CURRICULUM VITAE

University of Idaho

NAME: Yimin Chen

DATE: December 27, 2023

RANK OR TITLE: Assistant Professor

DEPARTMENT: Margaret Ritchie School of Family and Consumer Sciences

OFFICE LOCATION AND CAMPUS ZIP:	EMAIL: yiminc@uidaho.edu
875 Perimeter Drive MS 3183 Moscow ID 83844-3183	FAX: 208-885-5751
Niccolls Building 108 C	

DATE OF FIRST EMPLOYMENT AT UI: August 19, 2019

DATE OF TENURE: Untenured

DATE OF PRESENT RANK OR TITLE: August 19, 2019

EDUCATION/TRAINING BEYOND HIGH SCHOOL:

Degrees:

PhD, University of Illinois at Chicago, Chicago, IL, 2017, Kinesiology, Nutrition, and Rehabilitation
MS, Rush University, Chicago, IL, 2005, Clinical Nutrition
Dietetic Internship, Rush University, Chicago, IL, 2003, Clinical Nutrition
BS, Loyola University of Chicago, Chicago, IL, 2001, Food and Nutrition

Certificates and Licenses:	
Certified Nutrition Support Dietitian/Clinician (CNSD/C)	2005, 2010, 2015
Licensed Dietitian Nutritionist, Illinois	2003 - 2019
License No. 164.004012	
Registered Dietitian	2003 - Current
Registration No. 917549	
Professional/Research Development:	
University of Idaho Research Leadership Development	2022
University of Idaho Professional Development in Scientific Writing Excellence	2021
University of Idaho Proposal Development Academy	2020
Institute of Translational Health Sciences (ITHS) KL2 Seminar Club	2020 - 2021
Visiting Scholar	2019
Oregon State University, College of Public Health and Human Sciences	
Mass spectrometry for human milk proteomics and peptidomics.	
Mentor: David C. Dallas, PhD	
Postdoctoral Research Associate	2017 - 2019
University of Illinois at Chicago, Department of Kinesiology and Nutrition	
Intestinal development, nutrient absorption, and mucosal barrier function in a	
neonatal piglet model. Mentor: Kelly A. Tappenden, PhD, RD, FASPEN	

EXPERIENCE:

Teaching, Extension and Research Appointments: Assistant Professor – Research Faculty

University of Idaho, College of Agricultural and Life Sciences, Margaret Ritchie School of Family and Consumer Sciences

2019 - Current

Adjunct Faculty

of Clinical Nutrition

Rush University, College of Health Sciences, Department of Clinical Nutrition 2017 – 2018 Instructor Rush University, College of Health Sciences, Department of Clinical Nutrition 2005 – 2017 Non-Academic Employment: Advanced Level Dietitian Rush University Medical Center Neonatal Intensive Care unit (2011 – 2017) Surgical Intensive Care Unit/University Transplant Program (2003 – 2011) Complete management of patients requiring specialized nutrition support as an integral part of interdisciplinary intensive care unit and transplant teams.

TEACHING ACCOMPLISHMENTS:

Areas of Specialization: Human milk, nutrition in critical illness, nutrition and immunology, gastroenterology, and metabolism

Courses Taught: University of Idaho Nutrition in the Life Cycle – FN 305 2022 - currentAdvanced Nutrition – FN 415/515 2022 - currentGastrointestinal Physiology and Immunology - FN 510 2021 - current**Directed Study – Nutrition Research in Lab Setting (Undergraduate)** – FCS 499 2020 - current **Directed Study – Nutrition Research in Lab Setting (Graduate) – FCS 502** 2020 **Concepts in Nutrition** – FCS 205 2020 Graduate Seminar - FCS 501 2019 - currentUniversity of Illinois at Chicago Nutrition for Healthy Living – Graduate Course for Healthy Living Practitioner[™] Certificate 2018

Rush UniversityHuman Metabolism II – NTR 5222007 – 2016Advance Medical Nutrition Therapy II – Neonatal Intensive Care Unit – NTR 5122011 – 2017Nutrition Assessment – NTR 5442010, 2015Interrelations between Diet and Disease I & II – NTR 541 & 5422009 – 2010Nutrition in Critical Care – NTR 5132005 – 2017Advance Medical Nutrition Therapy II – Surgical Intensive Care Unit – NTR 5122003 – 2011

Research Students Advised: Postdoctoral Fellow:

• Yang Lyu, 2019 – 2021

Graduate Students:

Major thesis/dissertation advisor:

- Megan Follett (PhD, UI), current
- Heidi Sellmann (MS, UI), current
- Katelyn Heckathorn (MS, UI), current
- Kendi Phelps (MS, UI), 2022

Served on graduate thesis committee:

- Betsy Church (MS, UI), current
- Gena Irwin (MS, UI), current
- Zoe Bye (MS, University of Saskatchewan), 2022 (external examiner)
- Jordan Pratt (MS, Eastern Michigan University), 2022
- Patrick Brown-Hayes (MS, UI), 2021
- Jean Ziegenhorn (MS, Rush University), 2018
- Sabrina Bierman (MS, Rush University), 2016
- Amber Smith (MS, Rush University), 2016
- Caitlin Mondelli (MS, Rush University), 2015
- Freida Xing Pan (MS, Rush University), 2015
- Nicole Brown (MS, Rush University), 2014

Non-thesis Research Project Advisor:

- Paola Maria Bregni Ibarra (MS, UW), current
- Sara Schumacher (MS.D., UI), current
- Hillary Zellner (MS, Rush University), 2017

Medical Students:

- Victoria Hollinshead (Southern Illinois University medical student, research internship), current
- Adam Crandall (WWAMI medical student, research internship), 2022
- Zachary Fishburn (WWAMI medical student, research internship), 2022

Undergraduate Research Students:

- Aubrey, Bureau, current
- Mya Gackstetter, current
- Sydney Woeller, current
- Alexis Biasotti, current

Education Materials Developed:

