategic Planning Coordinating Committee, Member, 2013-2014, Cornell University

Ad-hoc Committee, Member, 2012, 2018, 2019 CALS. Cornell University

Outcomes Assessment Committee, Chair, 1998-2000, Cal Poly Pomona University

#### **Department Committees**

Curriculum Committee, 2017-2020, Cornell University

Faculty Search Committee, Co-Chair, Assistant Professor in Biochemistry, Metabolism and Genomics. DNS. April 1 2017-Present, Cornell University

Maternal and Child Nutrition (MCN) Training Grant Executive Committee. 2016-present

Faculty Mentoring Committees (n=3); 2013-Present.  
Appointments and Tenure Committee, Member, DNS, September 2013-August 2016  
Teaching & Research Fellow Search Committee Meeting, Member, DNS, 2011-Present  
Post-baccalaureate Program in Health Studies Admission Committee, Member, DNS,  
2010-2016  
Nurse Practitioner Search Committee, Member, DNS, 2012-2013  
Faculty Search Committee, Chair, Human Metabolism, DNS, 2011-2012  
Graduate Admissions Committee, DNS, 2011-2013  
Human Metabolic Research Unit (HMRU) Advisory Committee, DNS, Cornell  
University, 2007-Present  
Graduate Admissions Committee, DNS, 2008-2010  
Faculty Search Committee, Human Metabolism, DNS, 2008-2009  
Faculty Search Committee, Member, Food Scientist, Cal Poly Pomona, 2004-2005  
Faculty Search Committee, Member, Food Scientist, Cal Poly Pomona, 2003-2004  
Retention, Tenure and Promotion Committee, Cal Poly Pomona, 2003-2004  
Coordinator of the Outcomes Assessment section of the departmental self study, Cal Poly  
Pomona, 2001-2002  
Outcomes Assessment Committee, Chair, Cal Poly Pomona, 1999-2001

### **Service Activities within Institution**

Faculty Participant in the 66<sup>th</sup> Trustee-Council Annual Meeting (TCAM), October 27 2016.  
Faculty Participant in DNS's efforts to increase diversity of trainees within the NIH  
training programs, 2016  
Faculty participant in the Food and Energy Systems portion of President Garrett's visit  
to CALS October 26, 2015  
Faculty participant in the VIP visit of Dr. Gerald Chan's to CALS, February 27 2015  
Faculty Participant in "The Cornell Teaching Partnership Program (CTPP)", June 9 2014  
Faculty Participant in the DNS Open House for Alumni Event, Friday June 6<sup>th</sup> 2014  
Faculty Participant in the Round Table with Beech-Nut. Friday June 6<sup>th</sup> 2014  
Featured Speaker and Panelist, Liberty Hyde Bailey Lecture, "Little Things, Big  
Consequences: Microbes, Micro-Nutrients, and Neurotransmitters", Cornell reunion  
event, June 2013.  
Faculty Speaker and Panelist, Trustee-Council Annual Meeting "Little Things, Big  
Consequences: Microbes, Micro-Nutrients and Micrometer Discoveries", CALS,  
Cornell University, October 2012.

Faculty Speaker, "Nutrition and Aging: Can nutrient exposure make us remember more and stay healthy? *Alumni Reunion*, College of Ecology, Cornell University, June, 2011

Host, Biology Scholars Program (BSP) Lab Tour: The BSP Program is designed to support academic excellence for underrepresented students majoring in Biological Sciences. March, 2011.

Faculty Speaker, "Dietary strategies for the prevention and treatment of atherosclerosis" *Cornell Cardiology Interest Group*. February 23, 2011.

Host, Presidential Life Science Fellow (Crystal Davenport, PhD Candidate, Nutrition) for one of her three required laboratory rotations. September to November, 2010.

Faculty Speaker, "Countering obesity and metabolic unfitnes with a Mediterranean-style dietary pattern", *Theta Delta Chi Fraternity* (Spectemur Agendo Foundation), Cornell University, December 2 2010.

