

## Curriculum Vitae

### Jennifer T. Smilowitz

Department of Nutrition  
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#### **EDUCATION & TRAINING**

**Lactation Education Counselor**, UC San Diego Extension, San Diego, 2021  
**Certified Lactation Educator**, Best Practices for Lactation Care, Pleasant Hill, 2015  
**Postdoctoral Scholar**, Department of Food Science & Technology, University of California Davis, 2009 - 2013  
**Ph.D. Nutritional Biology**, Specialization Endocrinology, University of California Davis, 2008  
**Fellow Business Development**, University of California Davis, 2006  
**B.Sc. Molecular, Cell and Developmental Biology**, University of California Los Angeles, 2001

#### **PROFESSIONAL EXPERIENCE**

<b>Assistant Professor of Cooperative Extension</b> , Department of Nutrition, UC Davis	2023 - current
<b>Director of Scientific and Strategic Development</b> , International Milk Genomics Consortium	2019 - current
<b>Associate Professional Researcher</b> , Department of Food Science & Technology, UC Davis	2019 - 2023
<b>Assistant Professional Researcher</b> , Department of Food Science & Technology, UC Davis	2013 - 2019
<b>Associate Director</b> , Human Studies Research, Foods for Health Institute, UC Davis	2010 - 2023
<b>Consultant</b> , MetaNutrix, Moraga, CA	2009 - current

#### **AWARDS AND HONORS**

[UC Davis Chancellor's Innovation Award](#), University of California Davis, 2020  
 Excellence in Postdoctoral Research, University of California Davis, Finalist, 2012  
 Centennial Symposia Competition, University of California Davis, First place Poster, 2008  
 American Chemical Society, Withycombe Charalambous Symposium, Finalist, 2008  
 Graduate Studies Travel Award, University of California Davis, 2008  
 Little Bang, Medical & Biotechnology Innovations, University of California Davis, First place project, 2006  
 Business Development Fellowship, University of California Davis, 2006  
 Agricultural Research Service, USDA WHNRC Graduate Fellowship, University of California, Davis, 2001

#### **PROFESSIONAL MEMBERSHIPS**

International Society for Research in Human Milk and Lactation (ISRHML), 2019 - present  
 Academy of Breastfeeding Medicine, 2017 - present  
 American Society for Nutrition, 2008 - present  
 International Lactation Consultant Association, 2015 - present  
 American Dietetic Association, 2010 - 2017

#### **LEADERSHIP AND ACADEMIC SERVICE**

- **Faculty Member**, Graduate Group in Nutrition, UC Davis, 2022 - current
- **Faculty Member**, Food Science Grad Group, UC Davis, 2021 – 2023

### University-Wide Committees

- **Member**, Awards Committee, Department of Nutrition, UC Davis, 2023-present
- **Member**, Admissions Committee, Graduate Group in Nutrition, UC Davis, 2023-present
- **Member**, Recruitment Committee, Food Science Graduate Group, UC Davis, 2021-2023
- **Reviewer**, Microbiome Graduate Research Award Program, UC Davis, July 2019
- **Member**, Poster Session Planning, Northern California Institute of Food Technologists Showcase, UC Davis, 2019, 2020
- **Member**, Outreach Committee, Department Food Science & Technology, UC Davis, 2019-2023
- **Co-organizer**, “FFHI and Center for Mind and Brain Nutrition and the Developing Mind Summit”, UC Davis, 2015
- **Member and Moderator**, FFHI-UC Davis Comprehensive Cancer Center Conference Planning and Strategy for “Nutrition Interventions for Cancer”, UC Davis, 2012
- **Member**, FFHI-WHRNC USDA Conference Planning and Strategy, UC Davis, 2012
- **Chair**, Human Studies Coordinator Hiring Committee, Foods for Health Institute, UC Davis, 2011
- **Member**, Lactation Education for Medical Professionals Conference Planning, Human Resources Work Life, UC Davis, 2011
- **Research Advisor**, FFHI Mentorship Program, UC Davis, 2009 - 2023
- **Program Director**, FFHI Mentorship, UC Davis, 2009 - present
- **Chair**, FFHI Outreach Program, UC Davis, 2009 – 2023

### Regional Committees

- **Member**, Nutrition Education Advisory Board, Folsom Lake College Nutrition Education, 2019-2021

### National Committees

- **Reviewer**, Nutrition Conference, American Society for Nutrition, 2020, 2022
- **Member**, Human Milk Composition Working Group, “Breastmilk Ecology: Genesis of Infant Nutrition (BEGIN), NIH/NICHHD, 2020-2022

### International Committees

- **Member**, Membership Committee, International Society for Research in Human Milk and Lactation (ISRHML), 2021-present
- **Chair**, Local Organizing Committee, International Milk Genomics Consortium Annual Symposium, 2020
- **Member**, Social Media Content Development, International Society for Research in Human Milk and Lactation (ISRHML), 2019-2022
- **Member**, Editorial Board, *Nutrients*, 2019-present

### Ad Hoc Reviewer

- *Ad hoc* Reviewer, Springer Biomedicine & Life Sciences Textbook Proposal, 2023
- *Ad hoc* Reviewer, Nutrition Reviews, 2022
- *Ad hoc* Reviewer, Beneficial Microbes, 2020
- *Ad hoc* Reviewer Pediatric Infectious Disease Journal, 2020
- *Ad hoc* Reviewer Journal of Infectious Diseases, 2020
- *Ad hoc* Reviewer Nutrients Journal, 2019, 2020, 2020, 2021
- *Ad hoc* Reviewer Current Developments in Nutrition, 2019
- *Ad hoc* Reviewer Scientific Reports, 2019

- *Ad hoc* Reviewer Journal of Human Lactation, 2017, 2020
- *Ad hoc* Reviewer PLOS ONE, 2016
- *Ad hoc* Reviewer Biomed Central Pregnancy and Childbirth, 2016
- *Ad hoc* Reviewer Journal of Human Nutrition and Dietetics, 2015
- *Ad hoc* Reviewer Journal of Nutrition and Metabolism, 2015
- *Ad hoc* Reviewer British Journal of Nutrition, 2014
- *Ad hoc* Reviewer Journal Molecular Nutrition Food Research, 2013
- *Ad hoc* Reviewer Journal of Nutrition, 2011, 2013
- *Ad hoc* Reviewer American Journal of Clinical Nutrition, 2010, 2012, 2021
- *Ad hoc* Reviewer Journal of Nutrition and Metabolism, 2011
- *Ad hoc* Reviewer Journal of Agricultural and Food Chemistry, 2010

### **PROFESSIONAL SERVICE**

**Panelist**, Challenges in Supply, Market Competition, and Regulation of Infant Formula in the United States, National Academy Science, Engineering & Medicine, 2023

**Technical Advisory Board Member**, Biomilq, Durham, NC; 2021-2023

Provide technical guidance on the milk and lactation science to the milk cultured company

**Consultant**, Evolve Biosystems Inc., Davis, CA; 2014-2016

Designed human studies on the effects of breastfeeding and probiotic intake on the infant gut microbiome.