Rush University Medical Center

ICU Nutrition Support Practicum for Dietitians (adult and neonatology) – program curriculum Nutrition Support Practicum for Critical Care and Pulmonary Fellows – program curriculum Nutrition Support Practicum for PharmD Residents – program curriculum

Courses Developed/Redesigned:

- Bethaney Fehrenkamp, MD, PhD, 2019 2022
- Laurel Nunez (MS, UI), 2022
- Alexis Virlee (MS, Rush University), 2018
- Ashley Sell (MS, Rush University), 2017
- Monica Bojko (MS, Rush University), 2014
- Nicoletta Coduti (MS, Rush University), 2014
- Laura Oliver (MS, Rush University), 2012
- Hannah Roosevelt (MS, Rush University), 2012
- Taylor Stang (MS, Rush University), 2012
- Samantha Rifkin (MS, Rush University), 2011
- Devon Romano (MS, Rush University), 2011
- Jennifer Kintner (MS, Rush University), 2010
- Vickie Mountain (MS, Rush University), 2010
- Jennifer Buckler (MS, Rush University), 2007
- Sabrina Bierman (MS, Rush University), 2016
- Kirstie Ducharme-Smith (MS, Rush University), 2015
- Juliette Soelberg (MS, Rush University), 2015
- Caleb Allred (WWAMI medical student, research internship), 2022
 - Matayah Fox (WWAMI medical student, research internship), 2022
 - Kyleigh Weinstein, 2020-2022
 - Lydia Waterman, 2020-2021
 - Abigail Euhus, 2020-2021
 - Kelsey Kolsky, 2020-2021

<u>University of Idaho</u> Advanced Nutrition – FCS 361 (now FN 415/515); 2022 Special Topics: Gastrointestinal Physiology and Immunology – FCS 504 (now FN 510); 2021 Concepts in Nutrition – FCS 205; 2020 Graduate Seminar – FCS 501; 2019

Rush University Human Metabolism II – NTR 522; 2013 – 2016 Nutrition Assessment – NTR 544; 2010, 2015 Interrelations between Diet and Disease I & II – NTR 541 & 542; 2009 – 2010 Nutrition in Critical Care – NTR 513; 2005 – 2017

Invited Presentations, Workshops, Seminars:

- *The effect of infant feeding types on intestinal, immune-, and neuro-development and inflammation*. American Society for Parenteral and Enteral Nutrition: Neonatal Section Webinar. 2023.
- Making the GRADE: Methodology and Recommendations from ASPEN's New Guidelines for Prescribing Parenteral Nutrition to Preterm Infants. American Society for Parenteral and Enteral Nutrition: Nutrition Science & Practice Conference. Las Vegas, NV. 2023.
- Reducing Maternal Stress in Mothers of Preterm Infants Using a Mindfulness-based Intervention. Mountain West CTR-IN Program: Virtual Annual Meeting, 2022.
- Omics analyses reveal digestion-resistant proteins and digestion-released peptides are associated with inflammation and cytotoxic suppression in intestinal epithelial cells. Federation of American Societies for Experimental Biology (FASEB) Science Research Conferences – Origins and Benefits of Biologically Active Components in Human Milk. West Palm Beach, FL. 2019.
- Impact of Human Milk: From the Science to Economics. American Society for Parenteral and Enteral Nutrition: Nutrition Science & Practice Conference. Phoenix, AZ. 2019.
- *Human Milk Components: Translating Basic Science to Bedside Application*. Graduate School Seminar. Oregon State University. Corvallis, OR. 2019.
- Balancing Optimal Nutrition and the Immunologic Effects of Nutrition Support in the Premature Infant. March of Dimes 43rd Annual Perinatal Nursing Conference. Lombard, IL. 2018.
- *Nutrition for the practicing pediatric clinician: human milk.* American Society for Parenteral and Enteral Nutrition: Nutrition Science & Practice Conference. Pre-conference Course. Las Vegas, NV. 2018.
- *Adult nutrition focused physical assessment*. American Society for Parenteral and Enteral Nutrition: Nutrition Science & Practice Conference. Las Vegas, NV. 2018.
- Digested early lactation stage preterm human milk suppresses TNF-induced inflammation and cytotoxicity in human intestinal epithelial cells. Federation of American Societies for Experimental Biology (FASEB) Science Research Conferences Origins and Benefits of Biologically Active Components in Human Milk. Lisbon, Portugal. 2017.
- *Effects of human milk feedings on oxidative stress and intestinal injury in premature infants.* American Society of Parenteral and Enteral Nutrition's Clinical Nutrition Week. Orlando, FL. 2017.
- *How to Successfully Disseminate Your Scientific Findings*. American Society for Parenteral and Enteral Nutrition's Clinical Nutrition Week Roundtable. Orlando, FL. 2017.
- Nutrition Assessment throughout the Life Cycle: Pediatric Malnutrition A Multifaceted Topic. Chicago, IL, 2016.
- *Ethical Dilemmas in Communication Across the Age Spectrum: A Theatrical Presentation.* Clinical Nutrition Week. Long Beach, CA, 2015.
- Ethical Considerations Surrounding Patient Feeding Issues: Comfort Feeding to Forced Feeding Feedings. Clinical Nutrition Week International Clinical Ethics Section Meeting. Savannah, GA, 2014.
- *Physiological importance of enteral nutrition in acute pancreatitis*. Dietitians in Nutrition Support (DNS) 2011 Minneapolis Symposia – "Evidence & practice – are you on target?" Minneapolis, MN. 2011.
- What would I do? Panel discussion: Enteral Nutrition during Hemodynamic Instability. Dietitians in Nutrition Support (DNS) 2011 Minneapolis Symposia "Evidence & practice are you on target?" Minneapolis, MN. 2011.
- *Evaluation and application of critical care nutrition guidelines*. North Suburban Dietetics Association. Palatine, IL. 2011.
- A comparison of two methods of insulin administration in critically ill patients receiving parenteral nutrition. Clinical

Nutrition Week – Session. Las Vegas, NV, 2010.