Faculty Speaker, "Nutritional Strategies for Healthy Aging" *Annual Meeting of the President's Council of Cornell Women*. Ithaca, NY March 2008

Guest Lecturer, "Personalized Nutrition" *NS 4420 Implementation of Nutrition Care*, Cornell University, December 2008

Honors Thesis Reviewer, Adam Bisogni, Cornell University, November 2008

Honors Thesis Reviewer, Veronica Conti, Cornell University, March 2008

Faculty Speaker, Biology Scholars Program, Cornell University, October 2008

Faculty Speaker, Dean's Supper for College Scholars, Cornell University, January 2008

Guest Lecturer, "Personalized Nutrition" *NS 4420 Implementation of Nutrition Care*, Cornell University, November, 2007

Faculty Speaker "Effective Grant Writing", McNair Scholars Program, Cal Poly Pomona, Spring 2007

Faculty Speaker "Effective Grant Writing", McNair Scholars Program, Cal Poly Pomona, Spring 2006

Faculty Speaker "Effective Grant Writing", McNair Scholars Program, Cal Poly Pomona, Spring 2005

Faculty Speaker "Effective Grant Writing", McNair Scholars Program, Cal Poly Pomona, Spring 2004

Faculty Speaker "Genetics and Nutrition, Folate a case in point", Minority Biomedical Research Program, Cal Poly Pomona, CA, July 2003

Faculty Speaker "Current and emerging issues in folate", Minority Biomedical Research Program, Cal Poly Pomona, CA, June 2002

Faculty Speaker "Current and emerging issues in folate", Minority Biomedical Research Program, Cal Poly Pomona, CA, June 2001

Advisor of FN Forum (Nutrition Club), Cal Poly Pomona, 2001-2000

Faculty Speaker "Current and emerging issues in folate nutriture", Minority Biomedical Research Program, Cal Poly Pomona, CA, November 2000

Faculty Speaker "Outcomes assessment" Western University, Pomona, CA. Fall, 1999

### **External Committees/Service**

American Society of Nutrition (ASN) student advisor, 2005-2007

### **Community Service Activities**

Guest Speaker, "Nutrigenetics, Southern California Dietetic Interns, Spring 2007

Guest Speaker, "Nutrigenetics", Southern California Dietetic Interns, Spring 2006

Guest Speaker, "Successful grant writing techniques ", Southern California Dietetic Interns, Spring 2005

Guest Speaker, "Successful grant writing techniques", Southern California Dietetic Interns, Spring 2004

Guest Speaker, "Successful grant writing techniques", Southern California Dietetic Interns, Spring 2003

Guest Speaker, "Homocysteine and Heart Disease" Undergraduate Biology Students, University of California, Irvine, May 2003

Guest Speaker, "Successful grant writing techniques, Cal Poly Pomona Dietetic Interns, Spring 2002

Guest Speaker, "Homocysteine and Heart Disease" Undergraduate Biology Students, University of California, Irvine, May 2002

Guest Speaker, "Successful grant writing techniques, Southern California Dietetic Interns, Spring 2001

Guest Speaker "Nutrition and Cardiovascular Disease" Public Health Graduate Students, University of California, Los Angeles, CA, November 2001

Guest Speaker, "Homocysteine and Heart Disease" Undergraduate Biology Students, University of California, Irvine, May 2001

Guest Speaker, "Heart Healthy Eating" Orange County Heart Disease Patients, University of California, Irvine, Spring 2001

Guest Speaker "Nutrition and Cardiovascular Disease" Public Health Graduate Students, University of California, Los Angeles, CA, November 2000

Guest speaker "Nutrition and disease" Undergraduate biology students, UCI, Spring, 2000

Guest speaker "Heart Healthy Nutrition" Orange County Heart Disease Patients,

Irvine, CA, Spring 2000  
Guest speaker "Folate and Health" Pomona Beta Food Bank, Pomona, CA, Spring 2000  
Guest Speaker, "Homocysteine and Heart Disease" Undergraduate Biology Students,  
University of California, Irvine, Spring 2000  
Guest Speaker "Nutrition and Cardiovascular Disease" Public Health Graduate  
Students, University of California, Los Angeles, CA, November 1999  
Guest Speaker, "Heart Healthy Eating" Orange County Heart Disease Patients, UCI,  
Irvine CA, Spring 1999  
Guest Speaker, "Homocysteine and Heart Disease" Undergraduate Biology Students,  
University of California, Irvine, CA May 1999  
Volunteer, Career Day at South El Monte High School, El Monte, CA, January, 1999  
Guest Speaker "Nutritional Assessment" University of California, Irvine, CA, Sept 1998  
Guest Speaker "Nutrition and Diabetes" Kiwanis Club, Upland, CA, August 1998  
Guest Speaker "Nutrition and Diabetes" Kiwanis Club, Pomona, CA, August 1998  
Guest Speaker, "Homocysteine and Heart Disease" Undergraduate Biology Students,  
University of California, Irvine, CA, May 1998  
Guest Speaker, "Nutrition and Diabetes" Kiwanis Club, Claremont, CA, April 1998

