TEXAS STATE VITA

I. Academic/Professional Background

A. Name and Title

Name: Dr. Michelle A. Lane Title: Associate Professor

B. Educational Background

Degree	*Year*	*University*	*Major*	*Thesis/Dissertation*
PHD	1996	Rutgers State Univ of NJ Newark	Nutritional Sciences	
BS	1991	Cornell University	Animal Science	

C. University Experience

Position	*University*	*Comments*	*Dates*
Associate Professor, Family & Consumer Sciences	Texas State University		June 2008 - Present
Assistant Professor, Human Ecology	The University of Texas at Austin		2001 - 2008
Part-Time Faculty, Science Technology and Society Program	Eugene Lang College of the New School University		1999 - 2001
Graduate Research Assistant, Nutrition	Rutgers-The State University of New Jersey		1991 - 1996
Head Teaching Assistant, General Biology	Rutgers-The State University of New Jersey		1994 - 1995
Teaching Assistant, General Biology	Rutgers-The State University of New Jersey		1991 - 1994

II. TEACHING

A. Teaching Honors and Awards:

Award / Honor Nominee: Nominee: Graduate Mentor Award, Texas State University.
2020

Additional Comments: Although not selected as the awardee either year, I was encouraged by Dean Golato to apply again in 2021.

2018 - 2019

Additional Comments: Although not selected as the awardee either year, I was encouraged to apply again in 2020.

Award / Honor Nominee: The Outstanding Contributions Award, Southern Conference of Graduate Schools.
November 2019 - January 2020

Award / Honor Recipient: Favorite Professor, graduate, Alfred H. Nolle Chapter of Alpha Chi National College Honor Society.
2016

Award / Honor Nominee: Presidential Award for Excellence in Teaching, College of Applied Arts, Texas State University.
2012

Fellowship Recipient: Katherine Richards Centennial Teaching Fellowship in Nutrition, University of Texas at Austin.
2006 - 2007

Award / Honor Recipient: College of Natural Sciences Teaching Award, University of Texas at Austin.
2005

Award / Honor Recipient: Department of Human Ecology Tenure Track Teaching Award, University of Texas at Austin.
2005

B. Courses Taught:

Texas State University:

BIO 4299 - UNDERGRAD RES

FCD 5350 - RES DES & MTH FCD

NUTR 1162 - FOOD SYSTEMS LAB

NUTR 1362 - FOOD SYSTEMS

NUTR 2360 - NUTRITION SCIENCE

NUTR 4361 - BIOCHEM NUTRITION

NUTR 4362 - NUTR AND GENETICS

NUTR 5101 - GRAD ASST DEVLPMNT

NUTR 5199B - THESIS

NUTR 5300 - FOUNDATION STUDIES

NUTR 5300 - FOUNDATIONAL STUDIES NUTR

NUTR 5302D - FOUND STUDIES

NUTR 5302E - NUTRITION & DISEAS

NUTR 5302F - NUTR SUPPLEMENTS

NUTR 5302H - ADV NUTR & GENETICS

NUTR 5302J - DIET THERAPY

NUTR 5350 - RESEARCH METHODS

NUTR 5355 - ADV IND STUDY NUTR

NUTR 5361 - ADV FOOD SYST ADM

NUTR 5364 - SCI OF NUTR & EXER

NUTR 5366 - NUTR METABOLISM I

NUTR 5367 - MICRO METAB

NUTR 5367 - NUTR METABOLISM II

NUTR 5371 - EXTERNSHIP HUM NTR

NUTR 5374 - ADV NUTR GENETICS

NUTR 5399A - NUTR THESIS PROPOSAL

NUTR 5399A - THESIS

NUTR 5399B - THESIS

C. Directed Student Learning (i.e. theses, dissertations, exit committees, etc.):

Member, Master's Thesis, "Technology-Delivered Medically Tailored Meal and Individualized Nutrition Solutions for Home-Bound Older Adults, A NUEVA Project", Status: In Progress. (August 2025 - Present). Family and Consumer Sciences, Nutrition, Texas State University.
Student(s): Nishat Tabassum, Graduate, MS.

Member, Master's Thesis, "An In Vivo Model Characterizing the Effects of Vitamin D Deficiency on the Gut-Liver Axis in an Obese Murine Model", Status: Completed. (December 2024 - December 2025). School of Family and Consumer Sciences, Nutrition and Foods Program, Texas State University.
Student(s): Cassandra Swanson, Graduate, MS.

Supervisor / Chair, Internship, "Systematic review of the impact of n-3 polyunsaturated fatty acids on myelination and ADHD in adolescents", Status: Completed. (October 2025 - November 2025). Family and Consumer Sciences, Nutrition Program, Texas State University.
Student(s): Yates Barker, Graduate, MS.

Additional Comments: I served as Ms. Barker's supervisor/preceptor for her specialty research rotation in our Dietetic Internship. Manuscript is in preparation.

Supervisor / Chair, Independent Study, "N/A", Status: Completed. (May 2024 - July 2024). School of Family and Consumer Sciences, Nutrition and Foods Program, Texas State University.
Student(s): Clara Jackson, Graduate, MS.

Additional Comments: NUTR 5355, Independent Study. Clara examined DNA methylation status in the brains of rats exposed to a Western diet during development. These data will contribute to a publication.

Member, Master's Thesis, "An in vitro and in vivo model characterizing the role of the visfatin/PAK4/B-catenin axis in obesity-associated liver cancer", Status: Completed. (April 2024). School of Family and Consumer Sciences, Nutrition and Foods Program, Texas State University.
Student(s): Jessie Waltenbaugh, Graduate, MS.

Supervisor / Chair, Master's Thesis, "The Effect of Omega-3 Polyunsaturated Fatty Acids on Neural Cytochrome C Oxidase Activity in Postpartum Rats", Status: Completed. (October 2022 - May 2023). Human Nutrition Master's Program, School of Family and Consumer Sciences, Texas State University.
Student(s): Carley Rivers, Graduate, MS.
CRivers_thesis proposal-1.docx
CRivers_Thesis_Final_Draft-1.docx
Additional Comments: Carley successfully defended her thesis proposal in Fall 2022. She graduated in May 2023.

Member, Master's Thesis, "The Impact of Maternal Methyl-Donor Nutrients Supplementation on Vitamin D Status and Inflammation Among Adult Offspring", Status: Completed. (August 2022 - May 2023). Human Nutrition Master's Program, School of Family and Consumer Sciences, Texas State University.
Student(s): Chin May Teoh, Graduate, MS.

Additional Comments: Dr. Koh is Chin May's thesis advisor. Chin May successfully defended her thesis proposal this fall.

Member, Master's Thesis, "Black Soldier Fly Larvae (BSFL) as a Protein Source for Cattle Consuming Forage", Status: Completed. (2021 - May 2023). Agricultural Sciences, Texas State University.
Student(s): Kayra Tasci, Graduate, MS.

Member, Master's Thesis, "Modulation of Vitamin D Status by Gut Microbiotia: Impact on Depression and Anxiety-related Behavior in Adult C57BL/6J Mice", Status: Completed. (2021 - December 2022). School of Family and Consumer Sciences, Nutrition and Foods Program, Texas State University.
Student(s): Karisa Renteria, Graduate, MS.

Additional Comments: Karisa completed her thesis under the direction of Dr. Gar Yee Koh.

Supervisor / Chair, Master's Thesis, "The effects of dietary fat and methyl donor nutrients during and after gestation on mood, cognition, and the stress response", Status: Completed. (August 2020 - December 2022). Family and Consumer Sciences, Texas State University.
Student(s): Christopher Farber, Graduate, MS Human Nutrition.
Farber_Thesis Proposal-1.pdf
Thesis_Final_Farber-1.docx
Additional Comments: Mr. Farber sucessfully defended his thesis in Fall 2022. He was the recipient of a Thesis Research Support Fellowship from the Graduate College. His proposal and thesis are attached.

Member, Master's Thesis, "Choline and betaine intake during pregnancy in relation to risk of Gestational diabetes mellitus among Chinese women", Status: Completed. (June 2021 - June 2022). School of Family and Consumer Sciences, Nutrition and Foods Program, Texas State University.
Student(s): Kallie Lamkin, Graduate, MS.

Additional Comments: Ms. Lamkin completed her thesis research under the supervision of Dr. Zhu.

Member, Master's Thesis, "TBD", Status: Completed. (2021 - May 2022). School of Family and Consumer Sciences, Nutrition and Foods Program, Texas State University.
Student(s): Curissa Groll, Graduate, MS.

Additional Comments: Curissa defended her proposal, but decided not to complete her thesis. She was Dr. Salcedo-Price's student.

PhD project proposal reviewer, Dissertation, "The role of mabisi in the diets of Zambian female adults", Status: Completed. (November 2020 - May 2022). Laboratory of Genetics, Wageningen University, The Netherlands.

Student(s): Taonga Chirwa, Graduate, PhD.

Additional Comments: This is the equivalent of serving as a dissertation committee member.