- Nutrition Support Team Perspective on Standard vs. Custom Parenteral Nutrition Solutions. American Society for Parenteral and Enteral Nutrition's Clinical Nutrition Week Roundtable. New Orleans, LA, 2009.
- *The Role of Dietitian Order-writing Privileges in Improving Parenteral Nutrition Utilization*. Original Contributions: Translating Research into Dietetics Practice Nutrition Support and Chronic Disease. American Dietetic Association's Food & Nutrition Conference & Expo. Chicago, IL, 2008.
- *How and Why We Minimize the Use of Intravenous Lipids in the ICU*. American Society for Parenteral and Enteral Nutrition's Clinical Nutrition Week Roundtable. Chicago, IL, 2008.
- Nutritional Implications of Acid-Base Disorders in the Adult Patient. Chicago Chapter of American Society of Parenteral and Enteral Nutrition. Maywood, IL, 2007.
- Delivery of Nutrition Support in the ICU: a case study approach. Chicago Dietetic Association. Chicago, IL, 2007.
- Pragmatic Approach to Nutrition in the Intensive Care Unit: Energy and Protein Requirements of the Critically Ill Patient. Chicagoland Nutrition Support Conference. Rush University Medical Center. 2005.

Honors and Awards:

- Academy of Nutrition and Dietetics, Dietitians in Nutrition Support (DNS) Distinguished Service Award: 2020
- Federation of American Societies for Experimental Biology (FASEB) Science Research Conferences Travel Award: 2019
- The International Society for Research in Human Milk and Lactation Conference Travel Award: 2018
- University of Illinois at Chicago, Dr. Savitrii Kamath Award: 2017
- University of Illinois at Chicago Graduate Student Council Travel Award: 2017
- Nutrition Practice Poster, Abstract of Distinction of Clinical Nutrition Week: 2010
- Best Overall Improvement of a Process Award of the RUSH National Healthcare Quality Fair for "Introduction of a Protocol to Improving Tube Feeding Delivery": 2007
- Nestlé Nutrition Ambassador: 2007
- Rush University Medical Center Dietetic Internship: Clinical Preceptor of the Year: 2006
- Recipient of Theda L. Ashley Memorial Award: 2002

SCHOLARSHIP ACCOMPLISHMENTS:

Current H-Index: 11

<u>Refereed/Adjudicated</u>:

1 - corresponding (senior) author; 2 - designed study; 3 - obtained funding for study; 4 - oversaw conduct of study; 5 - contributing participant in associated workshop or activity; 6 - major role in manuscript preparation

Journal Articles

My Bibliography: <u>https://www.ncbi.nlm.nih.gov/myncbi/yimin.chen.2/bibliography/public/</u> In Preparation:

- 1. Lyu Y, Kim BJ, Patel J,Dallas DC, Chen Y. Peptidomics analysis of human milk protein-derived bioactive peptides from *in vitro* digested colostrum. (1-6)
- 2. Burnette-Phelps K, Fehrenkamp B, Partridge C, **Chen Y**. Assessing associations of maternal stress with infant behavior and inflammatory markers in human milk. (1,2,4-6)
- 3. Nuñez LA, Fehrenkamp B, McDonough A, Piaskowski J, **Chen Y**. Early-life feeding exposure impacts brain development in a neonatal piglet model a pilot study. (1-6)
- 4. Fehrenkamp BD, Nuñez LA, Crandall A, Fishburn Z, **Chen Y**. Impacts of early life feeding exposure on intestinal development in a neonatal piglet model. (1-6)
- 5. Heckathorn K, Patel J, Good M, Kim BJ, Dallas DC, McGuire M, Chen Y. The anti-inflammatory effect of

human milk peptides via interference of LPS-binding to TLR4 and MD2. (1-6)

- 6. Hollinshead V, Piaskowski J, Chen Y. Association between vitamin D status and depression scores in 20–44year-old adults – an NHANES data analysis. (1-6)
- 7. Follett M, Schumacher S, Nuñez LA, Biasotti A, Fehrenkamp BD, Chen Y. Intestinal barrier function and tight junction protein differences in human milk vs infant formula-fed neonatal piglets. (1-6)

Published:

*denotes trainee

- Robinson D, Calkins K, Chen Y, Cober M, Falciglia G, Church D, Mey J, McKeever L, Sentongo T. Corrigendum: Guidelines for parenteral nutrition in preterm infants: The American Society for Parenteral and Enteral Nutrition. JPEN J Parenter Enteral Nutr. Sep 2023;47(7):830-858. DOI: 10.1002/jpen.2582
 - Robinson D, Calkins K, Chen Y, Cober M, Falciglia G, Church D, Mey J, McKeever L, Sentongo T. Response to Liviskie and colleagues. *J Parenter Enteral Nutr*. 2023; online first. DOI: 10.1002/jpen.2579 (2,4-6)
 - b. Robinson D, Calkins K, Chen Y, Cober M, Falciglia G, Church D, Mey J, McKeever L, Sentongo T. Guidelines for parenteral nutrition in preterm infants: The American Society of Parenteral and Enteral Nutrition. J Parenter Enteral Nutr. 2023; 47(7):830-585. DOI: 10.1002/jpen.2550 (2,4-6)
- 2. Lyu Y*, Chen Y. Digested human colostrum reduces interleukin-8 production in induced human intestinal epithelial cells. *Nutrients*. 2022; 14:2787. DOI: 10.3390/nu14142787 (1-4,6)
- 3. Chen Y, Kim BJ, Dallas DC. Proteomics analysis reveals digestion-resistant proteins from colostrum are associated with inflammatory and cytotoxic responses in intestinal epithelial cells. *J Parenter Enteral Nutr*. 2022; 46(5):1119-1129. DOI: 10.1002/jpen.2285 (1-6)
- Mueller C, Jonnalagadda S, Torres KA, Hubbard VS, Turner J, Ottery F, Chen Y, Russell ME, Cetnarowski W, Citty SW, Dye L, Sacks GS, Kumbhat S. The Importance of Public-Private Partnerships for Nutrition-support Research: An ASPEN Position Paper. *J Parenter Enteral Nutr*. 2021; 45(8):1619-1626. DOI: 10.1002/jpen.2239 (5,6)
- 5. Chen Y, Fantuzzi G, Schoeny M, Meier PM, Patel AL. High-dose human milk feedings decrease oxidative stress in premature infants. *J Parenter Enteral Nutr.* 2019;43(1):126-132. DOI: 10.1002/jpen.1178 (1-6)
- 6. Chen Y. Invited Commentary: Considerations in Donor Human Milk Use in Premature Infants. *J Pediatr* Gastroenterol Nutr. 2018;67(5):550-551. DOI: 10.1097/MPG.00000000002095 (1,6)
- 7. Bierman S*, Peterson SJ, Chen Y. Identification, coding, and reimbursement of pediatric malnutrition at an urban academic medical center. *Nutr Clin Pract.* 2018;33(5):640-646. DOI: 10.1002/ncp.10064 (1,2,4,6)
- Chen Y, Patel AL, Meier PP, Fantuzzi G. Digested early lactation stage preterm human milk suppresses TNFinduced inflammation and cytotoxicity in human intestinal epithelial cells. *J Pediatr Gastroenterol Nutr*. 2018;66(6):e153-e157. DOI: 10.1097/MPG.00000000001932 (1-6)
- Chen Y, Kintner J, Rifkin SK, Keim KS, Tangney CC. Changes in Resting Energy Expenditure Following Orthotopic Liver Transplantation. *J Parenter Enteral Nutr.* 2016;40(6): 877-882. DOI: 10.1177/0148607115586435 (1,2,4-6)
- 10. Coduti N*, Gregoire M, Sowa D, Diakakis G, **Chen Y**. Characteristics of exclusively breastfeeding mothers. *Top Clin Nutr.* 2015;30(2):174-183. DOI: 10.1097/TIN.00000000000033 (1,2,4,6)
- 11. Meier PP, Patel AL, Bigger HR, **Chen Y**, Johnson TJ, Rossman B, Engstrom JL. Human Milk Feedings in the Neonatal Intensive Care Unit. In: Rajendram R., Preedy V.R., Patel V.B. (eds) Diet and Nutrition in Critical

Care. Springer, New York, NY. 2015. DOI: 10.1007/978-1-4614-7836-2_126 (5,6)

- Patel A, Trivedi S, Bhandari N, Ruf A, Scala C, Witowich G, Chen Y, Renschen C, Meier P, Silvestri J. Reducing Necrotizing Enterocolitis in Very Low Birth Weight Infants Using Quality Improvement Methods. J Perinatol. 2014;34(11):850-7. DOI: 10.1038/jp.2014.123 (5,6)
- Oliver L*, Rasmussen H, Gregoire MB, Chen Y. Health care provider's knowledge, perceptions, and use of probiotics and prebiotics. *Top Clin Nutr*. 2014;29(2):1-11. DOI: 10.1097/01.TIN.0000445898.98017.eb (1,2,4,6)
- 14. Brantley SL, Russell MK, Mogensen KM, Wooley JA, Bobo E, Chen Y, Malone A, Roberts S, Romano MM, Taylor B, American Society for Parenteral and Enteral Nutrition, Academy of Nutrition and Dietetics. American Society for Parenteral and Enteral Nutrition and Academy of Nutrition and Dietetics: Revised 2014 standards of practice and standards of professional performance for registered dietitian nutritionists (competent, proficient, and expert) in nutrition support. *Nutr Clin Pract.* 2014;29(6):792-828. DOI: 10.1177/0884533614554264 (5,6)
- Roosevelt H*, Gregiore M, Sowa D, KinnareK, ChenY. The Influence of Risk and Resources Managed on Nutrition Support Registered Dietitians' Salaries. *Top Clin Nutr*. 2013;28(3):274–282. DOI: 10.1097/TIN.0b013e31829dee7d (1,2,6)
- Kinnare KF, Bacon CA, Chen Y, Sowa DC, Peterson SJ. Risk factors for predicting hypoglycemia in patients receiving concomitant parenteral nutrition and insulin therapy. *J Acad Nutr Diet*. 2013;113:263-268. DOI: 10.1016/j.jand.2012.11.007 (2,5,6)
- 17. Sheean PM, Peterson SJ, **Chen Y**, Liu D, Lateef O, Braunschweig CA. Utilizing multiple methods to classify malnutrition among elderly patients admitted to the medical and surgical intensive care units (ICU). *Clin Nutr*. 2013;32:752-757. DOI: 10.1016/j.clnu.2012.12.012 (2,5)
- 18. Peterson S, Chen Y. Systematic approach to parenteral nutrition in the ICU. *Curr Drug Saf.* 2010;5:33-40. DOI: 10.2174/157488610789869139 (5,6)
- 19. Chen Y. Acute bariatric surgery complications: managing parenteral nutrition in the morbidly obese. *J Am Diet Assoc.* 2010;110:1734-1737. DOI: 10.1016/j.jada.2010.08.010 (1,5,6)
- 20. Peterson SJ, **Chen Y**, Sullivan CA, Wyckoff KF, Tupesis NC, Patel GP, Sowa DC, Lateef O, Sheean PM. Assessing the influence of registered dietitian order writing privileges on parenteral nutrition use. *J Am Diet Assoc.* 2010;110:1703-1711. DOI: 10.1016/j.jada.2010.08.003 (2,3,5,6)
- 21. Chen Y, Peterson SJ. Enteral nutrition formulas: which formula is right for your adult patient? Nutr Clin Pract. 2009;24:344-355. DOI: 10.1177/0884533609335377 (1,5,6)
- 22. Behara A, Peterson SJ, Chen Y, Lateef O, Butsch J, Komanduri S. Nutrition Support in the Critically Ill: A Physician Survey. *J Parenter Enteral Nutr.* 2008;32(2):113-119. DOI: 10.1177/0148607108314763 (2,4,6)

Abstracts

*denotes trainee

- Richter J, Keele S, Nunez L, Chen Y, Fox M, Childress A and Fehrenkamp B. Assessing the effects of breastmilk and formula on neonatal immune development using a piglet model. 2024 Western Medical Research Conference. Carmel, CA. *Oral Presentation*
- Fehrenkamp BD, Badger R, Bunker M, Nuñez LA, **Chen Y**. Histological and Transcriptomic Investigations into the Effect of Human Milk on Intestinal Immune Development in a Neonatal Piglet Model. International Milk Genomic Consortium Symposium 2023. Cork, Ireland. *Oral Presentation*
- Heckathorn K*, Patel J, Chen Y. Interactions between digestion-released human milk peptides and cell surface

receptors targeting inflammation. Nutrition 2023. Boston, MA.