### **Courses Taught**

NS 3310 Human Nutrition and Nutrient Metabolism, Cornell University, Spring 2019  
NS 4410 Nutrition and Disease, 4 credits, Cornell University, Fall 2011-2017  
NS 6310 Micronutrients, 1 credit, Cornell University, Fall 2011  
NS 4410 Nutrition and Disease, 4 credits, Cornell University, Fall 2010  
NS 6310 Micronutrients, 1 credit, Cornell University, Fall 2010  
NS 4410 Nutrition and Disease, 4 credits, Cornell University, Fall 2009  
NS 6310 Micronutrients, 1 credit, Cornell University, Fall 2009  
NS 4410 Nutrition and Disease, 4 credits, Cornell University, Spring 2009  
NS 6310 Micronutrients, 1 credit, Cornell University, Fall 2008  
FN 435 Advanced Nutrition III, 4 credits, Cal Poly Pomona, Spring 2007  
FN 499 Nutritional Genomics, 2 credits, Cal Poly Pomona, Winter 2007  
FN 434 Advanced Nutrition II, 4 credits, Cal Poly Pomona, Winter 2007  
FN 433 Advanced Nutrition I, 4 credits, Cal Poly Pomona, Fall 2006  
FN 435 Advanced Nutrition III, 4 credits, Cal Poly Pomona, Spring 2006  
FN 499 Nutritional Genomics, 2 credits, Cal Poly Pomona, Winter 2006  
FN 434 Advanced Nutrition II, 4 credits, Cal Poly Pomona, Winter 2006  
FN 433 Advanced Nutrition I, 4 credits, Cal Poly Pomona, Fall 2005

FN 435 Advanced Nutrition III, 4 credits, Cal Poly Pomona, Spring 2005  
FN 434 Advanced Nutrition II, 4 credits, Cal Poly Pomona, Winter 2005  
FN 305 Nutrition, Science and Health, 4 credits, Cal Poly Pomona, Winter 2005  
FN 434 Advanced Nutrition II, 4 credits, Cal Poly Pomona, Winter 2004  
FN 305 Nutrition, Science and Health, 4 credits, Cal Poly Pomona, Winter 2004  
FN 433 Advanced Nutrition I, 4 credits, Cal Poly Pomona, Fall 2003  
FN 305 Nutrition, Science and Health, Cal Poly Pomona, Summer 2003  
FN 570 Graduate Seminar, 2 credits, Cal Poly Pomona, Spring 2003  
FN 435 Advanced Nutrition III, 4 credits, Cal Poly Pomona, Spring 2003  
FN 434 Advanced Nutrition II, 4 credits, Cal Poly Pomona, Winter 2003  
FN 305 Nutrition, Science and Health, 4 credits, Cal Poly Pomona, Winter 2003  
FN 305 Nutrition, Science and Health, 4 credits, Cal Poly Pomona, Fall 2002  
FN 433 Advanced Nutrition I, 4 credits, Cal Poly Pomona, Fall 2002  
FN 435 Advanced Nutrition III, 4 credits, Cal Poly Pomona, Spring 2002  
FN 685 Sports Nutrition, 2 credits, Cal Poly Pomona, Spring 2002  
FN 434 Advanced Nutrition II, 4 credits, Cal Poly Pomona, Winter 2002  
FN 305 Nutrition, Science and Health, 4 credits, Cal Poly Pomona, Summer 2001  
FN 435 Advanced Nutrition III, 4 credits, Cal Poly Pomona, Spring 2001  
FN 685 Sports Nutrition, 2 credits, Cal Poly Pomona, Spring 2001  
FN 434 Advanced Nutrition II, 4 credits, Cal Poly Pomona, Winter 2001  
FN 570 Graduate Seminar, 2 credits, Cal Poly Pomona, Winter 2001  
FN 305 Nutrition, Science and Health, 4 credits, Cal Poly Pomona, Fall 2000  
FN 433 Advanced Nutrition I, 4 credits, Cal Poly Pomona, Fall 2000  
FN 346, 346L Community Nutrition and Lab, 3 credits, Cal Poly Pomona, Spring 2000  
FN 685 Sports Nutrition, 2 credits, Cal Poly Pomona, Spring 2000  
FN 570 Graduate Seminar, 2 credits, Cal Poly Pomona, Winter 2000  
FN 345, 345A Nutrition Education and activity, 3 credits, Winter 2000  
FN 434 Advanced Nutrition II, 4 credits, Cal Poly Pomona, Winter 2000  
FN 305 Nutrition, Health and Science, 4 credits, Cal Poly Pomona, Fall 1999  
FN 433 Advanced Nutrition I, 4 credits, Cal Poly Pomona, Fall 1999  
FN305 Nutrition, Health and Science, 4 credits, Cal Poly Pomona, Spring 1999  
FN 346, 346L Community Nutrition and Lab, 3 credits, Cal Poly Pomona, Spring 1999  
FN 685 Sports Nutrition , 2 credits, Cal Poly Pomona, Spring 1999  
FN 434 Advanced Nutrition II, 4 credits, Cal Poly Pomona, Winter 1999  
FN 570 Graduate Seminar, 2 credits, Cal Poly Pomona, Winter 1999  
FN 305 Nutrition, Health and Science, 4 credits, Fall 1998  
FN 433 Advanced Nutrition I, 4 credits, Cal Poly Pomona, Fall 1998  
FN 346, 346L Community Nutrition and Lab, 3 credits, Cal Poly Pomona, Spring 1998  
FN 305 Nutrition, Science and Health, 4 credits, Cal Poly Pomona, Spring 1998  
FN 570 Graduate Seminar, 2 credits, Cal Poly Pomona, Spring 1998