Supervisor / Chair, Master's Thesis, "The effects of dietary fat and methyl donor nutrients during and after gestation on risk for early onset colorectal cancer", Status: Completed. (August 2020 - March 2022). Family and Consumer Sciences, Texas State University.
Student(s): JD Muraida, Graduate, MS Human Nutrition.
Muraida_Thesis_Proposal-1.pdf
Additional Comments: Mr. Muraida dropped the thesis option prior to defending his thesis. He did pass his proposal defense.

Supervisor / Chair, Undergraduate student, "N/A", Status: Completed. (September 2021 - December 2021). School of Family and Consumer Sciences, Nutrition and Foods Program, Texas State University.
Student(s): Joel Betancourt, Undergraduate, BS.

Additional Comments: Joel is an undergraduate that volunteered to do research in my laboratory.

Supervisor / Chair, "N/A", Status: Completed. (May 2021 - December 2021). School of Family and Consumer Sciences, Nutrition and Foods Program, Texas State University.
Student(s): Jordan Ritter, Undergraduate, BS.

Additional Comments: Jordan is an undergraduate student volunteering in my research lab.

Member, Master's Thesis, "The role of visfatin and the IGF-1/IR/Akt axis in chemo-resistant liver cancer cells.", Status: Completed. (August 2018 - May 2021). Family and Consumer Sciences, Texas State University.
Student(s): Kimberly Glasscock, Graduate, MS.

Additional Comments: Dr. Ramona Salcedo-Price is Ms. Glasscock's thesis advisor.

Supervisor / Chair, Practicum, "Dietetic Internship Research Rotation", Status: Completed. (October 20, 2020 - November 20, 2020). School of Family and Consumer Sciences, Texas State University.
Student(s): Crystal Alvarez, Graduate, Dietetic Internship.

Additional Comments: I supervised Ms. Alvarez during her research rotation for the Texas State Dietetic Internship. These rotations last approximately one month and entail 35 hours of work from each intern every week. During her rotation under my training Ms. Alvarez completed the coding of bisphenol A exposure for participants in the Food, Feelings, and Family Study. She also compiled data from the Food, Feelings, and Family Study and made figures

and tables for publication regarding how diet during pregnancy affects depression, and anxiety during and after pregnancy.

Supervisor / Chair, Practicum, "Dietetic Internship Research Rotation", Status: Completed. (September 1, 2020 - October 9, 2020). School of Family and Consumer Sciences, Texas State University.
Student(s): Heath Melissa, Graduate, Dietetic Internship.

Additional Comments: I supervised Ms. Heath's research rotation as part of her dietetic internship. These rotations last approximately one month and entail 35 hours of work from each intern every week. During her rotation, I trained Ms. Heath and supervised her as she completed quantification of cytochrome oxidase activity in sensory regions of brains from rats that consumed diets deficient in or supplemented with n-3 polyunsaturated fatty acids.

Supervisor / Chair, Master's Thesis, "Determining the Effects of Antenatal N-3 Polyunsaturated Fatty Acids and Methyl Donor-Nutrient Intake on Perinatal Depression, Anxiety, and Attachment", Status: Completed. (August 2018 - April 2020). Family and Consumer Sciences, Texas State University.
Student(s): Rebecca Smith, Graduate, MS.
Smith_Proposal_Fall 2019-1.pdf
Smith_Rebecca_Thesis-1.pdf
Additional Comments: Ms. Smith defended her thesis proposal in August, 2018. She successfully defended her thesis in April, 2020. Both documents are attached.

Supervisor / Chair, Master's Thesis, "The Effects of Antenatal Methyl Donor and n-3 Polyunsaturated Fatty Acid Intake on Ante- and Peri-natal Depression and Cognition", Status: Completed. (September 2017 - April 2020). Family and Consumer Sciences, Texas State University.
Student(s): Crystal Alvarez, Graduate, MS.
Alvarez Thesis Proposal-1.pdf
Alvarez_Crystal_Thesis-1.pdf
Additional Comments: Ms. Alvarez successfully defended her thesis proposal in Fall 2019. She defended her thesis in May 2020. Both the proposal and final thesis are attached.

Member, Master's Thesis, "Nutrient and food component supplementation for substance use disorder recovery: A systematic review", Status: Completed. (August 2018 - November 2019). Family and Consumer Sciences, Texas State University.
Student(s): Melissa Heath, Graduate, MS.

Member, Master's Thesis, "Elucidating the Mechanism of Visfatin, an Adipocytokine with Insulin-like Properties", Status: Completed. (January 2018 - May 2019).
Student(s): Megan Zamora, Graduate, MS.

Additional Comments: Ms. Zamora successfully defended her research proposal in the Spring of 2018. She defended her thesis in the Spring of 2109. Ramona Salcedo Price is her thesis advisor.

Supervisor / Chair, Master's Thesis, "The ethyl ester forms of the n-3 polyunsaturated fatty acids eicosapentaenoic acid and docosahexaenoic acid decrease the proliferation, invasion, and matrixmetalloproteinase activiity of colorectal cancer cells", Status: Completed. (September 2016 - May 2019). Family and Consumer Sciences, Texas State University.
Student(s): Eric Pfister, Graduate, MS.
Pfister thesis-1.pdf
Additional Comments: Mr. Pfister was the recipient of a Graduate Thesis Support Fellowship. His thesis is uploaded.

Member, Master's Thesis, Status: Completed. (January 2017 - October 2018). Family and Consumer Sciences.
Student(s): Christina Ramirez, Graduate, MS.

Member, Master's Thesis, "Characterizing Adipokines, Visfatin and Resistin, and Determining the Contribution of Kinase Signaling in an Obesity-induced Liver Cancer Phenotype", Status: In Progress. (December 2017 - May 2018). Family and Consumer Sciences, Texas State University.
Student(s): Candace Miethe, Graduate, MS.

Additional Comments: Dr. Salcedo-Price is the thesis committee chair.

Supervisor / Chair, Master's Thesis, "Inhibition of recently isolated human colorectal cancer cell lines by vitamin A", Status: Completed. (May 2016). Human Nutrition, Texas State University.
Student(s): Alexandra Hurst, Graduate.

Supervisor / Chair, Master's Thesis, "Development of a new mouse model for metastatic colorectal cancer", Status: Completed. (May 2016). Human Nutrition, Texas State University.
Student(s): Catherine Applegate, Graduate.

Supervisor / Chair, Master's Thesis, "Effect of maternal omega-3 fatty acid supplementation on offspring behavior and brain metabolism", Status: Completed. (May 2016). Human Nutrition, Texas State University.
Student(s): Corey Jackson, Graduate.

Supervisor / Chair, Master's Thesis, "Role of omega-3 fatty acids and vitamin A in depression", Status: Completed. (August 2014). Human Nutrition, Texas State University.
Student(s): Elisa Gonzales, Graduate.

Member, Master's Thesis, Status: Completed. (May 2014). Chemistry, Texas State University.

Student(s): Abuzar Ahmed, Graduate.

Member, Master's Thesis, Status: Completed. (August 2013). Human Nutrition, Texas State University.
Student(s): Hannah Thornton, Graduate.

Supervisor / Chair, Research Projects, Status: Completed. (2012). Texas State University.
Student(s): Abigail Smith, Undergraduate.

Supervisor / Chair, Research Projects, Status: Completed. (2012). Texas State University.
Student(s): Hillary Meyers, Undergraduate.

Supervisor / Chair, Research Projects, Status: Completed. (2012). Texas State University.
Student(s): Kristin Horst, Undergraduate.

Supervisor / Chair, Research Projects, Status: Completed. (2012). Texas State University.
Student(s): Mark Schmidt, Undergraduate.

Supervisor / Chair, Master's Thesis, "Interaction between vitamin A and PI3K", Status: Completed. (May 2012). Human Nutrition, Texas State University.
Student(s): Kaylan Olds, Graduate.

Supervisor / Chair, Research Projects, Status: Completed. (2010). Texas State University.
Student(s): Corey Jackson, Undergraduate.

Supervisor / Chair, Master's Thesis, "Mechanism by which retinol inhibits colorectal cancer metastasis", Status: Completed. (August 2010). Human Nutrition, Texas State University.
Student(s): Jennifer Griffin, Graduate.

Member, Master's Thesis, Status: Completed. (August 2010). Human Nutrition, Texas State University.
Student(s): Juanita Escamilla, Graduate.

Member, Dissertation, Status: Completed. (May 2010). Nutrition, The University of Texas at Austin.
Student(s): Karrie Wheatley, Doctoral.

Member, Dissertation, Status: Completed. (December 2009). Chemistry, The University of Texas at Austin.
Student(s): Joseph Chiptuk, Doctoral.

Supervisor / Chair, Research Projects, Status: Completed. (2008). University of Texas at Austin.
Student(s): Almas Ali, Undergraduate.

Supervisor / Chair, Research Projects, Status: Completed. (2008). University of Texas at Austin.
Student(s): Laura Swan, Undergraduate.