- Fehrenkamp BD, Nuñez LA, McDonough A, Piaskowski J, **Chen Y**. Utilizing the neonatal piglet model to investigate the impact early-life feeding may have on brain development. Federation of American Societies for Experimental Biology (FASEB) Science Research Conferences Origins and Benefits of Biologically Active Components in Human Milk. 2023.Melbourne, FL. *Oral Presentation*
- Fishburn Z*, Crandall A, Nunez L, Fehrenkamp B, **Chen Y**. Human milk feeding promotes gastrointestinal development in first six months of life compared to infant formula feeding in a neonatal piglet model. 2023 Western Medical Research Conference. Carmel, CA. *Oral Presentation*
- Burnette-Phelps K*, Fehrenkamp B, Partridge C, Speer A, McGuire M, Chen Y. Assessing associations of maternal stress with infant behavior and inflammatory markers in human milk. Des Moines University Research Symposium. Des Moines, IA. 2022.
- Chen Y, Fehrenkamp B*, Nunez L*, Piaskowski J, McDonough A. Human milk feeding improves brain growth and cognitive performance compared with infant formula feeding a pilot neonatal piglet study. 21st ISRHML Conference of the International Society for Research in Human Milk and Lactation. Panama City, Panama. 2022.
- Fehrenkamp B*, Nunez L*, Chen Y. Early-life feeding exposure and brain development in a neonatal piglet model. ASPEN 2022 Nutrition Science & Practice Conference. Seattle, WA. 2022.
- Wang S*, Chen Y, Gao J, Patel RA, Tappenden KA, Li W. A Neonatal Piglet Brain Database with High Resolution MRI. Radiological Society of North America Annual Meeting. Chicago, IL. 2020.
- Chen Y, Kim BJ, Fantuzzi G, Dallas DC. Omics analyses reveal digestion-resistant proteins and digestionreleased peptides are associated with inflammation and cytotoxic suppression in intestinal epithelial cells. Federation of American Societies for Experimental Biology (FASEB) Science Research Conferences – Origins and Benefits of Biologically Active Components in Human Milk. West Palm Beach, FL. July 2019.
- Chen Y, Tappenden KA, Meier PP, Patel A, Fantuzzi G. Human milk protein mediators following *in vitro* digestion. 19th ISRHML Conference of the International Society for Research in Human Milk and Lactation. Kanagawa, Japan. 2018.
- Chen Y, Patel A, Meier PP, Fantuzzi G. *Digested early lactation stage preterm human milk suppresses TNF-induced inflammation and cytotoxicity in human intestinal epithelial cells*. Federation of American Societies for Experimental Biology (FASEB) Science Research Conferences Origins and Benefits of Biologically Active Components in Human Milk. Lisbon, Portugal. 2017.
- Bierman S*, **Chen Y**. Identification, Coding, and Reimbursement of Pediatric Malnutrition at Rush University Medical Center. American Society of Parenteral and Enteral Nutrition's Clinical Nutrition Week. Orlando, FL. 2017.
- Smith A*, Foley S, Ratz N, Sharp C, Sowa D, **Chen Y**. The Psychometric Properties of the Modified Screening Tool for the Assessment of Malnutrition in Paediatrics (mSTAMP) for use on Inpatient Pediatric Patients. American Society of Parenteral and Enteral Nutrition's Clinical Nutrition Week. Orlando, FL. 2017.
- Scala CM, Chen Y, Peterson SJ, Silvestri JM, Patel AL, Sharp C. Vitamin D deficiency and supplementation in preterm infants in the neonatal intensive care unit. American Society of Parenteral and Enteral Nutrition's Clinical Nutrition Week. Orlando, FL. 2017.
- Ducharme-Smith K*, Scala CM, Chen Y. Factors influencing adequacy and achievement of parenteral nutrition prescription on growth in neonatal intensive care unit infants at Rush University Medical Center. American Society of Parenteral and Enteral Nutrition's Clinical Nutrition Week. Austin, TX. 2016.
- Pan X*, Foley S, Patel A, **Chen Y**, Scala CM. Linear and head circumference growth in premature neonates receiving fortified human milk with supplemental protein. American Society of Parenteral and Enteral Nutrition's Clinical Nutrition Week. Austin, TX. 2016.
- Mondelli VC*, Sowa D, Foley S, Chen Y. Determine entry-level registered dietitian nutritionist's participation in advocacy. J Acad Nutr Dietetics. 2015;115(suppl 2, 9):A-12.
- Chen Y, Wicks J, Rogers LM, Esquerra-Zwiers A, Scala CM, Janes J, Meier PP, Silvestri JM, and Patel AL. Impact of a Donor Milk Program on Mother's Own Milk Usage and Growth in Very Low Birth Weight Infants in the Neonatal Intensive Care Unit. American Society of Parenteral and Enteral Nutrition's Clinical Nutrition Week. Long Beach, CA. 2015
- Chen Y, Meier PP, Friel JK, Fantuzzi G. Effect of Colostrum on Endotoxin-Induced Interleukin-8 Production in Human Intestinal Epithelial Cells. 17th ISRHML Conference. Kiawah Island, SC. 2014