**Consultant**, Abunda Nutrition, San Francisco, CA; 2011

Consulted the company on the interpretation of their bioactive molecule research to identify new value propositions.

**Consultant**, NUMA, San Francisco, CA; 2010

Designed the nutritional formulation for a snack food targeted at pregnant and lactating women.

### **TEACHING EXPERIENCE**

#### University of California Davis

##### Co-instructor

- **Nutrition 250**, *Metabolic Homeostasis*, Fall 2004, 2005

##### Guest Lecture

- **Food Science and Technology 10**, *Food Science, Folklore and Health*, "Introduction to Lipids and Fatty Acid Metabolism", Fall, Winter, Spring 2005-2006
- **Food Science and Technology 100B**, *Food Properties*, "Use of the Postprandial Challenge Model to Phenotype", Winter 2010, 2011, 2013
- **Food Science and Technology 200**, *Food Chemistry and Biochemistry*, "Lipids and Fatty Acid Metabolism", Fall 2012
- **Food Science and Technology 211**, *Lipids*, "Fatty Acid Metabolism", Winter 2009-2013
- **Food Science and Technology 290**, *Graduate Seminar*, Winter 2018, 2021, 2023
- **Integrated Study Course 194**, *How to write a research paper?* "Art and Skill of Writing Research Papers", Winter 2013,
- **Nutrition 116**, *Clinical Nutrition*, "Lactation, Milk and Infant Health", Winter 2009-2013
- **Nutrition 260**, *Nutrition During Pregnancy*, "Lipids, Fatty Acids and Fat-Soluble Vitamins during Pregnancy", Fall 2015, Fall 2017
- **Nutrition 291**, *Graduate Group in Nutritional Biology Seminar Series*, "Infant Feeding Practices, Outcomes, and Parental Perceptions during the 2022 U.S. Infant Formula Shortage", Fall 2023
- **Nutrition 298**, *Group Study*, "Dietary Lipids and Metabolism", Fall 2012

- **Pharmacology Toxicology 290, Seminar, Fall 2021**

#### Teaching Assistant

- **Food Science and Technology 1, Principles of Food Science, Teaching Assistant, Fall 2005**
- **Food Science and Technology 10, Food Science, Folklore and Health, Teaching Assistant, Fall, Winter, Spring 2005-2006**
- **Nutrition 10, Discoveries and Concepts in Nutrition, Teaching Assistant, Fall, Winter, Spring 2003-2005**

#### University of California Los Angeles

#### Teaching Assistant

- **Molecular Cell Developmental Biology 30, The Biology of Cancer, Fall, Winter, Teaching Assistant, 1999-2000, Fall 2000**
- **Molecular Cell Developmental Biology 40, AIDS and other Sexually Transmitted Diseases, Teaching Assistant, Fall, Winter, Spring 1998-1999**

#### PEER-REVIEWED PUBLICATIONS

1. Larke JA, Chin EL, Bouzid YY, Nguyen T, Vainberg Y, Lee DH, Pirsiavash H, **Smilowitz JT**, Lemay DG. Surveying Nutrient Assessment with Photographs of Meals (SNAPMe): A Benchmark Dataset of Food Photos for Dietary Assessment. *Nutrients*. 2023 Nov 30;15(23):4972. doi.org/10.3390/nu15234972
2. Cernioglo K, **Smilowitz JT**. Infant Feeding Practices and Parental Perceptions during the 2022 United States Infant Formula Shortage Crisis. *BMC Pediatrics*. 2023 June. 10.1186/s12887-023-04132-9.
3. **Smilowitz JT**, Allen LH, Dallas DC, McManaman J, Raiten DJ, Rozga M, Sela DA, Seppo A, Williams JE, Young BE, McGuire MK, Ecologies, Synergies, and Biological Systems Shaping Human Milk Composition—a Report from Breastmilk Ecology and the Genesis of Infant Nutrition (BEGIN) Working Group 2. *AJCN*. 2023 May. https://doi.org/10.1016/j.ajcnut.2022.11.027.
4. Castillo JJ, Couture G, Bacalzo NP Jr, Chen Y, Chin EL, Blecksmith SE, Bouzid YY, Vainberg Y, Masarweh C, Zhou Q, **Smilowitz JT**, German JB, Mills DA, Lemay DG, Lebrilla CB. The Development of the Davis Food Glycopedia-A Glycan Encyclopedia of Food. *Nutrients*. 2022 Apr 14;14(8). doi: 10.3390/nu14081639.
5. Taft DH, Lewis ZT, Nguyen N, Ho S, Masarweh C, Dunne-Castagna V, Tancredi DJ, Huda MN, Stephensen CB, Hinde K, von Mutius E, Kirjavainen PV, Dalphin JC, Lauener R, Riedler J, **Smilowitz JT**, German JB, Morrow AL, Mills DA. Bifidobacterium Species Colonization in Infancy: A Global Cross-Sectional Comparison by Population History of Breastfeeding. *Nutrients*. 2022 Mar 29;14(7):1423. doi: 10.3390/nu14071423.
6. Vinjamuri A, Davis JCC, Totten SM, Wu LD, Klein LD, Martin M, Quinn EA, Scelza B, Breakey A, Gurven M, Jasienska G, Kaplan H, Valeggia C, Hinde K, **Smilowitz JT**, Bernstein RM, Zivkovic AM, Barratt MJ, Gordon JI, Underwood MA, Mills DA, German JB, Lebrilla CB. Human Milk Oligosaccharide Compositions Illustrate Global Variations in Early Nutrition. *J Nutr*. 2022 Feb 18;. doi:

- 10.1093/jn/nxac027. [Epub ahead of print] PubMed PMID: 35179194.
7. O'Brien CE, Meier AK, Cernioglo K, Mitchell RD, Casaburi G, Frese SA, Henrick BM, Underwood MA, **Smilowitz JT**. Early probiotic supplementation with *B. infantis* in breastfed infants leads to persistent colonization at 1 year. *Pediatr Res*. 2021 Mar 24;. doi: 10.1038/s41390-020-01350-0.
  8. Cernioglo K, Kalanetra KM, Meier A, Lewis ZT, Underwood MA, Mills DA, **Smilowitz JT**. Probiotic supplementation with a product containing human-native *S. salivarius* K12 in healthy adults increases oral *S. salivarius*. *Nutrients*. 2021 Dec 8;13(12). doi: 10.3390/nu13124392.
  9. Henrick BM, Rodriguez L, Lakshmikanth T, Pou C, Henckel E, Arzoomand A, Olin A, Wang J, Mikes J, Tan Z, Chen Y, Ehrlich AM, Bernhardsson AK, Mugabo CH, Ambrosiani Y, Gustafsson A, Chew S, Brown HK, Pramps J, Bohlin K, Mitchell RD, Underwood MA, **Smilowitz JT**, German JB, Frese SA, Brodin P. Bifidobacteria-mediated immune system imprinting early in life. *Cell*. 2021 Jul 22;184(15):3884-3898.e11. doi: 10.1016/j.cell.2021.05.030.
  10. Pedersen TL, **Smilowitz JT**, Winter CK, Emami S, Schmidt RJ, Bennett DH, Hertz-Picciotto I, Taha AY. Quantification of Nonpersistent Pesticides in Small Volumes of Human Breast Milk with Ultrahigh Performance Liquid Chromatography Coupled to Tandem Mass Spectrometry. *J Agric Food Chem*. 2021 Jun 16;69(23):6676-6689. doi: 10.1021/acs.jafc.0c05950.
  11. Amicucci MJ, Nandita E, Galermo AG, Castillo JJ, Chen S, Park D, **Smilowitz JT**, German JB, Mills DA, Lebrilla CB. A nonenzymatic method for cleaving polysaccharides to yield oligosaccharides for structural analysis. *Nat Commun*. 2020 Aug 7;11(1):3963. doi: 10.1038/s41467-020-17778-1.
  12. Westreich ST, Salcedo J, Durbin-Johnson B, **Smilowitz JT**, Korf I, Mills DA, Barile D, Lemay DG. Fecal metatranscriptomics and glycomics suggest that bovine milk oligosaccharides are fully utilized by healthy adults. *J Nutr Biochem*. 2020 Jan 17;79:108340. doi: 10.1016/j.jnutbio.2020.108340.
  13. Henrick BM, Chew S, Casaburi G, Brown HK, Frese SA, Zhou Y, Underwood MA, **Smilowitz JT**. Colonization by *B. infantis* EVC001 modulates enteric inflammation in exclusively breastfed infants. *Pediatr Res*. 2019 Aug 23;. doi: 10.1038/s41390-019-0533-2.
  14. Goonatileke E, **Smilowitz JT**, Mariño KV, German BJ, Lebrilla CB, Barboza M. Immunoglobulin A N-glycosylation Presents Important Body Fluid-specific Variations in Lactating Mothers. *Mol Cell Proteomics*. 2019 Nov;18(11):2165-2177. doi: 10.1074/mcp.RA119.001648.
  15. Casaburi G, Duar RM, Vance DP, Mitchell R, Contreras L, Frese SA, **Smilowitz JT**, Underwood MA. Early-life gut microbiome modulation reduces the abundance of antibiotic-resistant bacteria. *Antimicrob Resist Infect Control*. 2019;8:131. doi: 10.1186/s13756-019-0583-6.
  16. Goonatileke E, Huang J, Xu G, Wu L, **Smilowitz JT**, German JB, Lebrilla CB. Human Milk Proteins and Their Glycosylation Exhibit Quantitative Dynamic Variations during Lactation. *J Nutr*. 2019 Aug 1;149(8):1317-1325. doi: 10.1093/jn/nxz086.

17. Beals E, Kamita SG, Sacchi R, Demmer E, Rivera N, Rogers-Soeder TS, Gertz ER, Van Loan MD, German JB, Hammock BD, **Smilowitz JT**, Zivkovic AM. Addition of milk fat globule membrane-enriched supplement to a high-fat meal attenuates insulin secretion and induction of soluble epoxide hydrolase gene expression in the postprandial state in overweight and obese subjects. *J Nutr Sci*. 2019;8:e16. doi: 10.1017/jns.2019.11.
18. Sanctuary MR, Kain JN, Chen SY, Kalanetra K, Lemay DG, Rose DR, Yang HT, Tancredi DJ, German JB, Slupsky CM, Ashwood P, Mills DA, **Smilowitz JT**, Angkustsiri K. Pilot study of probiotic/colostrum supplementation on gut function in children with autism and gastrointestinal symptoms. *PLoS One*. 2019;14(1):e0210064. doi: 10.1371/journal.pone.0210064.
19. Yang Y, Rader E, Peters-Carr M, Bent RC, **Smilowitz JT**, Guillemin K, Rader B. Ontogeny of alkaline phosphatase activity in infant intestines and breast milk. *BMC Pediatr*. 2019 Jan 3;19(1):2. doi: 10.1186/s12887-018-1379-1.
20. Nijman RM, Liu Y, Bunyatratkata A, **Smilowitz JT**, Stahl B, Barile D. Characterization and Quantification of Oligosaccharides in Human Milk and Infant Formula. *J Agric Food Chem*. 2018 Jul 5;66(26):6851-6859. doi: 10.1021/acs.jafc.8b01515.
21. Bever CS, Rand AA, Nording M, Taft D, Kalanetra KM, Mills DA, Breck MA, **Smilowitz JT**, German JB, Hammock BD. Effects of triclosan in breast milk on the infant fecal microbiome. *Chemosphere*. 2018 Jul;203:467-473. doi: 10.1016/j.chemosphere.2018.03.186.
22. Henrick BM, Hutton AA, Palumbo MC, Casaburi G, Mitchell RD, Underwood MA, **Smilowitz JT**, Frese SA. Elevated Fecal pH Indicates a Profound Change in the Breastfed Infant Gut Microbiome Due to Reduction of Bifidobacterium over the Past Century. *mSphere*. 2018 Mar 7;3(2). pii: e00041-18. Doi: 10.1128/mSphere.00041-18.
23. Scoble JA, **Smilowitz JT**, Argov-Argaman N, German JB, Underwood MA. Plasma Lipoprotein Particle Subclasses in Preterm Infants. *Am J Perinatol*. 2018 Mar;35(4):369-379. doi: 10.1055/s-0037-1607347.
24. Meredith-Dennis L, Xu G, Goonatilleke E, Lebrilla CB, Underwood MA, **Smilowitz JT**. Composition and Variation of Macronutrients, Immune Proteins, and Human Milk Oligosaccharides in Human Milk From Nonprofit and Commercial Milk Banks. *J Hum Lact*. 2018 Feb;34(1):120-129. doi: 10.1177/0890334417710635.
25. Frese SA, Hutton AA, Contreras LN, Shaw CA, Palumbo MC, Casaburi G, Xu G, Davis JCC, Lebrilla CB, Henrick BM, Freeman SL, Barile D, German JB, Mills DA, **Smilowitz JT**, Underwood MA. Persistence of Supplemented Bifidobacterium longum subsp. infantis EVC001 in Breastfed Infants. *mSphere*. 2017 Dec 6;2(6). pii: e00501-17. doi: 10.1128/mSphere.00501-17.
26. Cajka T, **Smilowitz JT**, Fiehn O. Validating Quantitative Untargeted Lipidomics Across Nine Liquid Chromatography-High-Resolution Mass Spectrometry Platforms. *Anal Chem*. 2017 Nov 21;89(22):12360-12368. doi: 10.1021/acs.analchem.7b03404.