Supervisor / Chair, Research Projects, Status: Completed. (2008). Texas State University.
Student(s): Lindsay McEwing, Undergraduate.

Supervisor / Chair, Research Projects, Status: Completed. (2008). University of Texas at Austin.
Student(s): Megan Brown, Undergraduate.

Member, Dissertation, Status: Completed. (August 2008). Cellular and Molecular Biology, The University of Texas at Austin.
Student(s): Rachel Snyder, Doctoral.

Member, Dissertation, Status: Completed. (May 2008). Nutrition, The University of Texas at Austin.
Student(s): Bijal Sanghani, Doctoral.

Member, Dissertation, Status: Completed. (May 2008). Nutrition, The University of Texas at Austin.
Student(s): Jodi Cahill, Doctoral.

Supervisor / Chair, Dissertation, "Accutane and depression: in vivo and in vitro approaches", Status: Completed. (March 2008). Cellular and Molecular Biology, The University of Texas at Austin.
Student(s): Kally O'Reilly, Doctoral.

Member, Dissertation, Status: Completed. (December 2007). Chemistry, The University of Texas at Austin.
Student(s): Barry Davis, Doctoral.

Member, Dissertation, Status: Completed. (December 2007). Nutrition, The University of Texas at Austin.
Student(s): Deanna Staskel, Doctoral.

Supervisor / Chair, Dissertation, "Inhibition of metastasis by retinol", Status: Completed. (December 2007). Cellular and Molecular Biology, The University of Texas at Austin.
Student(s): Eun Young Park, Doctoral.

Member, Dissertation, Status: Completed. (December 2007). Neuroscience, The University of Texas at Austin.
Student(s): Penny Riha, Doctoral.

Supervisor / Chair, Research Projects, Status: Completed. (2007). University of Texas at Austin.
Student(s): Amanda Bowers, Undergraduate.

Supervisor / Chair, Research Projects, Status: Completed. (2007). University of Texas at Austin.
Student(s): Jennifer Griffin, Undergraduate.

Supervisor / Chair, Research Projects, Status: Completed. (2007). University of Texas at Austin.
Student(s): Mary Agnew, Undergraduate.

Supervisor / Chair, Dissertation, "Mechanism by which retinol decreases beta-catenin protein levels in retinoic acid-resistant human colon cancer cells", Status: Completed. (May 2007). Nutrition, The University of Texas at Austin.
Student(s): Alice Dillard, Doctoral.

Member, Dissertation, Status: Completed. (May 2007). Cellular and Molecular Biology, The University of Texas at Austin.
Student(s): Zhun Xu, Doctoral.

Supervisor / Chair, Research Projects, Status: Completed. (May 2007). University of Texas at Austin.
Student(s): Louis Doan, Undergraduate.

Supervisor / Chair, Research Projects, Status: Completed. (2006). University of Texas at Austin.
Student(s): Roylisha Jackson, Undergraduate.

Member, Dissertation, Status: Completed. (May 2006). Nutrition, The University of Texas at Austin.
Student(s): Lauren West, Doctoral.

Member, Dissertation, Status: Completed. (May 2006). Botany, The University of Texas at Austin.
Student(s): Nico Azios, Doctoral.

Supervisor / Chair, Honor's Thesis, "Carbohydrate vs. energy restriction: Effects on weight loss, body composition, and metabolism", Status: Completed. (May 2006). Nutrition, The University of Texas at Austin.
Student(s): Elizabeth Williams, Undergraduate.

Member, Dissertation, Status: Completed. (August 2005). Nutrition, The University of Texas at Austin.
Student(s): John Profitt, Doctoral.

Member, Dissertation, Status: Completed. (May 2005). Nutrition, The University of Texas at Austin.
Student(s): Goldy George, Doctoral.

Member, Dissertation, Status: Completed. (May 2005). Nutrition, The University of Texas at Austin.
Student(s): Saroja Voruganti, Doctoral.

Supervisor / Chair, Research Projects, Status: Completed. (2004). University of Texas at Austin.

Student(s): Chris Skaggs, Undergraduate.

Supervisor / Chair, Research Projects, Status: Completed. (2004). University of Texas at Austin.
Student(s): Erin Smith, Undergraduate.

Member, Dissertation, Status: Completed. (May 2004). Nutrition, The University of Texas at Austin.
Student(s): Jamie Davis, Doctoral.

Supervisor / Chair, Honor's Thesis, "Role of RXR in retinol-mediated growth inhibition", Status: Completed. (May 2004). Nutrition, The University of Texas at Austin.
Student(s): Margery Pepper, Undergraduate.

Member, Dissertation, Status: Completed. (December 2003). Nutrition, The University of Texas at Austin.
Student(s): Guowen Cai, Doctoral.

Supervisor / Chair, Research Projects, Status: Completed. (2003). Molecular Biology, NSF-REU Summer Program.
Student(s): Christopher Morgan, Undergraduate.

Member, Dissertation, Status: Completed. (May 2003). Nutrition, The University of Texas at Austin.
Student(s): Tracey Milani, Doctoral.

Supervisor / Chair, Honor's Thesis, "The effects of retinol on RA-resistant colon cancer cell growth", Status: Completed. (May 2003). Nutrition, The University of Texas at Austin.
Student(s): Jessica Leland, Undergraduate.

Member, Dissertation, Status: Completed. (September 2002). Nutrition, The University of Texas at Austin.
Student(s): Miao-Hsueh Chen, Doctoral.

Member, Dissertation, Status: Completed. (May 2002). Nutrition, The University of Texas at Austin.
Student(s): Catherina Ruffo, Doctoral.

Supervisor / Chair, Research Projects, Status: Completed. (2001). University of Texas at Austin.
Student(s): George Terrazas, Undergraduate.

D. Courses Prepared and Curriculum Development:

NUTR 5302F Supplements, First Time Course Preparation: 2010.

NUTR 5350 Research Design and Methods in Family and Consumer Sciences, First Time Course Preparation: 2010.

NUTR 5302E Nutrition and Disease, First Time Course Preparation: 2009.

NUTR 4361 Biochemical Nutrition, First Time Course Preparation: 2008.

NUTR 4362 Nutrition and Genetics, First Time Course Preparation: 2008.

NTR 390.11 Nutrition, Development, and Cancer, First Time Course Preparation: 2003.

NTR 390.6 Molecular Nutrition, First Time Course Preparation: 2003.

NTR 126L Advanced Nutrition Laboratory, First Time Course Preparation: 2002.

NTR 307 Introductory Food Science, First Time Course Preparation: 2002.

NUTR 5367 Nutrient Metabolism II, First Time Course Preparation: 2002.

NTR 394 Graduate Seminar in Nutrition, First Time Course Preparation: 2001.

NUTR 5101 GA Development, First Time Course Preparation: 2001.

The Botany and Ecology of the Metropolitan Area, First Time Course Preparation: 2000.

Bioethics and Critical Thinking, First Time Course Preparation: 1999.

Genes the Code of Codes, First Time Course Preparation: 1999.

E. Teaching Grants and Contracts

2. Submitted, but not Funded, External Teaching Grants and Contracts:

Lane, Michelle A (Principal). Investigamos: Integration of Research Experiences into the Undergraduate Nutrition Curriculum at Texas State University, USDA, HSI Proposal, $250,000.00. (Submitted: February 2013). Grant.

F. Other:

Guest Lecture, HS 1310 lecture regarding majoring in Nutrition & Foods, Texas State University. San Marcos. 50. (March 4, 2026).

Teaching overload, NUTR 4362 Nutrition and Genetics. 49. (October 31, 2016 - December 15, 2016).

Additional Comments: I taught NUTR 4362 for Ms. Thornton while she was on maternity leave.

Student Accomplishments:

Award:

Supervisor, UT Austin College of Natural Sciences Undergraduate Research Award. "Carbohydrate vs. energy restriction: Effects on weight loss, body composition, and metabolism," UT Austin College. (2005).
Student(s): Elizabeth Williams, Undergraduate.

Fellowship:

Mentor, Graduate Thesis Research Fellowship. Status: In Progress. (2021).
Student(s): Muraida, Graduate, MS.

Mentor, Graduate Thesis Research Fellowship. Status: In Progress. (2021).
Student(s): Christopher Farber.

Mentor, Graduate Thesis Support Fellowship. Status: In Progress. (December 2017).
Student(s): Eric Pfister, Graduate, MS.

Supervisor, Graduate Research Support Fellowship. Status: In Progress. (September 1, 2016).
Student(s): Marissa Martinez, Graduate, MS.

Supervisor, Undergraduate Research Fellowship. "Carbohydrate vs. energy restriction: Effects on weight loss, body composition, and metabolism." (2006).
Student(s): Elizabeth Williams, Graduate.
Additional Comments: 2005-2006

Paper:

Mentor, Finalist, 2010 American Nutrition Society/Nutritional Sciences Council graduate student research competition. "Phosphatidylinositol 3-kinase mediates the ability of retinol to inhibit colon cancer cell invasion in vitro." (2010).
Student(s): J Griffin, Graduate.