FN 345, 345A Nutrition Education and Activity, 3 cr, Cal Poly Pomona, Winter 1998  
FN 305 Nutrition, Science and Health, 4 credits, Cal Poly Pomona, Winter 1998  
FN 305 Nutrition, Health and Science, 4 credits, Cal Poly Pomona, Fall 1997  
FN 305 Nutrition, Health and Science, 4 credits, Cal Poly Pomona, Fall 1997  
FN 441 or 442 Internship in foods and Nutrition, 1-3 cr, Cal Poly Pomona, 1997-2007  
FN 400 Special Topics, 1-3 credits, Cal Poly Pomona, 1997-2007  
FN 550 Independent Study, 1-3 credits, Cal Poly Pomona, 1997-2007

## **Editorial/Review**

### **Editorial Board**

Journal of Nutrition, May 1, 2009-April 30, 2013

### **Journals (ad hoc reviewer)**

American Journal of Clinical Nutrition, FASEB Journal, Diabetes, Journal of Autism and Developmental Disorders, Journal of Food and Compositional Analysis, European Journal of Clinical Nutrition, BMC Obstetrics and Gynecology, British Journal of Pharmacology, British Journal of Nutrition, Food and Function, Current Pharmacogenomics and Personalized Medicine, Journal of Cellular Biochemistry, Molecular Biology Reports.

### **Granting Agencies (Study Section)**

NIH Scientific Reviewer for the *"Dietary Influence on the Human Health Effects on Environmental Exposures (R21)"* Research Triangle Park, NC October 24-25, 2011  
NIH Scientific Reviewer for the *"Competitive Revision Applications"*, Bethesda, Maryland. June 2009

### **Granting Agencies (ad hoc or mail reviewer)**

Alliance for Potato Research & Education (APRE). External reviewer for 2017 grant proposal submissions.

Egg Nutrition Center (ENC). External reviewer for 2015 and 2016 grant proposal submissions

NIH/Integrative Nutrition and Metabolic Processes (INMP) RO1 scientific reviewer, October 4, 2012

United States – Israel Binational Science Foundation (BSF) Reviewer, January 2008

NIH K23 Review of patient-oriented career development award, April, 2007

USDA/NRI "Improving Human Nutrition for Optimal Health" March, 2004

USDA/NRI "Improving Human Nutrition for Optimal Health", March 2001