27. **Smilowitz JT**, Moya J, Breck MA, Cook C, Fineberg A, Angkustsiri K, Underwood MA. Safety and tolerability of *Bifidobacterium longum* subspecies *infantis* EVC001 supplementation in healthy term breastfed infants: a phase I clinical trial. *BMC Pediatr.* 2017 May 30;17(1):133. doi: 10.1186/s12887-017-0886-9. Erratum in: *BMC Pediatr.*
28. **Smilowitz JT**, Moya J, Breck MA, Cook C, Fineberg A, Angkustsiri K, Underwood MA. Erratum to: Safety and tolerability of *Bifidobacterium longum* subspecies *infantis* EVC001 supplementation in healthy term breastfed infants: a phase I clinical trial. *BMC Pediatr.* 2017 Aug 15;17(1):180. doi: 10.1186/s12887-017-0932-7.
29. Rogers TS, Demmer E, Rivera N, Gertz ER, German JB, **Smilowitz JT**, Zivkovic AM, Van Loan MD. The role of a dairy fraction rich in milk fat globule membrane in the suppression of postprandial inflammatory markers and bone turnover in obese and overweight adults: an exploratory study. *Nutr Metab (Lond).* 2017 May 17;14:36. doi: 10.1186/s12986-017-0189-z.
30. Krishnan S, Shimoda M, Sacchi R, Kailemia MJ, Luxardi G, Kaysen GA, Parikh AN, Ngassam VN, Johansen K, Chertow GM, Grimes B, **Smilowitz JT**, Maverakis E, Lebrilla CB, Zivkovic AM. HDL Glycoprotein Composition and Site-Specific Glycosylation Differentiates Between Clinical Groups and Affects IL-6 Secretion in Lipopolysaccharide-Stimulated Monocytes. *Sci Rep.* 2017 Mar 13;7:43728. doi: 10.1038/srep43728.
31. **Smilowitz JT**, Lemay DG, Kalanetra KM, Chin EL, Zivkovic AM, Breck MA, German JB, Mills DA, Slupsky C, Barile D. Tolerability and safety of the intake of bovine milk oligosaccharides extracted from cheese whey in healthy human adults. *J Nutr Sci.* 2017 Feb 20;6:e6. doi: 10.1017/jns.2017.2.
32. Xu G, Davis JC, Goonatileke E, **Smilowitz JT**, German JB, Lebrilla CB. Absolute Quantitation of Human Milk Oligosaccharides Reveals Phenotypic Variations during Lactation. *J Nutr.* 2017 Jan;147(1):117-124. doi: 10.3945/jn.116.238279.
33. Huang J, Kailemia MJ, Goonatileke E, Parker EA, Hong Q, Sabia R, **Smilowitz JT**, German JB, Lebrilla CB. Quantitation of Human Milk Proteins and their Glycoforms using Multiple Reaction Monitoring (MRM). *Analytical and bioanalytical chemistry* 2017, 409(2):589-606. doi: 10.1007/s00216-016-0029-4.
34. O'Sullivan A, Farver M, **Smilowitz JT**. Correction to The Influence of Early Infant-Feeding Practices on the Intestinal Microbiome and Body Composition in Infants. *Nutr Metab Insights.* 2015;8(Suppl 1):87. doi: 10.4137/NMI.S41125.
35. Davis JC, Totten SM, Huang JO, Nagshbandi S, Kirmiz N, Garrido DA, Lewis ZT, Wu LD, **Smilowitz JT**, German JB, Mills DA, Lebrilla CB. Identification of Oligosaccharides in Feces of Breast-fed Infants and Their Correlation with the Gut Microbial Community. *Mol Cell Proteomics.* 2016 Sep;15(9):2987-3002. doi: 10.1074/mcp.M116.060665.
36. Awasthi S, Wilken R, Patel F, German JB, Mills DA, Lebrilla CB, Kim K, Freeman SL, **Smilowitz JT**, Armstrong AW, Maverakis E. Dietary supplementation with *Bifidobacterium longum* subsp. *infantis* (B. *infantis*) in healthy breastfed infants: study protocol for a randomised controlled trial. *Trials.* 2016 Jul 22;17(1):340. doi: 10.1186/s13063-016-1467-1.