III. SCHOLARLY/CREATIVE

A. Works in Print (including works accepted, forthcoming, in press):

1. Books:

d. Chapters in Books:

Non-refereed:

Lane, M. A. (2008). Retinoic acid receptor-independent actions of the naturally occurring retinoids: Retinol, the retroretinoids, and 4-oxoretinol. In F. Columbus (Ed.), *Vitamin A: New Research*.

2. Articles:

a. Refereed Journal Articles:

Farber, C., Jackson, C., Renteria, K., Rivers, C., Ritter, J., Muraida, J., … Lane, M. A. (2026). Methyl donor nutrient supplementation fails to prevent the adverse effects of a maternal Western-style diet on depression-related behavior and results in stress-dependent effects on learning. *Nutrition*, *147*. Published. https://doi.org/https://doi.org/10.1016/j.nut.2026.113149

Farber et al 2026-1.pdf
Table 1 v2 Farber et al MDN-1.docx
Farber et al MDN figures-1.pptx
Additional Comments: CRediT authorship contribution statement Christopher Faber (20%): Investigation, Formal analysis, Data curation. Clara Jackson (5%): Investigation, Writing – original draft. Karisa Renteria (2%): Investigation. Carley Rivers (1%): Investigation. Jordan Ritter (1%): Investigation. JD Muraida (1%): Investigation. Jie Zhu (15%): Conceptualization, Writing – review & editing, Resources, Funding acquisition. Gar Yee Koh (5%): Conceptualization, Writing – review & editing, Resources, Funding acquisition. Michelle A. Lane (50%): Conceptualization, Formal analysis, Writing – original draft, Writing – review & editing, Visualization, Resources, Funding acquisition, Project administration, Supervision.

Tabassum, N. T., Biediger-Friedman, L. M., Johnson, C. M., Lane, M. A., & Marceaux, S. M. (2026). Digital and Technology-Based Nutrition Interventions, Including Medically Tailored Meals (MTMs) for Older Adults in the U.S. – A Scoping Review. *Nutrients*, *18*(3), 385. https://doi.org/10.3390/nu18030385 https://www.mdpi.com/2072-6643/18/3/385

Nutrients - Submission - 12.14.25-1.pdf
nutrients-18-00385-with-cover-1.pdf

Rivers, C., Farber, C., Heath, M., Gonzales, E., Barrett, D. W., Gonzalez-Lima, F., & Lane, M. A. (2024). Dietary omega-3 polyunsaturated fatty acids reduce cytochrome c oxidase in brain white matter and sensorimotor regions while increasing functional interactions between neural systems related to escape behavior in postpartum rats. *Frontiers in Systems Neuroscience*, *18*. Published. https://doi.org/10.3389/fnsys.2024.1423966 https://doi.org/10.3389/fnsys.2024.1423966

Rivers et al. 2024-1.pdf
Additional Comments: **Author contributions and percent effort are as follows. *Indicates student author**
***Carley Rivers:** 30%, Investigation, Data curation; Formal analysis; Visualization; Roles/Writing - original draft

***Christopher Farber:** 5%, Investigation
***Melissa Heath:** 5%, Investigation
***Elisa Gonzales:** 2%, Investigation
Douglas W. Barrett: 10% Methodology, Investigation, Writing - review & editing.

F. Gonzalez-Lima: 3%, Methodology, Investigation, Writing - review & editing
Michelle A. Lane: 45%, Conceptualization; Data curation; Formal analysis; Funding acquisition; Investigation; Methodology; Project administration; Supervision; Visualization; Roles/Writing - original draft; and Writing - review & editing.

Farber, C. M., Renteria, K., Ritter, J., Muraida, J., Rivers, C., McKenzie, A. L., … Lane, M. A. (2023). Comparison of maternal versus postweaning ingestion of a high fat, high sucrose diet on depression-related behavior, novelty reactivity, and corticosterone levels in young, adult rat offspring. *Behavioural Brain Research*, *455*, 114677. https://doi.org/https://doi.org/10.1016/j.bbr.2023.114677 https://www.sciencedirect.com/science/article/pii/S0166432823003959?via%3Dihub

Farber et al v1 2023 published MS-1.pdf

Additional Comments: **Contributions and effort are as follows.**
***Indicates student author.**

*Christopher Faber: 35%, Investigation, Formal analysis, Data curation, Writing – original draft, Visualization.
*Karisa Renteria: 5%, Investigation.
*Jordan Ritter: 5% Investigation.
*JD Muraida: 2% investigation.
*Carley Rivers: 2%, Investigation.
*Avery McKenzie: 1% Writing – review & editing.
Jie Zhu: 5% Conceptualization, Writing – review & editing, Resources, Funding acquisition.
Gar Yee Koh: 5%, Conceptualization, Writing – review & editing, Resources, Funding acquisition.
Michelle A. Lane: 40%, Conceptualization, Formal analysis, Writing – original draft, Writing – review & editing, Visualization, Resources, Funding acquisition, Project administration, Supervision.

Mathieu, V., Laguera, B., Masi, M., Dulanto, S. A., Bingham, T., Hernandez, L., … Lane, M. A. (2022). Amaryllidaceae Alkaloids Decrease the Proliferation, Invasion, and Secretion of Clinically Relevant Cytokines by Cultured Human Colon Cancer Cells. *Biomolecules*, *12*. Published.

biomolecules-NCS-CRC-1.pdf

Teoh, C. M., Cooper, A., Renteria, K., Lane, M., Zhu, J., & Koh, G. Y. (2022). Supplementation of methyl-donor nutrients to a high-fat, high-sucrose diet during pregnancy and lactation normalizes circulating 25-

dihydroxycholecalciferol levels and alleviates inflammation in offspring. *Metabolites*, *12*(12), 1252. https://doi.org/10.3390/metabo12121252

2022_Metabolites_Supplementation of MS to a HFS diets during pregnancy and lactation normalize vitamin D status-1.pdf

Additional Comments: Impact Factor: 5.581.

Contributions and effort are as follows. *Indicates student author.

*CMT - 20%, Investigation, formal Analysis, Writing - original draft

*AC - 15%, Investigation, formal Analysis

*KMR - 5%, Investigation

ML - 5%, Conceptualization, Investigation, Funding acquisition, Writing - review and editing

JZ - 5%, Conceptualization, Investigation, Funding acquisition, Writing - review and editing

GYK - 50%, Conceptualization, Investigation, Writing - review and editing, Supervision, Validation, Funding acquisition

Pfister, E., Smith, R. J., & Lane, M. A. (2021). N-3 Polyunsaturated fatty acid ethyl esters decrease the invasion, but not the proliferation, of human colorectal cancer cells via a PI3K-dependent mechanism in vitro. *Prostaglandins, Leukotrienes & Essential Fatty Acids*, *167*. Published. https://doi.org/doi: 10.1016/j.plefa.2021.102273 https://www-sciencedirect-com.libproxy.txstate.edu/science/article/abs/pii/S0952327821000363?via%3Dihub

Pfister et al 2021-1.pdf

Additional Comments: A .pdf of the manuscript is attached. I am the lead, corresponding author. Effort is as follows: Pfister (30%), Smith (10%), Lane (60%).

Smith, R. J., Alvarez, C. G., Crixell, S. L., & Lane, M. A. (2021). The Food, Feelings, and Family Study: comparison of the efficacy of traditional methods, social media, and broadcast email to recruit pregnant women to an observational, longitudinal nutrition study. *BMC Pregnancy and Childbirth*, *21*(203). https://doi.org/https://doi.org/10.1186/s12884-021-03680-1 https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-021-03680-1#citeas

Smith et al 2021 FFF recruitment-1.pdf

Additional Comments: A .pdf of the manuscript is attached. I am the lead, corresponding author. Effort is as follows: Smith (30%), Alvarez (10%), Crixell (10%), Lane (50%).

Jackson, C., Barrett, D. W., Gonzales, E., Shumake, J., Gonzalez-Lima, F., & Lane, M. A. (2018). Maternal omega-3 fatty acid intake during neurodevelopment does not affect pup behavior related to depression, novelty, or learning. *Biomed Central Research Notes*, *11*(1), 812.