- Chen Y, Wicks J, Rogers LM, Esquerra-Zwiers A, Scala CM, Janes J, Meier PP, Silvestri JM, and Patel AL. Growth in Very Low Birth Weight Infants in the Neonatal Intensive Care Unit fed Mother's Own Milk versus Pasteurized Donor Milk. 17th ISRHML Conference. Kiawah Island, SC. 2014
- Coduti N*, Gregoire M, Sowa D, Diakakis GM, Chen Y. Influences of breastfeeding mothers. Experimental Biology. San Diego, CA. 2014
- Brown N*, Gregoire M, Sowa D, Ratz, Chen Y. Characteristics of exclusive formula and mixed feeding mothers. Experimental Biology. San Diego, CA. 2014
- Patel AL, Rogers LM, Scala CM, **Chen Y**, Janes J, Renschen C, Meier PP, Silvestri JM. Impact of Donor Milk on Short-Term Outcomes in Very Low Birth Weight (VLBW) Infants. Pediatric Academic Societies and Asian Society for Pediatric Research Joint Meeting. Vancouver, Canada. 2014: 3845.678
- Patel AL, Rogers LM, Chen Y, Scala CM, Janes J, Renschen C, Meier PP, Silvestri JM. Impact of Donor Human Milk (DM) in a High Mothers' Own Milk (MOM) Feeding Neonatal Intensive Care Unit (NICU). Pediatric Academic Societies and Asian Society for Pediatric Research Joint Meeting. Vancouver, Canada. 2014: 3844.594
- Scala CM, Patel, A, Silvestri J, Wilcox R, Sowa D, **Chen Y**. Transitional parenteral nutrition use in the neonatal intensive care unit (NICU) and growth in very low birth weight (VLBW) infants. American Society of Parenteral and Enteral Nutrition's Clinical Nutrition Week. Savannah, GA. 2014.
- Scala CM, Chen Y. Discrepancy in length measurement between measuring tape and recumbent length board in the neonatal intensive care unit (NICU). American Society of Parenteral and Enteral Nutrition's Clinical Nutrition Week. Savannah, GA. 2014.
- Scala CM, Witowich G, Sowa D, Chen Y. Head Circumference and Linear Growth with Increased Protein Administration in Neonates. American Society of Parenteral and Enteral Nutrition's Clinical Nutrition Week. Phoenix, AZ. 2013.
- Rasmussen H, Oliver L, Gregoire M, Chen Y. Knowledge, Use and Perceptions of Probiotics and Prebiotics in Medical Center Healthcare Providers. Experimental Biology. San Diego, CA. 2012.
- Stang T*, Peterson S, Sowa D, Gregoire M, Chen Y. Validating Generalist and Advanced Indicators Statements in the 2007 Standards of Professional Performance for Registered. Academy of Nutrition and Dietetics's Food & Nutrition Conference & Expo. Philadelphia, PA. 2012.
- Chen Y, Lewandowski J, Sperry M, Keim K, Sowa D, Peterson SJ. A comparison of two methods of insulin administration in critically ill patients receiving parenteral nutrition. *Nutr Clin Pract*. 2010.
- Peterson SJ, Chen Y, Sullivan C, Butsch J, Komanduri S, Lateef O. Improved utilization of parenteral nutrition. Society of Critical Care Medicine's 37th Critical Care Congress. Hawaii, 2008.
- Peterson S, Chen Y, Sullivan C, Tangney C, Sheean P. Does a weight loss indicator enhance the predictability of APACHE II for determining hospital mortality among patients admitted to the Medical Intensive Care Unit (MICU)? American Society of Parenteral and Enteral Nutrition's Clinical Nutrition Week. Chicago, IL 2008.
- Peterson SJ, Chen Y, Butsch J, Lateef O, Komanduri S, Elpern E, Patel G, Sowa D. Introduction of a Protocol to Improve Tube Feeding Delivery in the Intensive Care Unit. RUSH National Healthcare Quality Fair, 2007.
- Chen Y, Zablah-Pimentel E, Dowling R, Millikan K, Butsch J. Predicting resting energy expenditure in obese patients undergoing Roux-en-Y gastric bypass surgery. RUSH University Chapter of Sigma Xi, 2007.

Grants and Contracts Awarded:

Title: Human milk peptides reduce intestinal inflammation and necroptosis via cell receptor binding (PI: Yimin Chen)

Agency: University of Idaho

Funding Mechanisms: Operation Resubmission Success **Date:** 2/23 – 2/24 **Total Fund:** \$74,351 (spending authority: \$74,351)

Title: Effect of early-life feeding types on neurodevelopment mediated by the gut-brain axis (PI: Yimin Chen) Agency: American Society for Parenteral and Enteral Nutrition Rhoads Research Foundation Funding Mechanisms: ASPEN Rhoads Research Foundation Grant Date: 1/23 – 12/23 (Renewed 2nd year funding) Total Fund: \$25,000 (spending authority: \$25,000) Title: Effects of human milk handling practices on peptide release and bioactivity in the preterm infant intestine (PI: David C. Dallas; Co-investigator: Yimin Chen) Agency: National Institute of Health Funding Mechanism/Award Number: 1R01HD097367-01A1 Date: 8/20/2022 – 7/31/2027 Total Fund: \$2,994,339 (spending authority: \$679,377)

Title: Early-life feeding exposure and intestinal development in a neonatal piglet model (PI: Yimin Chen) Agency: University of Idaho INBRE and WWAMI Funding Mechanism: Idaho INBRE WWAMI Student Research Training Support Award Date: 12/21 – 2/22 Total Fund: \$17,903.60 (spending authority: \$17,903.60)

Title: Effect of early-life feeding types on neurodevelopment mediated by the gut-brain axis (PI: Yimin Chen) Agency: American Society for Parenteral and Enteral Nutrition Rhoads Research Foundation Funding Mechanisms: ASPEN Rhoads Research Foundation Grant Date: 1/22 – 12/22 Total Fund: \$25,000 (spending authority: \$25,000)

Title: Investigating peptide bioactivity in human milk via complimentary modeling and experiments (PI: Yimin Chen)

Agency: University of Idaho Institute for Modeling Collaboration and Innovation (IMCI) Funding Mechanism/Award Number: IMCI Internal Grant Date: 2021 – 2022 Total Fund: \$80,000 (spending authority: \$80,000)