37. Zeng NF, Mancuso JE, Zivkovic AM, **Smilowitz JT**, Ristenpart WD. Red Blood Cells from Individuals with Abdominal Obesity or Metabolic Abnormalities Exhibit Less Deformability upon Entering a Constriction. *PLoS One*. 2016;11(6):e0156070. doi: 10.1371/journal.pone.0156070.
38. Napoli E, Ross-Inta C, Song G, Wong S, Hagerman R, Gane LW, **Smilowitz JT**, Tassone F, Giulivi C. Premutation in the Fragile X Mental Retardation 1 (FMR1) Gene Affects Maternal Zn-milk and Perinatal Brain Bioenergetics and Scaffolding. *Front Neurosci*. 2016;10:159. doi: 10.3389/fnins.2016.00159.
39. Demmer E, Van Loan MD, Rivera N, Rogers TS, Gertz ER, German JB, **Smilowitz JT**, Zivkovic AM. Addition of a dairy fraction rich in milk fat globule membrane to a high-saturated fat meal reduces the postprandial insulinaemic and inflammatory response in overweight and obese adults. *J Nutr Sci*. 2016 Mar 7;5:e14. doi: 10.1017/jns.2015.42.
40. Demmer E, Van Loan MD, Rivera N, Rogers TS, Gertz ER, German JB, Zivkovic AM, **Smilowitz JT**. Consumption of a high-fat meal containing cheese compared with a vegan alternative lowers postprandial C-reactive protein in overweight and obese individuals with metabolic abnormalities: a randomised controlled cross-over study. *J Nutr Sci*. 2016 Feb 9;5:e9. doi: 10.1017/jns.2015.40.
41. Lewis ZT, Davis JC, **Smilowitz JT**, German JB, Lebrilla CB, Mills DA. The impact of freeze-drying infant fecal samples on measures of their bacterial community profiles and milk-derived oligosaccharide content. *PeerJ*. 2016 Jan 21;4:e1612. doi: 10.7717/peerj.1612.
42. Cajka T, Davis R, Austin KJ, Newman JW, German JB, Fiehn O, **Smilowitz JT**. Using a lipidomics approach for nutritional phenotyping in response to a test meal containing gamma-linolenic acid. *Metabolomics : Official journal of the Metabolomic Society*. 2016; 12:1-16. doi: 10.1007/s11306-016-1075-9.
43. O'Sullivan A, Farver M, **Smilowitz JT**. The Influence of Early Infant-Feeding Practices on the Intestinal Microbiome and Body Composition in Infants. *Nutr Metab Insights*. 2015;8(Suppl 1):1-9. doi: 10.4137/NMI.S29530.
44. Goldsmith F, O'Sullivan A, **Smilowitz JT**, Freeman SL. Lactation and Intestinal Microbiota: How Early Diet Shapes the Infant Gut. *J Mammary Gland Biol Neoplasia*. 2015 Dec;20(3-4):149-58. doi: 10.1007/s10911-015-9335-2.
45. Spevacek AR, **Smilowitz JT**, Chin EL, Underwood MA, German JB, Slupsky CM. Infant Maturity at Birth Reveals Minor Differences in the Maternal Milk Metabolome in the First Month of Lactation. *J Nutr*. 2015 Aug;145(8):1698-708. doi: 10.3945/jn.115.210252.
46. Beck KL, Weber D, Phinney BS, **Smilowitz JT**, Hinde K, Lönnerdal B, Korf I, Lemay DG. Comparative Proteomics of Human and Macaque Milk Reveals Species-Specific Nutrition during Postnatal Development. *J Proteome Res*. 2015 May 1;14(5):2143-57. doi: 10.1021/pr501243m.
47. Lewis ZT, Totten SM, **Smilowitz JT**, Popovic M, Parker E, Lemay DG, Van Tassell ML, Miller MJ, Jin YS, German JB, Lebrilla CB, Mills DA. Maternal fucosyltransferase 2 status affects the gut bifidobacterial communities of breastfed infants. *Microbiome*. 2015 Apr 10;3:13. doi: 10.1186/s40168-015-0071-z.



48. Huang J, Guerrero A, Parker E, Strum JS, **Smilowitz JT**, German JB, Lebrilla CB. Site-specific glycosylation of secretory immunoglobulin A from human colostrum. *J Proteome Res.* 2015 Mar 6;14(3):1335-49. doi: 10.1021/pr500826q.
49. Dallas DC, Smink CJ, Robinson RC, Tian T, Guerrero A, Parker EA, **Smilowitz JT**, Hettinga KA, Underwood MA, Lebrilla CB, German JB, Barile D. Endogenous human milk peptide release is greater after preterm birth than term birth. *J Nutr.* 2015 Mar;145(3):425-33. doi: 10.3945/jn.114.203646.
50. Grapov D, Lemay DG, Weber D, Phinney BS, Azulay Chertok IR, Gho DS, German JB, **Smilowitz JT**. The human colostrum whey proteome is altered in gestational diabetes mellitus. *J Proteome Res.* 2015 Jan 2;14(1):512-20. doi: 10.1021/pr500818d.
51. Totten SM, Wu LD, Parker EA, Davis JC, Hua S, Stroble C, Ruhaak LR, **Smilowitz JT**, German JB, Lebrilla CB. Rapid-throughput glycomics applied to human milk oligosaccharide profiling for large human studies. *Anal Bioanal Chem.* 2014 Dec;406(30):7925-35. doi: 10.1007/s00216-014-8261-2.
52. Khaldi N, Vijayakumar V, Dallas DC, Guerrero A, Wickramasinghe S, **Smilowitz JT**, Medrano JF, Lebrilla CB, Shields DC, German JB. Predicting the important enzymes in human breast milk digestion. *J Agric Food Chem.* 2014 Jul 23;62(29):7225-32. doi: 10.1021/jf405601e.
53. **Smilowitz JT**, Lebrilla CB, Mills DA, German JB, Freeman SL. Breast milk oligosaccharides: structure-function relationships in the neonate. *Annu Rev Nutr.* 2014;34:143-69. doi: 10.1146/annurev-nutr-071813-105721.
54. **Smilowitz JT**, Gho DS, Mirmiran M, German JB, Underwood MA. Rapid measurement of human milk macronutrients in the neonatal intensive care unit: accuracy and precision of fourier transform mid-infrared spectroscopy. *J Hum Lact.* 2014 May;30(2):180-9. doi: 10.1177/0890334413517941.
55. Hong Q, Ruhaak LR, Totten SM, **Smilowitz JT**, German JB, Lebrilla CB. Label-free absolute quantitation of oligosaccharides using multiple reaction monitoring. *Anal Chem.* 2014 Mar 4;86(5):2640-7. doi: 10.1021/ac404006z.
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#### **PUBLISHED DATA SETS**

Chin, Elizabeth L.; Larke, Jules A.; Bouzid, Yasmine Y.; Nguyen, Tu; Vainberg, Yael; **Smilowitz, Jennifer. T.**; Lemay, Danielle G. (2022). SNAPMe: A Benchmark Dataset of Food Photos with Food Records for Evaluation of Computer Vision Algorithms in the Context of Dietary Assessment. *Ag Data Commons*.  
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#### **NON-PEER-REVIEWED PUBLICATIONS**

Zivkovic AM, Smilowitz JT, German JB. Future of food matching personal diets to individual phenotypes. *Food Science & Technology*, 25th Anniversary issue. 2011; 24-25.