Jackson et al BMC Res Notes 2018-1.pdf

Rudzinski, W. E., Palacios, A., Ahmed, A., Lane, M. A., & Aminabhavi, T. M. (2016). Targeted delivery of small interfering RNA to colon cancer cells using chitosan and PEGylated chitosan nanoparticles. *Carbohydrate Polymers*, *147*, 323–332. https://doi.org/10.1016/j.carbpol.2016.04.041 https://doi.org/10.1016/j.carbpol.2016.04.041

Applegate, C. C., & Lane, M. A. (2015). Role of retinoids in the prevention and treatment of colorectal cancer. *World Journal of Gastrointestinal Oncology*, *7*(10), 184. https://doi.org/10.4251/wjgo.v7.i10.184 https://doi.org/10.4251/wjgo.v7.i10.184

Gonzales, E., Barrett, D. W., Shumake, J., Gonzalez-Lima, F., & Lane, M. A. (2015). Omega-3 fatty acids improve behavioral coping to stress in multiparous rats. *Behavioural Brain Research*, *279*, 129–138. https://doi.org/10.1016/j.bbr.2014.11.010 https://doi.org/10.1016/j.bbr.2014.11.010

Griffin Lengyel, J. N., Park, E. Y., Brunson, A. R., Pinali, D., & Lane, M. A. (2014). Phosphatidylinositol 3-Kinase Mediates the Ability of Retinol to Decrease Colorectal Cancer Cell Invasion. *Nutrition and Cancer*, *66*(8), 1352–1361. https://doi.org/10.1080/01635581.2014.956258 https://doi.org/10.1080/01635581.2014.956258

Shumake, J., Barrett, D. W., Lane, M. A., & Wittke, A. J. (2014). Behavioral effects of bovine lactoferrin administration during postnatal development of rats. *BioMetals*, *27*(5), 1039–1055. https://doi.org/10.1007/s10534-014-9735-6 https://doi.org/10.1007/s10534-014-9735-6

Park, E. Y., Pinali, D., Lindley, K., & Lane, M. A. (2012). Hepatic vitamin A preloading reduces colorectal cancer metastatic multiplicity in a mouse xenograft model. *Nutrition and Cancer*, *64*, 732–740.

Escamilla, J., Lane, M. A., & Maitin, V. (2012). Cell-free supernatants from probiotic Lactobacillus casei and Lactobacillus rhamnosus GG decrease colon cancer cell invasion in vitro. *Nutrition and Cancer*, *64*(6), 871–878. https://doi.org/10.1080/01635581.2012.700758 https://doi.org/10.1080/01635581.2012.700758

Drew, C. J., O'Reilly, K. C., Lane, M. A., & Bailey, S. J. (2011). Chronic administration of 13-cis- retinoic acid does not alter the number of serotoninergic neurons in the mouse raphe nuclei. *Neuroscience*, *172*, 66–73.

Griffin, J., Pinali, D., Olds, K., Lu, N., Appleby, L., Doan, L., & Lane, M. A. (2010). 13-Cis- retinoic acid decreases hypothalamic cell number in vitro. *Neuroscience Research*, *683*, 185–190.

Voruganti, V. S., Cai, G., Klohe, D. M., Jordan, K. C., & Lane, M. A. (2010). Short-term weight loss in overweight/obese low-income women improves plasma zinc and metabolic syndrome risk factors. *Journal of Trace Elements in Medicine and Biology*, *24*, 271–276.

O'Reilly, K. C., Shumake, J., Bailey, S. J., Gonzalez-Lima, F., & Lane, M. A. (2009). Chronic 13-cis-retinoic acid administration disrupts network interactions between the raphe nuclei and the hippocampal system in young adult mice. *European Journal of Pharmacology*, *605*(1-3), 68–77. https://doi.org/10.1016/j.ejphar.2008.12.037 https://doi.org/10.1016/j.ejphar.2008.12.037

Lane, M. A., Xu, J. E., Wilen, E. W., Sylvester, R., Derguini, F., & Gudas, L. J. (2008). LIF removal increases CRABPI and CRABPII transcripts in embryonic stem cells cultured in retinol or 4-oxoretinol. *Molecular and Cellular Endocrinology*, *280*, 63–74.

O'Reilly, K., Bailey, S. J., & Lane, M. A. (2008). Retinoid function in the adult CNS. *Experimental Biology and Medicine*, *233*, 251–258.

Park, E. Y., Wilder, E. T., Chiptuk, J., & Lane, M. A. (2008). Retinol decreases phosphatidylinositol 3-kinase activity in colon cancer cells. *Molecular Carcinogenesis*, *47*, 264–274. Retrieved from https://doi.org/10.1002/mc.20381 https://doi.org/10.1002/mc.20381

Additional Comments: Article selected as issue's cover story

Dillard, A., & Lane, M. A. (2008). Retinol increases beta-catenin/RXR alpha binding, leading to the increased proteasomal degradation of beta-catenin and RXR alpha. *Nutrition and Cancer*, *60*, 97–108.

O'Reilly, K., Bailey, S. J., & Lane, M. A. (2008). Retinoid-Mediated Regulation of Mood: Possible Cellular Mechanisms. *Experimental Biology and Medicine*, *233*(3), 251–258. https://doi.org/10.3181/0706-mr-158 https://doi.org/10.3181/0706-mr-158

Wheatley, K. E., Williams, E. A., Smith, N. C., Dillard, A., Park, E. Y., Nunez, N. P., … Lane, M. A. (2008). Low-Carbohydrate Diet Versus Caloric Restriction: Effects on Weight Loss, Hormones, and Colon Tumor Growth in Obese Mice. *Nutrition and Cancer*, *60*(1), 61–68. https://doi.org/10.1080/01635580701510150 https://doi.org/10.1080/01635580701510150

O'Reilly, K., Trent, S., Bailey, S. J., & Lane, M. A. (2007). 13-Cis-retinoic acid alters intracellular serotonin, increases 5-HT1A receptor, and serotonin

reuptake transporter levels in vitro. *Experimental Biology and Medicine*, *232*, 1195–1203.

Williams, E., Perkins, S., Smith, N., Hurstings, S., & Lane, M. A. (2007). Metabolic insights on carbohydrate vs. dietary energy restriction on weight loss in obese mice. *Annals of Nutrition and Metabolism*, *51*, 232–243.

Park, E. Y., Wilder, E. T., & Lane, M. A. (2007). Retinol Inhibits the Invasion of Retinoic Acid–Resistant Colon Cancer Cells In Vitro and Decreases Matrix Metalloproteinase mRNA, Protein, and Activity Levels. *Nutrition and Cancer*, *57*(1), 66–77. https://doi.org/10.1080/01635580701268238 https://doi.org/10.1080/01635580701268238

Dillard, A. C., & Lane, M. A. (2007). Retinol decreases β catenin protein levels in retinoic acid resistant colon cancer cell lines. *Molecular Carcinogenesis*, *46*(4), 315–329. https://doi.org/10.1002/mc.20280 https://doi.org/10.1002/mc.20280

O'Reilly, K. C., Shumake, J., Gonzalez-Lima, F., & Lane, M. A. (2006). Chronic administration of 13-cis-retinoic acid induces depression-related behavior in mice. *Neuropsychopharmacology*, *31*, 1919–1927.

Park, E. Y., Dillard, A., Williams, E., Wilder, E. T., Pepper, M. R., & Lane, M. A. (2005). Retinol inhibits the growth of retinoic acid-resistant and sensitive colon cancer cells through a retinoic acid receptor-independent mechanism. *Cancer Research*, *65*, 9923–9933.

Lane, M. A., & Bailey, S. J. (2005). Role of retinoid signaling in the adult brain. *Progress in Neurobiology*, *75*, 275–293.

Park, E. Y., Dillard, A., Williams, E. A., Wilder, E. T., Pepper, M. R., & Lane, M. A. (2005). Retinol Inhibits the Growth of *All-Trans*-Retinoic Acid–Sensitive and *All-Trans*-Retinoic Acid–Resistant Colon Cancer Cells through a Retinoic Acid Receptor–Independent Mechanism. *Cancer Research*, *65*(21), 9923–9933. https://doi.org/10.1158/0008-5472.can-05-1604 https://doi.org/10.1158/0008-5472.can-05-1604

Chen, A. C., Yu, K., Lane, M. A., & Gudas, L. J. (2003). Homozygous deletion of the CRABPI gene in AB1 embryonic stem cells results in increased CRABPII gene expression and decreased intracellular retinoic acid concentration. *Archives of Biochemistry and Biophysics*, *411*(2), 159–173. https://doi.org/10.1016/s0003-9861(02)00732-4 https://doi.org/10.1016/s0003-9861(02)00732-4

Lane, M. A., Baldwin, R. L., & Jesse, B. W. (2002). Developmental changes in ketogenic activity and messenger RNA expression during sheep rumen development. *Journal of Animal Science*, *80*, 1538–1544.

Lane, M. A., Baldwin, R. L., & Jesse, B. W. (2000). Sheep rumen metabolic development in response to different dietary treatments. *Journal of Animal Science*, *78*, 1990–1996.