Title: Reducing Maternal Stress in Mothers of Preterm Infants Using a Mindfulness-based Intervention (PI: Yimin Chen)

Agency: Mountain West Clinical Translational Research – Infrastructure Network Funding Mechanism/Award Number: U54GM104944 Date: 2020 – 2022 Total Funding: \$60,000 (spending authority: \$60,000)

Title: ASPEN 2019 Research Workshop (RW) The Relationship between the intestinal barrier and chronic disease (PI: Yimin Chen) Agency: National Institute of Health/ National Institute of Diabetes and Digestive and Kidney Diseases Funding Mechanism/Award Number: R13DK120290 Date: 2019 Total Fund: \$10,000 (spending authority: \$10,000)

Title: Peptidomics in *in vitro* digested human milk (PI: Yimin Chen) Agency: International Society for Research in Human Milk and Lactation/ Family-Larsson Rosenquist Foundation Funding Mechanism: Trainee Travel Fund Date: 2019 Total Fund: \$10,000 (spending authority: \$10,000)

Title: Modulating effect of feeding type on pathophysiologic response in the premature infant and intestinal epithelial cells (PI: Yimin Chen) Agency: Academy of Nutrition and Dietetics Foundation Funding Mechanism: Dietitians in Nutrition Support Practice Group Research Grant Date: 2016 – 2018 Total Fund: \$10,000 (spending authority: \$10,000)

Grants and Contracts Pending:

Title: Paracellular and Transcellular Passage Function of Piglet Tissue Exclusively Fed Human Milk and Infant Formula (PI: Yimin Chen; Graduate Student Applicant: Megan Follett)
Agency: Academy of Nutrition and Dietetics Foundation
Funding Mechanism/Award Number: Commission on Dietetic Registration Emerging Researcher Grant Date: 01/01/2024 – 12/31/2024
Total Fund: \$10,000 (spending authority: \$10,000)

Title: Differentiating intestinal epithelial and immune cell populations as a function of early feeding exposures using scRNA sequencing in a neonatal piglet model (PI: Yimin Chen; Graduate Student Applicant: Sara Schumacher)
Agency: Academy of Nutrition and Dietetics Foundation
Funding Mechanism/Award Number: Commission on Dietetic Registration Emerging Researcher Grant Date: 01/01/2024 – 12/31/2024
Total Fund: \$10,000 (spending authority: \$10,000)

Title: COBRE in Nutrition and Women's Health (PI: Shelley McGuire; Co-investigator: Yimin Chen) – <u>scored</u> Agency: National Institute of Health Funding Mechanism/Award Number: 1351834 Date: 01/15/2024 – 01/14/2029 Total Fund: \$11,928,535 (spending authority: \$700,670)

Grants and Contracts Unfunded:

Title: Mechanistic investigation of human milk feeding on neurodevelopment: a comparative study using neonatal piglets and translatable biomarkers (PI: Yimin Chen) – <u>scored</u> Agency: National Institute of Health Funding Mechanism/Award Number: 1R01HD113572-01 Date: 09/01/2023 – 08/31/2028 Total Fund: \$3,652,822 (spending authority: \$3,652,822)

Title: COBRE in Nutrition and Women's Health (PI: Shelley McGuire; Co-investigator: Yimin Chen) – <u>scored</u> Agency: National Institute of Health Funding Mechanism/Award Number: 1141528 Date: 01/15/2023 – 01/14/2028 Total Fund: \$7,800,000 (spending authority: \$780.505)

Title: Human milk peptides reduce intestinal inflammation and necroptosis via cell receptor binding (PI: Yimin Chen) – <u>scored</u> Agency: National Institute of Health Funding Mechanism/Award Number: 1R01HD109857-01 Date: 07/01/2022 – 06/30/2027 Total Fund: \$3,099,401 (spending authority: \$3,099,401)

Title: Effects of human milk handling practices on peptide release and bioactivity in the preterm infant intestine (PI: Brian Scottoline; Co-investigator: Yimin Chen) Agency: National Institute of Health Funding Mechanism/Award Number: 1 R01 HD109193-01 Date: 2022 – 2027 Total Fund: \$ 3,795,700 (spending authority: \$300,000)

Title: Mechanistic effects of early-life feeding on neurodevelopment via the gut-brain immune axis (PI: Yimin Chen) Agency: National Institute of Health Funding Mechanism/Award Number: 1R01HD111021-01 Chen, Yimin

Date: 12/01/2022 – 11/30/2026 **Total Fund:** \$2,674,556 (spending authority: \$2,674,556)

Title: Mechanistic investigation of human milk feeding on neurodevelopment: a parallel comparative study using neonatal piglets and human infant biomarkers (PI: Yimin Chen) – <u>scored</u> Agency: National Institute of Health Funding Mechanism/Award Number: 1R01HD111434-01 Date: 04/01/2023 – 03/31/2028 Total Fund: \$3,159,112 (spending authority: \$3,159,112)

Title: Discovering digestion-released human milk-peptides bioactivities targeting anti-microbial activities, and intestinal inflammation and necroptosis pathways (PI: Yimin Chen) Agency: National Institute of Health Funding Mechanism/Award Number: 1R01HD110474-01 Date: 09/01/2022 – 08/31/2027 Total Fund: \$3,099,400 (spending authority: \$3,099,400)

Title: Examining gut-health enhancing peptides across human milk digestion in infants and with varying milk handling practices (PI: David C. Dallas; Co-investigator: Yimin Chen)
Agency: United States Department of Agriculture
Funding Mechanism/Award Number: Agriculture and Food Research Initiative Competitive Grants Program Date: 2021 – 2024
Total Fund: \$600,000 (spending authority: \$150,000)

Title: Effect of feeding types on neurodevelopment mediated by the gut-brain axis (PI: Yimin Chen) Agency: The Pew Charitable Trusts – Pew Scholars Program in the Biomedical Sciences Funding Mechanism/Award Number: NA Date: 2021 – 2025 Total Fund: \$300,000 (spending authority: \$300,000)