**Smilowitz JT**, Dillard CJ, German JB. Milk beyond essential nutrients: the metabolic food. *Australian Journal of Dairy Technology*. 2005;60:77-83.

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German, J. B., Dillard, C. J., Hillyard, S. L., Lange, M. C., **Smilowitz, J. T.**, Ward, R. E. & Zivkovic, A. M. Metabolomics: Bringing Nutrigenomics to Practice in Individualized Health Assessment. *Nutritional Genomics: Discovering the Path to Personalized Nutrition*, 85 (2006).

**ABSTRACTS-PUBLICATIONS**

Chin, Elizabeth L.; Larke, Jules A.; Bouzid, Yasmine Y.; Nguyen, Tu; Vainberg, Yael; **Smilowitz, Jennifer. T.**; Lemay, Danielle G. (2022). SNAPMe: A Benchmark Dataset of Food Photos with Food Records for Evaluation of Computer Vision Algorithms in the Context of Dietary Assessment. *Ag Data Commons*.  
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**Jennifer Smilowitz**, Matthew Amicucci, Eshani Nandita, Ace Galermo, Diane Tu, Diana Taft, Anna Meier, Karina Kurudimov, Lisa Oakes, David Mills, J German, Bethany Henrick, Carlito Lebrilla. The Introduction of Plant-Derived Glycans in Exclusively 6-Month Old Breastfed Infants Alters Fecal Glycan Profiles and Microbial Metabolism (IMiND Study). *Current Developments in Nutrition*, Volume 4, Issue Supplement\_2, June 2020, Page 1082, [https://doi.org/10.1093/cdn/nzaa054\\_154](https://doi.org/10.1093/cdn/nzaa054_154)

**Jennifer Smilowitz**, Karen Kalanetra, Anna Meier, Karina Kurudimov, Mark Underwood, David Mills. Probiotic Supplementation with *S. salivarius* K12 in Healthy Adults Increases Oral *S. salivarius* K12 in a Randomized, Double-Blind, Placebo-Controlled Study. *Current Developments in Nutrition*, Volume 4, Issue Supplement\_2, June 2020, Page 1584, [https://doi.org/10.1093/cdn/nzaa062\\_041](https://doi.org/10.1093/cdn/nzaa062_041)

**ABSTRACTS - POSTERS**

1. Van T. Pham, Michaela C. DeBolt, Aaron G. Beckner, **Jennifer T. Smilowitz**, Steven J. Luck, Lisa M. Oakes. Examining Visual Short-Term Memory in 5- to 12-Month-Old Infants in a Longitudinal Sample. International Congress of Infant Studies (ICIS). Glasgow, Scotland. 2024.
2. **Jennifer T. Smilowitz**, Karina Cernioglo, Karla Damian-Medina, Dina M. DiMaggio, Anthony F Porto. 2022 United States Infant Formula Shortage: Infant Feeding and Parental Perceptions. American Society of Nutrition. Boston, MA. 2023.
3. Jules A. Larke, Elizabeth L. Chin, Yasmine Y. Bouzid, Tu Nguyen, Yael Vainberg, **Jennifer T. Smilowitz**, Danielle G. Lemay. Surveying Nutrient Assessment with Photographs of Meals (SNAPMe): A Benchmark Dataset of Food Photos Paired with Food Records. American Society of Nutrition. Boston, MA. 2023.
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6. Rebecca M. Duar, Steven A. Frese, Ryan D. Mitchell, **Jennifer T. Smilowitz**, Jia Xu. Baoling Quah, Peter D Gluckman, Neerja Karnani, Bethany M. Henrick. Low prevalence of *B. infantis* in developed nations including the United States may be related to factors related to adopting an urbanized lifestyle. American Academy of Pediatrics. Anaheim, CA. 2022.
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  11. **Jennifer T. Smilowitz**, Matthew J. Amicucci, Eshani Nandita, Ace G. Galermo, Diane Tu, Diana H. Taft, Anna Meier, Karina Kurudimov, Lisa M. Oakes, J. Bruce German, Bethany M. Henrick, David A. Mills, Carlito B. Lebrilla. The Introduction of Plant-Derived Glycans in Exclusively 6-Month Old Breastfed Infants Alters Fecal Glycan Profiles and Microbial Metabolism (IMiND Study). Nutrition 2020 Live Online, American Society Nutrition (ASN). 2020. E-Poster.
  12. Niamh M. Kelly, **Jennifer T. Smilowitz**, Orla Cagney, Robin L. Flannery, Rachel M Tribe. Delayed onset of lactogenesis and reduced breastfeeding frequency in mothers who give birth by caesarean section. Federation of Nutrition Societies (FENS). Dublin, Ireland, 2019.
  13. Bethany M. Henrick, Stephanie Chew, Giorgio Casaburi, Ryan Mitchell, Steve A. Frese, **Jennifer T. Smilowitz**, and Mark Underwood. Restoring the natural infant gut microbiome with *B. infantis* EVC001 significantly reduces intestinal inflammation. Canadian Association of Neonatal Nurses (CANN). Toronto, Canada. 2019.
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  17. Diane Tu, Carol Stroble, Gege Xu, Matthew J. Amicucci, **Jennifer T. Smilowitz**, Carlito B. Lebrilla. Rapid Throughput Quantitation of Carboxylic Acid Metabolites Using UHPLC/QqQ-MS to Monitor Diet and the Microbiome. American Society of Mass Spectrometry (ASMS). Atlanta, GA. 2019.
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  20. Elisha Goonatilleke, Mariana Barboza Gardner, **Jennifer T Smilowitz**, Carlito B. Lebrilla. Protein-specific glycomic analysis yielded extensive IgA glycosylation and biologically important tissue specific variations. ASMS. San Diego, CA. 2018.