Lane, M. A., Chen, A. C., Roman, S. D., Derguini, F., & Gudas, L. J. (1999). Removal of LIF (leukemia inhibitory factor) results in increased vitamin A (retinol) metabolism to 4-oxoretinol in embryonic stem cells. *Proceedings of the National Academy of Sciences*, *96*(23), 13524–13529. https://doi.org/10.1073/pnas.96.23.13524 https://doi.org/10.1073/pnas.96.23.13524

Lane, M. A., & Jesse, B. W. (1997). Effect of volatile fatty acid infusion on development of the rumen epithelium in neonatal sheep. *Journal of Dairy Science*, *80*, 740–746.

b. Non-refereed Articles:

Mathieu, V., Laguera, B., Masi, M., Dulanto, S. A., Bingham, T. W., Hernandez, L. W., … Lane, M. A. (2022). Amaryllidaceae Alkaloids Decrease the Proliferation, Invasion, and Secretion of Clinically Relevant Cytokines by Cultured Human Colon Cancer Cells. *Biomolecules*, *12*(9), 1267. https://doi.org/10.3390/biom12091267 https://doi.org/10.3390/biom12091267

Park, E. Y., Pinali, D., Lindley, K., & Lane, M. A. (2012). Hepatic Vitamin A Preloading Reduces Colorectal Cancer Metastatic Multiplicity in a Mouse Xenograft Model. *Nutrition and Cancer*, *64*(5), 732–740. https://doi.org/10.1080/01635581.2012.687425 https://doi.org/10.1080/01635581.2012.687425

Voruganti, V. S., Cai, G., Klohe, D. M., Jordan, K. C., Lane, M. A., & Freeland-Graves, J. H. (2010). Short-term weight loss in overweight/obese low-income women improves plasma zinc and metabolic syndrome risk factors. *Journal of Trace Elements in Medicine and Biology*, *24*(4), 271–276. https://doi.org/10.1016/j.jtemb.2010.05.001 https://doi.org/10.1016/j.jtemb.2010.05.001

Escamilla, J., Lane, M. A., & Maitin, V. (2010). Probiotic Lactobacilli Decrease Invasion of Metastatic Human Colon Cancer Cells In Vitro. *The FASEB Journal*, *24*(S1). https://doi.org/10.1096/fasebj.24.1_supplement.928.21 https://doi.org/10.1096/fasebj.24.1_supplement.928.21

Lane, M. A., Xu, J., Wilen, E. W., Sylvester, R., Derguini, F., & Gudas, L. J. (2008). LIF removal increases CRABPI and CRABPII transcripts in embryonic stem cells cultured in retinol or 4-oxoretinol. *Molecular and Cellular Endocrinology*, *280*(1-2), 63–74. https://doi.org/10.1016/j.mce.2007.09.010 https://doi.org/10.1016/j.mce.2007.09.010

Williams, E. A., Perkins, S. N., Smith, N. C. P., Hursting, S. D., & Lane, M. A. (2007). Carbohydrate versus Energy Restriction: Effects on Weight Loss, Body Composition and Metabolism. *Annals of Nutrition and Metabolism*, *51*(3), 232–243. https://doi.org/10.1159/000104143 https://doi.org/10.1159/000104143

Dillard, A. C., & Lane, M. A. (2007). Retinol Increases β-Catenin-RXRα Binding Leading to the Increased Proteasomal Degradation of β-Catenin and RXRα. *Nutrition and Cancer*, *60*(1), 97–108. https://doi.org/10.1080/01635580701586754 https://doi.org/10.1080/01635580701586754

O'Reilly, K. C., Trent, S., Bailey, S. J., & Lane, M. A. (2007). 13-*cis*-Retinoic Acid Alters Intracellular Serotonin, Increases 5-HT_{1A}Receptor, and Serotonin Reuptake Transporter Levels*In Vitro*. *Experimental Biology and Medicine*, *232*(9), 1195–1203. https://doi.org/10.3181/0703-rm-83 https://doi.org/10.3181/0703-rm-83

O'Reilly, K. C., Shumake, J., Gonzalez-Lima, F., Lane, M. A., & Bailey, S. J. (2006). Chronic Administration of 13-Cis-Retinoic Acid Increases Depression-Related Behavior in Mice. *Neuropsychopharmacology*, *31*(9), 1919–1927. https://doi.org/10.1038/sj.npp.1300998 http://dx.doi.org/10.1038/sj.npp.1300998

Lane, M. A., & Bailey, S. J. (2005). Role of retinoid signalling in the adult brain. *Progress in Neurobiology*, *75*(4), 275–293. https://doi.org/10.1016/j.pneurobio.2005.03.002 http://dx.doi.org/10.1016/j.pneurobio.2005.03.002

3. Conference Proceedings:

a. Refereed Conference Proceedings:

Jackson, C. S., Barrett, D. W., Shumake, J., Gonzalez-Lima, F., & Lane, M. A. (2014). Fatty Acid Consumption Decreases Offspring Reactivity to the Stress of a Novel Environment. In *FASEB Journal*.

Shumake, J., Barrett, D., Lane, M. A., & Wittke, A. (2013). Behavioral effects of bovine lactoferrin (bLF) supplementation in developing rats.

Gonzales, E. M., Barrett, D. W., Gonzalez-Lima, F., & Lane, M. A. (2013). Omega-3 fatty acid supplementation improves adaptive coping in a rat model of post-partum depression. In *Faseb J*.

Olds, K., & Lane, M. A. (2012). Retinol tends to reduce activator protein-1 and nuclear factor kappa B mediated gene transcription in cultured human colorectal cancer cells. In *Faseb J*.

Griffin, J. N., & Lane, M. A. (2011). Phosphatidylinositol 3-kinase mediates the ability of dietary vitamin A to decrease the incidence of hepatic colorectal cancer metastases in a mouse xenograft model.

Lane, M. A., Riha, P., & Shumake, J. (2010). 2010 Dietary vitamin A supplementation alters brain metabolism and network interactions in mice. In *Faseb J*.

Griffin, J. N., & Lane, M. A. (2010). Phosphatidylinositol 3-kinase mediates the ability of retinol to inhibit colon cancer cell invasion in vitro. In *Faseb J*.

Escamilla, J., Lane, M. A., & Maitin, V. (2010). Probiotic Lactobacilli decrease invasion of metastatic human colon cancer cells in vitro. In *FASEB Journal*.

Lane, M. A. (2009). Dietary vitamin A supplementation decreases colorectal cancer metastases in mice. In *FASEB Journal* (Vol. 23).

O'Reilly, K. C., Bailey, S. J., & Lane, M. A. (2007). 13-Cis-retinoic acid alters serotonin reuptake transporter levels in RN46A-B14 raphe nuclei cells. In *FASEB Journal* (Vol. 21).

Park, E. Y., Wilder, E. T., & Lane, M. A. (2007). Retinol inhibits PI3K/Akt activity but does not affect IRS-1 and PI3K levels in retinoic acid-resistant human colon cancer cells. In *FASEB Journal* (Vol. 21).

Dillard, A., & Lane, M. A. (2007). Retinol reduces beta-catenin protein in retinoic acid-resistant colon cancer cells by increasing beta-catenin-RXR-alpha interaction in the nucleus and translocation into the cytosol. In *FASEB Journal* (Vol. 21).

Bailey, S. J., O'Reilly, K. C., & Lane, M. A. (2006). 13-Cis-retinoic acid (Accutane) increases 5-HT1A receptor levels in vitro. In *Journal of Psychopharmacology* (5th ed., Vol. 20).

O'Reilly, K., Wilder, E., Bailey, S. J., & Lane, M. A. (2006). 13-Cis-retinoic acid alters serotonin and 5HT1A receptor levels and induces apoptosis in RN46A-B14 raphe nuclei cells.

Williams, E., Perkins, S., Smith, N., Hursting, S., & Lane, M. A. (2006). Carbohydrate restriction, dietary energy restriction and weight loss in obese mice: Metabolic insights. In *FASEB Journal* (Vol. 20).

Dillard, A., & Lane, M. A. (2006). Retinol decreases beta-catenin levels in retinoic acid- resistant colon cancer cell lines via a RXR-mediated degradation pathway. In *FASEB Journal* (Vol. 20).

Park, E. Y., Wilder, E. T., & Lane, M. A. (2006). Retinol inhibits all-trans-retinoic acid-resistant colon cancer cell invasion by reducing matrixmetalloproteinase (MMP) levels and PI3K/Akt activity.

O'Reilly, K. C., Johnson, E., Shumake, J., Gonzalez-Lima, F., & Lane, M. A. (2005). Effects of chronic 13-cis-retinoic acid (Accutane) administration on depression-related behavior in mice.

Wilder, E. T., & Lane, M. A. (2005). Retinol and retinoic acid inhibit the migration and invasion of retinoic-acid resistant colon cancer cells in vitro (Vol. 46).

Dillard, A., & Lane, M. A. (2005). Retinol decreases beta-catenin levels in retinoic acid-resistant colon cancer cell lines through increased protein degradation (Vol. 46).

Wilder, E. T., Pepper, M. R., & Lane, M. A. (2004). Retinoic acid and retinol reduce the migration of RA-resistant colon cancer cells through a basement membrane.

Dillard, A., & Lane, M. A. (2004). Retinol decreases beta-catenin levels in retinoic acid-resistant colon cancer cell lines.

Dillard, A., & Lane, M. A. (2004). Retinol decreases beta-catenin protein levels in retinoic acid-resistant colon cancer cells.