Title: Impact of maternal stress on beneficial human milk proteins/peptides and subsequent infant outcomes (PI: Yimin Chen) Agency: Gerber Foundation Funding Mechanism/Award Number: NA Date: 2020 – 2023 Total Fund: \$350,000

Title: The relationship between maternal stress and human milk proteins/peptides. (PI: Yimin Chen)
Agency: Institute of Translational Health Sciences
Funding Mechanism/Award Number: ITHS KL2 Multidisciplinary Clinical Research Career Development
Program
Date: 2020 – 2023
Total Fund: \$255,000

Title: Piglet Intervention Center (PInC). (PI: Yimin Chen) Agency: University of Idaho Funding Mechanism/Award Number: Office of Research and Economic Development – Equipment and Infrastructure Support Date: 2019 – 2020 Total Fund: \$46,000

SERVICE:

University Service

Major Committee Assignments

University of Idaho, Family & Consumer Sciences, Staff Search Committees, 2023

- Sponsored Program Administrator II
- Sponsored Program Administrator I or II
- Statistician

University of Idaho, College of Agricultural and Life Sciences, Awards Reviewer, 2023 University of Idaho, Family & Consumer Sciences, Awards Committee, 2022 – <u>Current</u> University of Idaho, Family & Consumer Sciences, Social Committee, 2021 – <u>Current</u> University of Idaho, Family & Consumer Sciences, Scholarship Committee, 2021 – <u>Current</u> University of Idaho, Family & Consumer Sciences, Faculty Search Committees, 2021 – 2023

- Assistant Professor Nutrition & Dietetics
- Extension Specialist Human Nutrition & Health

University of Idaho, Family & Consumer Sciences, Awards Committee, 2022 – <u>Current</u> University of Idaho, Family & Consumer Sciences, Scholarship Committee, 2021 – <u>Current</u> University of Idaho, Family & Consumer Sciences, Graduate Program Committee, 2019 – 2022, 2023 Rush University Graduate Program in Clinical Nutrition: Research Committee, 2007 – 2016 Rush University Graduate Program in Clinical Nutrition: Workshop Committee, 2007 – 2017 Rush University Graduate Program in Clinical Nutrition: Website Committee, 2005 – 2007

Offices Held

University of Idaho, Family & Consumer Sciences, Staff Search Committee, Chair (2022 - 2023)

- Research Associate II
- Research Associate I

University of Idaho, Family & Consumer Sciences, Scholarship Committee, **Chair** (2021 – 2023) University of Idaho, Family & Consumer Sciences, Social Committee, **Chair** (2019 – <u>Current</u>) University of Idaho, Family & Consumer Sciences, Graduate Program, **Director** (2019 – 2021)

Professional and Scholarly Organizations

Memberships

American Society for Nutrition, 2018 – <u>Current</u> International Society for Research in Human Milk and Lactation, 2012 – <u>Current</u> European Society for Parenteral and Enteral Nutrition, 2007 – 2011 Chicago Chapter American Society for Parenteral and Enteral Nutrition, 2005 – 2019 American Society for Parenteral and Enteral Nutrition, 2003 – <u>Current</u> Dietitians in Nutrition Support Dietetics Practice Group (DPG), 2003 – 2020 Academy of Nutrition and Dietetics (formerly American Dietetic Association), 2001 – 2020 Chicago Dietetic Association, 2001 – 2004

Committee Assignments

International Society for Research in Human Milk and Lactation:

• Trainee Interest Group Governing Committee, 2019 – 2022

American Society for Parenteral and Enteral Nutrition:

- Abstract Task Force, 2023 Current
- Research Committee Mentor/Mentee Subgroup, 2018 2019
- Neonatal Parenteral Nutrition Guidelines Committee, 2018 2023
- Succession Planning Task Force Committee, 2018 2020
- Neonatal Section Leadership, 2017 2020
- Nominations Committee, 2016 2017
- Research Committee, 2013 2020
- Research Section Leadership, 2013 2017
- Sections Affairs Subcommittee, 2013 2017
- Standards Task Force Committee, 2011 2013

- Program Planning Committee, 2013 2021
- Conference Monitoring Committee, 2012 2015
- Abstract Review Committee, 2008 2013

Dietitians in Nutrition Support, Dietetics Practice Groups of the Academy of Nutrition and Dietetics:

- Research Committee, 2012 2013
- Coordinating Cabinet Member, 2008 2010
- Mentorship Program Committee, 2007 2010

Reviewer

Journal of Pediatric Gastroenterology and Nutrition, 2018 - Current

Nutrition in Clinical Practice, 2018 - Current

Journal of Parenteral and Enteral Nutrition, 2011 - Current

Journal of the Academy of Nutrition and Dietetics (formerly Journal of the American Dietetics Association), 2010 – Current

Offices Held

International Society for Research in Human Milk and Lactation:

- Virtual Conference, Co-chair (2020)
- Trainee Interest Group, Co-President (2019 2021)
- Executive Committee, **Ex-Officio** (2019 2021)

American Society for Parenteral and Enteral Nutrition:

- Program Planning Committee, Chair (2019 2020), Chair-elect (2018 2019)
- Research Committee, Chair (2020)
- Research Committee Mentor/Mentee Subgroup, Chair (2018 2019)
- Neonatal Section, Chair (2017 2020)
- Research Workshop 2019 of the Research Committee, Chair (2017 2019)
- Research Section, Chair (2015 2017), Chair-elect (2013 2015)
- Clinical Nutrition Week Monitoring Committee, Chair (2013 2015)
- Abstract Review Committee, Chair (2012 2013)

Dietitians in Nutrition Support, Dietetics Practice Groups of the Academy of Nutrition and Dietetics:

- Executive Committee, Immediate Past-Chair (2019 2020), Chair (2018 2019), Chair-elect (2017 2018)
- Executive Committee, **Secretary** (2010 2012)
- Mentorship Program, Chair (2008 2010)

Chicago Chapter American Society for Parenteral and Enteral Nutrition:

- **President** (2010 2011)
- **Treasurer** (2008 2009)
- **Program Chair** (2007 2009)