21. **Jennifer T. Smilowitz**, Steven A. Frese, Andra A. Hutton, Lindsey N. Contreras, Claire A. Shaw, Ryan Mitchell, Mark A. Underwood. Bifidobacterium longum subsp. infantis stably restores the infant gut microbiome over the first year of life in breastfed infants. Pediatric Academic Societies. Toronto, Canada. 2018.
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30. Steven A. Frese PhD, Andra Hutton MS, Lindsey N. Contreras, Claire A. Shaw, Jackelyn Moya, Melissa A. Breck, Annette Fineberg MD, Mark Underwood MD, **Jennifer T. Smilowitz** PhD. The IMPRINT (Infant Microbiota and Probiotic Intake) Study: Microbiome Remodeling in Breast-fed Term Infants Following Supplementation and Subsequent Colonization of a Keystone Bifidobacterium Species. American Academy of Pediatrics. San Diego, CA. 2016.
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**ORAL PRESENTATIONS**

1. Prioritizing Nutrition and Health in the First 1000 Days for Lifelong Impact. Nutrition Policy Institute, Brown Bag Series. University of California Agriculture and Natural Resources. Oakland, CA. December 2023.
2. The Impact of Human Milk on the Infant Gut Microbiome and Lifelong Health. Contra Costa Regional Medical Center, Grand Rounds Presentation. Contra Costa County, CA. August 2023.
3. The Impact of Human Milk Bioactive Molecules on the Infant Gut Microbiome and Lifelong Health. The Microbirth Plan 2023 Virtual Conference. England. April 2023.
4. A probiotic containing *B. infantis* supplemented in breastfed infants restores the gut microbiome. International Lactation Consultant Association. Houston, TX. August 2021.
5. Restoring the gut microbiome of breastfed infants over the first year of life Got Milk? Variability in Milk Composition and Effects on Offspring Health. American Dietetic Association 79<sup>th</sup> Scientific Sessions, CA. June 2019.
6. Factors that influence the infant gut microbiome. Contra Costa Regional Medical Center, Grand Rounds Presentation. Contra Costa County, CA. March 2019.
7. *Bifidobacterium Longum* Subsp. *infantis* Stably Restores the Infant Gut Microbiome Over the First Year of Life in Breastfed Infants. International Milk Genomics Consortium. Sacramento, CA. Nov 2018.
8. Celebrating World Breastfeeding Week: Restoring the Infant Gut Microbiome in an Industrialized World. UC Davis Breastfeeding Support Program. UC Davis, Davis, CA. July 2018.
9. Community Science Cafe Conversations: Restoring the Infant Gut Microbiome, A Conversation with Dr. Smilowitz. Research and Education Community Advisory Board. Sacramento, CA. July 2018.
10. Restoring the Infant Gut Microbiome in an industrialized World. UC Davis Center for Mind and Brain. Davis, CA. July 2018.
11. *Bifidobacterium longum* subsp. *infantis* stably restores the infant gut microbiome over the first year of life in breastfed infants. American Society for Nutrition. Boston, MA. June 2018.
12. Delivery mode and the infant's diet, influence long-term development of the gut microbiome. Contra Costa County WIC, CA. November 2017.
13. A Heritage of Health: Your Baby's Gut Microbiome, Contra Costa County Breastfeeding Task Force WIC. Contra Costa County, CA. November 2017.
14. Establishing the infant gut microbiome from delivery, diet and environment and consequences on health. Contra Costa Regional Medical Center, Grand Rounds Presentation. Contra Costa County, CA. October 2017.
15. Delivery mode and the infant's specific diet, influence long-term development of the gut microbiome. Contra Costa County WIC, CA. January 2017.
16. Factors that influence long-term development of the gut microbiome. What do we know now that we did not know 5 years ago? Kaiser Pinole, Breastfeeding: Comprehensive Content Course. Pinole, CA. November 2016.
17. Safety and Tolerability following Consumption of *Bifidobacterium longum* subspecies *infantis* in exclusively breastfed term infants: IMPRINT Study, International Milk Genomics Consortium. Davis, CA. October 2016.
18. How delivery mode and the infant's diet, influence the developing gut microbiome. Kaiser Vallejo, Breastfeeding: Comprehensive Content Course. Vallejo, CA. June 2016.
19. The International Childbirth Education Association; invited lecture, Carmichael, CA. June 2016.
20. Establishing the infant gut microbiome from delivery, diet and environment and consequences on health, California WIC Annual Conference and Trade Show. San Diego, CA. April 2016.
21. How the mode of delivery, and the infant's specific diet, influence long-term development of the gut



- microbiome. What do we know now that we did not know 5 years ago? Kaiser Roseville, Breastfeeding: Comprehensive Content Course. Roseville, CA. March 2016.
22. Mother's Milk for Profit: Focus on Health Equity, Public Health Boots on the Ground Series UC Berkeley. Berkeley, CA. February 2016
  23. Influences of the infant intestinal microbiome, Sacramento County WIC, Rancho Cordova, CA. February 2016.
  24. Introducing the IMPRINT Study, California Breastfeeding Summit Creating a Constellation: Charting the Course for Breastfeeding Success. Sacramento, CA. February 2016
  25. Influences of the infant intestinal microbiome, Sacramento Breastfeeding Coalition Fall Mixer. Sacramento, CA. November 2015.
  26. Effects of gestational diabetes mellitus on protective factors in human milk, UC Davis Center for Mind and Brain Summit Series: Nutrition and the Developing Mind, Center for Mind and Brain. Davis, CA. October 2015.
  27. Building the Science, Technologies and Education to Personalize Diet and Health, National Agricultural Biotechnology Council, National Biotechnology Conference, Davis, CA. June 2010,
  28. Bringing Synbiotic Interventions in Cancer to Practice: from bench to bedside, Cancer Research Symposium, UC Davis Comprehensive Cancer Center, Sacramento, CA. September, 2012.
  29. Biochemical Phenotyping to Assess Individual Metabolism: a Bioguide for the Agriculture Industry. American Chemical Society, Withycombe-Charalambous Graduate Student Symposium. New Orleans, LA. April 2008.