Dillard, A., Leland, J., Wilder, E., & Lane, M. A. (2003). Retinol inhibits the growth of retinoic acid-resistant colon cancer cells via a retinoic acid independent mechanism. In *FASEB Journal* (Vol. 17).

Lane, M. A., Wilen, E., & Gudas, L. J. (2002). Correlation of 4-oxoretinol production with expression of CRABPI and CRABPII transcripts in embryonic stem cells. In *FASEB Journal* (Vol. 16).

Latimer, P., Wilder, E. T., & Lane, M. A. (2002). Retinol inhibits growth and induces apoptosis in retinoic acid resistant HCT-116 colon cancer cells.

Ng, S., Lane, M. A., & Gudas, L. J. (2002). Role of Cyp26 in stem cell differentiation (Vol. 43).

Lane, M. A., Chen, A., Roman, S., Derguini, F., & Gudas, L. J. (2000). 4-Oxoretinol production from retinol in embryonic stem cells in increased by the addition of exogenous retinoids.

Lane, M. A., Chen, A., Roman, S., & Gudas, L. J. (1999). Retinol metabolism is induced in embryonic stem cells by the removal of leukemia inhibitory factor. In *FASEB Journal* (Vol. 13).

Lane, M. A., Baldwin, R. L., Dawson, T. E., & Jesse, B. W. (1996). Dietary effects on sheep rumen morphological development. In *FASEB Journal* (Vol. 10).

Lane, M. A., Baldwin, R. L., & Jesse, B. W. (1995). Metabolic development of rumen epithelium does not occur in the absence of solid feed intake. In *FASEB Journal* (Vol. 9).

Lane, M. A., Baldwin, R. L., & Jesse, B. W. (1995). Sheep rumen metabolic development in response to different dietary treatments. In *Journal of Dairy Science* (Vol. 78 (Suppl. 1)).

Lane, M. A., & Jesse, B. W. (1994). Infusion of physiological levels of volatile fatty acids stimulates rumen metabolic development in neonatal lambs. In *Journal of Animal Science* (Vol. 72 (Suppl. 2)).

Lane, M. A., & Jesse, B. W. (1993). Developmental changes in sheep ruminal ketogenic enzyme activity. In *Journal of Animal Science* (Vol. 71 (Suppl. 1)).

Wang, L. Q., Baldwin, R. L., Lane, M. A., & Jesse, B. W. (1993). Isolation and characterization of cDNA clones of genes undergoing differential expression during normal ruminal epithelial development. In *Journal of Animal Science* (Vol. 71 (Suppl. 1)).

b. Non-refereed:

Pfister, E., & Lane, M. A. (2019). Abstract 1606: The ethyl ester forms of the n-3 fatty acids eicosapentaenoic acid and docosahexaenoic acid decrease the proliferation, invasion, and matrixmetalloproteinase activity of colorectal cancer cells. In *Prevention, Early Detection, and Interception* (pp. 1606–1606). American Association for Cancer Research. https://doi.org/10.1158/1538-7445.sabcs18-1606 https://doi.org/10.1158/1538-7445.sabcs18-1606

Lane, M. A. (2006). Ability of retinol to inhibit retinoic acid-resistant colon cancer growth and metastasis.

4. Abstracts:

Cooper, A., Teoh, C. M., Renteria, K., Lane, M. A., Zhu, J., & Koh, G. Y. (2023). Colonic content from offspring born to dams of high-fat high-sucrose diet modulates IL-8 secretion in Lipopolysaccharide-stimulated HT-29 cells. Published. https://doi.org/10.1016/j.cdnut.2023.101813

Cooper_Colonic content from offspring born to dams of HFHS diet modulates IL-8 secretion-1.pdf

Additional Comments: Abstract accepted by NUTRITION 2023 Conference, sponsored by American Society for Nutrition, on April 3, 2023 and published on July 2023.

Teoh, C. M., Cooper, A., Lane, M. A., Zhu, J., & Koh, G. Y. (2023). Maternal methyl donor nutrients supplementation to a high-fat high-sucrose diet modulates systemic vitamin D signaling and renal inflammation among adult offspring. *Current Developments in Nutrition*, *7*(Supp 1), 752. https://doi.org/10.1016/j.cdnut.2023.101793

Teoh_Maternal methyl donor nutrients supplementation and renal inflammation-1.pdf

Additional Comments: Abstract accepted by NUTRITION 2023 Conference, sponsored by American Society for Nutrition, on April 3, 2023 and published on July 2023.

Teoh, C. M., Renteria, K., Cooper, A., Zhu, J., Lane, M., & Koh, G. Y. (2022). Supplementation of a high-fat high-sucrose diet with methyl-donor nutrients during pregnancy and lactation modulates the colonic vitamin D signaling pathway in weaned rats. *Current Developments in Nutrition*, *6*(1), 1195. https://doi.org/10.1093/cdn/nzac074.024

Teoh_Supplementation of HFHS diet with MS Nutrients during pregnancy and lactation modulates colonic vitamin D signaling-1.pdf

Additional Comments: Abstract accepted by NUTRITION 2022 Conference (online), sponsored by American Society for Nutrition, on April 11, 2022 and published on June 14, 2022.

Smith, R., Alvarez, C., Crixell, S., & Lane, M. A. (Published). The Food, Feelings, and Family Study: Comparison of the efficacy of traditional methods, social media, and broadcast email to recruit pregnant women to an observational, longitudinal nutrition study.

Smith, R. J., Pfister, E., & Lane, M. A. (Published). Ethyl ester n-3 polyunsaturated fatty acids decrease colorectal cancer cell invasion and proliferation via different mechanisms.

AACR abstract 2020-1.pdf

Additional Comments: This conference was canceled due to the COVID-19 pandemic.

Pfister, E., & Lane, M. A. (Published). The ethyl ester forms of the n-3 fatty acids eicosapentaenoic acid and docosahexaenoic acid decrease the proliferation, invasion, and matrixmetalloproteinase activity of colorectal cancer cells.

AACR abstract for 2019 conference Pfister and Lane-1.pdf

AACR poster 2019-1.pdf

Pfister, E., & Lane, M. (2017). Free, ethyl- and methyl- ester eicosapentaenoic acid inhibit the proliferation of human and murine colon cancer cells in vitro. *FASEB J, 71*(Supple 1).

Martinez, M., Hurst, A., Reynolds, C. P., & Lane, M. (2017). The proliferation and invasion of low passage number human colon cancer cell lines is inhibited by retinoids. *FASEB J, 71*(Supple 1).

Jackson, C. S., Alhado, M., Gonzales, E., Shumake, J., Barrett, D., Gonzalez-Lima, F., & Lane, M. A. (2016). Maternal consumption of a diet lacking omega-3 fatty acids during development alters pup behavior and brain metabolism later in life. *FASEB Journal*. Published.

Martinez, M. M., Hurst, A., Reynolds, C. P., & Lane, M. A. (Published). The proliferation and invasion of low passage number human colon cancer cell lines is inhibited by retinoids. *FASEB J*.

Jackson, C. S., Barrett, D. W., Shumake, J., Gonzalez-Lima, F., & Lane, M. A. (2014). Maternal Omega-3 Fatty Acid Consumption Decreases Offspring Reactivity to the Stress of a Novel Environment. *FASEB Journal*. Published.

Shumake, J., Barrett, D., Lane, M. A., & Wittke, A. (2013). Behavioral effects of bovine lactoferrin (bLF) supplementation in developing rats. Published.

Gonzales, E. M., Barrett, D. W., Gonzalez-Lima, F., & Lane, M. A. (2013). Omega-3 fatty acid supplementation improves adaptive coping in a rat model of post-partum depression. *FASEB Journal*. Published.

Olds, K., & Lane, M. A. (2012). Retinol tends to reduce activator protein-1 and nuclear factor kappa B mediated gene transcription in cultured human colorectal cancer cells. *FASEB Journal*. Published.

Griffin, J. N., & Lane, M. A. (2011). Phosphatidylinositol 3-kinase mediates the ability of dietary vitamin A to decrease the incidence of hepatic colorectal cancer metastases in a mouse xenograft model. Published.

Lane, M. A., Riha, P., & Shumake, J. (2010). 2010 Dietary vitamin A supplementation alters brain metabolism and network interactions in Mice. *FASEB Journal*. Published.

Griffin, J. N., & Lane, M. A. (2010). Phosphatidylinositol 3-kinase mediates the Ability of retinol to inhibit colon cancer cell invasion in vitro. *FASEB Journal*. Published.

Escamilla, J., Lane, M. A., & Maitin, V. (2010). Probiotic Lactobacilli decrease invasion of metastatic human colon cancer cells in vitro. *FASEB Journal*. Published.

Griffin, J. N., Park, E. Y., & Lane, M. A. (2009). Dietary vitamin A supplementation decreases colorectal cancer metastases in mice. *FASEB Journal*, *23*. Published.