#### **BROADCAST, PRINT, OR ELECTRONIC MEDIA**

1. Comstock's Magazine. Magazine Article. 12/4/2023. Beyond the Bottle. [View this Media](#).
2. Salon. Magazine Article. 11/9/2023. Why is infant mortality so high in the US? Because our health care system fails mothers, too. [View this Media](#).
3. Salon. Magazine Article. 7/28/2023. Misinformation about chestfeeding is swirling online. Here's what that actually means. [View this Media](#).
4. Early Learning Nation. Magazine Article. 7/18/2023. New Research: Unsafe Feeding Skyrocketed During the Infant Formula Shortage. [View this Media](#).
5. Salon. Magazine Article. 7/2/2023. Infant formula shortage forced desperate moms to practice unsafe feeding: study. [View this Media](#).
6. UC Davis Savor Lecture Series: Our First Superfood and the Infant Microbiome. Webinar. 10/27/2021. [View this Media](#).
7. UC San Diego Extension Lactation Consultant Pathway 1 and Pathway 2 Course. Webinar. 9/23/2021. Interview with Jennifer Smilowitz, PhD: Understanding HMOs and Their Role in Breastfeeding.
8. UC San Diego Extension Lactation Education Refresher Course. Webinar. 8/3/2021. Interview with Dr. Smilowitz on the Infant Gut Microbiome.
9. Inside Edition. Interview. 1/8/2021. Scientists to Pay Health Study Participants for Poop. [View this Media](#).
10. Sacramento CBS Local News. Interview. 1/6/2021. Paying for Poop, UC Davis Study Gets Smelly for Science. [View this Media](#).
11. Microbirth School. Alto Films LTD. United Kingdom. Blog. 2/5/2020. Breast Milk and the Infant Microbiome Q&A Part 1. [View this Media](#)
12. Microbirth School. Alto Films LTD. United Kingdom. Blog. 3/11/2020. Breast Milk and the Infant Microbiome Q&A Part2. [View this Media](#)

13. Microbirth School. Alto Films LTD. United Kingdom. Webinar. 4/27/2020. The Infant Microbiome COVID-19 Project. [View this Media](#)
14. The Scientist, Cover. Magazine Article. 6/1/2020. The Infant Gut Microbiome and Probiotics that Work. [View this Media](#)
15. The Well Nourished, Brighter Futures initiative. Webinar. 6/11/2020. Healthy Eating Patterns During Critical Life Stages: Essential for Optimal Health and Development. [View this Media](#).
16. UC Davis News. News Article. 6/15/2020. UC Davis Names Recipients of 2020 Chancellor's Innovation Awards. [View this Media](#)
17. Food Sleuth Radio, Part 1. Interview. 11/6/2020. [View this Media](#).
18. Food Sleuth Radio, Part 2. Interview. 12/3/2020, [View this Media](#)
19. Contra Costa Medical Center. Webinar. 11/13/2017. Why Breast Milk is Critical for Babies and their Gut Microbiomes.
20. Microbirth School. Alto Films LTD. United Kingdom. Webinar. 11/1/2018. Breast Milk and the Infant Microbiome. Approved for 8 Hours CPD / CE / CERPs by IBLCE, ACNM, ACM, MEAC, NMC, LAMAZE, ICEA, CAPP, DONA. [View this Media](#)
21. Today. Newspaper Article. 3/7/2018. Baby poop is changing, science reveals. Here's why it matters [View this Media](#)

## FUNDING

### ACTIVE

**National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)**, 1R01DK124193-01, *Annotating carbohydrate structures to develop markers for consumption of food*, \$1,958,216 (direct costs), 04/01/2020 – 12/31/2024, Carlito Lebrilla, PI; Role: Co-PI

### COMPLETED

**USDA/NSF Institute for Next Generation Food Systems (AIFS)**, *Prediction of glycan content from real-world food diaries*, \$199,963 (direct costs), 01/01/2021-08/31/2022, Danielle Lemay, PI; Role: Co-PI

**Reckitt Benckiser**, *Designing the study on effects of novel nutrition supplement containing NAD precursors on milk production and quality in overweight and obese pregnant women*, \$59,318 (direct costs), 10/1/2021-6/31/2022, Role: PI

**Medela**, *Hospital-grade Breast Donation for the UC Davis MOONRISE Study*, \$10,000 (donation), 03/1/2022

**UC Davis Educational Technology Resource Award (ETRA)**, *Global Access to Lactation Education*, \$1,700 (direct costs), 9/1/2021, Role: PI

**Innovation Institute for Food and Health UC Davis**, *Got Safe Milk?*, \$100,000 (direct costs), 10/01/2016-03/31/2021, **Role: PI**

**Mengniu Dairy Inc.**, *Mengniu-University of California Davis Foods for Health Institute Nutrition and Health Innovation Partnership*, \$1,484,474 (direct costs), 04/01/2017-03/31/2021, **Role: PI**

**Clorox Renew Life**, *Effects of Streptococcus-containing probiotic on the microbiome in healthy human adults: Phase I randomized placebo-controlled study*, \$149,779 (direct costs), 06/12/2017-01/12/2020, **Role: PI**

**Evolve Biosystems Inc.**, *Rescuing the microbiome effectively with different doses of B. infantis in infants trial (REMEDI)*, \$227,503 (direct costs), 10/01/2017-05/31/2019, **Role: PI**

**USDA**, *Cardiovascular and Immune Benefits to Elders from Increased Dairy*, \$30,000 (direct costs), 07/1/2017-08/31/2018, Marta Van Loan, PI; **Role: Co-I**

**NIEHS Core Center for Environmental Health Sciences at UC Davis Pilot Projects Program**, *Streamlining pesticide analysis in human breast milk*, \$30,000 (direct costs), 2016-2018, Ameer Taha, PI; **Role: Co-I**

**NIEHS Core Center for Environmental Health Sciences at UC Davis Pilot Projects Program**, *One-shot analysis to determine the concentrations of environmental toxins in low-volume breast milk samples from California women*, \$29,785 (direct costs), 2016-2018, Birgit Pushner, **PI: Role: Co-I**

**UC Davis Institute for Social Sciences (Oakes)**, *An examination of the connection between gut microbiota and cognitive development in infancy*, \$10,000 (direct costs), 05/2015-06/2017, Lisa Oakes, PI; **Role: Co-PI**

**Oregon Health and Science University, Innovations Small Grant Award**, *Variability of Breast Milk Storage Technique and Impact on Infant Growth*, \$14,025 (direct costs), 04/2015-05/2016, Doria Thiele, PI; **Role: Co-PI**

**Evolve Biosystems Inc.**, *Infant Microbiota and Probiotic Intake*, \$145,969 (direct costs), 10/01/2014-09/30/2017, **Role: PI**

**Dairy Research Institute**, *Pilot Study: Tolerability of feeding different doses of bovine milk oligosaccharides for modifying gastrointestinal function in healthy individuals*, \$129,743 (direct costs), 10/2011-09/2012, Daniela Barile, PI; **Role: Co-I**

**Dairy Research Institute**, *Effects of Dairy Fat on Postprandial Inflammation*, \$599,458 (direct costs), 09/2011-08/2013, **Role: PI** with Angela Zivkovic (co-PI)

**Unilever**, *HDL Metabolism Modulation by Diet*, \$40,000 (direct costs), 09/2011-03/2012, **Role: PI**