Escamilla, J., Lane, M. A., & Maitin, V. (2009). Probiotic Lactobacilli decrease invasion of metastatic human colon cancer cells in vitro. Published.

O'Reilly, K. C., Bailey, S. J., & Lane, M. A. (2007). 13-Cis-retinoic acid alters serotonin reuptake transporter levels in RN46A-B14 raphe nuclei cells. *FASEB Journal*, *21*. Published.

Park, E. Y., Wilder, E. T., & Lane, M. A. (2007). Retinol inhibits PI3K/Akt activity but does not affect IRS-1 and PI3K levels in retinoic acid-resistant human colon cancer cells. *FASEB Journal*, *21*. Published.

Dillard, A., & Lane, M. A. (2007). Retinol reduces beta-catenin protein in retinoic acid-resistant colon cancer cells by increasing beta-catenin-RXR-alpha interaction in the nucleus and translocation into the cytosol. *FASEB Journal*, *21*. Published.

Bailey, S. J., O'Reilly, K. C., & Lane, M. A. (2006). 13-Cis-retinoic acid (Accutane) increases 5-HT1A receptor levels in vitro. *Journal of Psychopharmacology*, *20*(5).

O'Reilly, K. C., Wilder, E., Bailey, S. J., & Lane, M. A. (2006). 13-Cis-retinoic acid alters serotonin and 5HT1A receptor levels and induces apoptosis in RN46A-B14 raphe nuclei cells. Published.

Williams, E., Perkins, S., Smith, N., Hursting, S., & Lane, M. A. (2006). Carbohydrate restriction, dietary energy restriction and weight loss in obese mice: Metabolic insights. *FASEB Journal*, *20*. Published.

Dillard, A., & Lane, M. A. (2006). Retinol decreases beta-catenin levels in retinoic acid-resistant colon cancer cell lines via a RXR-mediated degradation pathway. *FASEB Journal*, *20*. Published.

Park, E. Y., Wilder, E. T., & Lane, M. A. (2006). Retinol inhibits all-trans-retinoic acid-resistant colon cancer cell invasion by reducing matrixmetalloproteinase (MMP) levels and PI3K/Akt activity. Published.

O'Reilly, K. C., Johnson, E., Shumake, J., Gonzalez-Lima, F., Lane, M. A., & Bailey, S. J. (2005). Effects of chronic 13-cis-retinoic acid (Accutane) administration on depression-related behavior in mice. Published.

Wilder, E. T., & Lane, M. A. (2005). Retinol and retinoic acid inhibit the migration and invasion of retinoic-acid resistant colon cancer cells in vitro, *46*. Published.

Dillard, A., & Lane, M. A. (2005). Retinol decreases beta-catenin levels in retinoic acid-resistant colon cancer cell lines through increased protein degradation, *46*. Published.

Wilder, E. T., Pepper, M. R., & Lane, M. A. (2004). Retinoic acid and retinol reduce the migration of RA-resistant colon cancer cells through a basement membrane. Published.

Dillard, A., & Lane, M. A. (2004). Retinol decreases beta-catenin levels in retinoic acid-resistant colon cancer cell lines. Published.

Dillard, A., & Lane, M. A. (2004). Retinol decreases beta-catenin protein levels in retinoic acid-resistant colon cancer cells. Published.

Dillard, A., Leland, J., Wilder, E., & Lane, M. A. (2003). Retinol inhibits the growth of retinoic acid-resistant colon cancer cells via a retinoic acid independent mechanism. *FASEB Journal, 17*. Published.

Lane, M. A., Wilen, E., & Gudas, L. J. (2002). Correlation of 4-oxoretinol production with expression of CRABPI and CRABPII transcripts in embryonic stem cells. *FASEB Journal, 16*. Published.

Latimer, P., Wilder, E. T., & Lane, M. A. (2002). Retinol inhibits growth and induces apoptosis in retinoic acid resistant HCT-116 colon cancer cells. Published.

Ng, S., Lane, M. A., & Gudas, L. J. (2002). Role of Cyp26 in stem cell differentiation, *43*. Published.

Lane, M. A., Chen, A., Roman, S., Derguini, F., & Gudas, L. J. (2000). . 4-Oxoretinol production from retinol in embryonic stem cells in increased by the addition of exogenous retinoids. Published.

Lane, M. A., Chen, A., Roman, S., & Gudas, L. J. (1999). Retinol metabolism is induced in embryonic stem cells by the removal of leukemia inhibitory factor. *FASEB Journal, 13*. Published.

Lane, M. A., Baldwin, R. L., Dawson, T. E., & Jesse, B. W. (1996). Dietary effects on sheep rumen morphological development. *FASEB Journal, 10*. Published.

Lane, M. A., Baldwin, R. L., & Jesse, B. W. (1995). Metabolic development of rumen epithelium does not occur in the absence of solid feed intake. *FASEB Journal, 9*. Published.

Lane, M. A., Baldwin, R. L., & Jesse, B. W. (1995). Sheep rumen metabolic development in response to different dietary treatments. *Journal of Dairy Science, 78 (Suppl. 1)*. Published.

Lane, M. A., & Jesse, B. W. (1994). Infusion of physiological levels of volatile fatty acids stimulates rumen metabolic development in neonatal lambs. *Journal of Animal Science, 72 (Suppl. 2)*. Published.

Lane, M. A., & Jesse, B. W. (1993). Developmental changes in sheep ruminal ketogenic enzyme activity. *Journal of Animal Science, 71 (Suppl. 1)*. Published.

Wang, L. Q., Baldwin, R. L., Lane, M. A., & Jesse, B. W. (1993). Isolation and characterization of cDNA clones of genes undergoing differential expression during normal ruminal epithelial development. *Journal of Animal Science, 71 (Suppl. 1)*. Published.

10. Other Works in Print:

Article Review s:

Bailey, S. J., Lane, M. A., Palha, & Goodman. (2006). Retrieved from http://www.schizophreniaforum.org/pap/comsearch.asp?commentator=Lane,Michelle%20A http://www.schizophreniaforum.org/pap/comsearch.asp?commentator=Lane,Michelle%20A

Articles and Television Appearances Spotlighting Dr. Lane and her Researchs:

Lane, M. A. (2009). Target: Colon Cancer. In *Research Texas* (2009th ed.).

Lane, M. A. (2006). Acne Drug Roaccutane (Accutane) Linked to Depression. In *Toronto Daily News*.

Lane, M. A. (2006). Acne treatment could be trigger factor in suicide, say researchers. In *New Zealand Herald*.

Lane, M. A. (2006). Acne-treating drug leads to depressive behavior: research. In *People's Daily China*.

Lane, M. A. (2006). Acne Drug Linked to Depression. In *BBC News*.

Lane, M. A. (2006). Mice Study finds link between depression and acne treatment. In *The Telegraph, UK*.

Lane, M. A. (2006). Research shows link between acne drug and depression. In *The Guardian, UK*.

Lane, M. A. (2006). Depression fears over acne drugs. In *Daily Mail, UK*.

B. Works Not in Print:

1. Papers Presented at Professional Meetings:

Jackson, C. S., Barrett, D. W., Shumake, J., Gonzalez-Lima, F., Lane, M. A., "Maternal Omega-3 Fatty Acid Consumption Decreases Offspring Reactivity to the Stress of a Novel Environment," FASEB Journal. (2014).

Shumake, J., Barrett, D., Lane, M. A., Wittke, A., International Conference on Lactoferrin, "Behavioral effects of bovine lactoferrin (bLF) supplementation in developing rats," Rome, Italy. (2013).

Gonzales, E. M., Barrett, D. W., Gonzalez-Lima, F., Lane, M. A., Experimental Biology, "Omega-3 fatty acid supplementation improves adaptive coping in a rat model of post-partum depression," FASEB Journal. (2013).

Olds, K., Lane, M. A., Experimental Biology, "Retinol tends to reduce activator protein-1 and nuclear factor kappa B mediated gene transcription in cultured human colorectal cancer cells," FASEB Journal. (2012).

Griffin, J. N., Lane, M. A., American Institute for Cancer Research Annual Conference, "Phosphatidylinositol 3-kinase mediates the ability of dietary vitamin A to decrease the incidence of hepatic colorectal cancer metastases in a mouse xenograft model." (2011).

Lane, M. A., Riha, P., Shumake, J., "Dietary vitamin A supplementation alters brain metabolism and network interactions in Mice," FASEB Journal. (2010).

Griffin, J. N., Lane, M. A., "Phosphatidylinositol 3-kinase mediates the Ability of retinol to inhibit colon cancer cell invasion in vitro," FASEB Journal. (2010).

Escamilla, J., Lane, M. A., Maitin, V., "Probiotic Lactobacilli decrease invasion of metastatic human colon cancer cells in vitro," FASEB Journal. (2010).

Griffin, J. N., Park, E. Y., Lane, M. A., "Dietary vitamin A supplementation decreases colorectal cancer metastases in mice," FASEB Journal. (2009).

O'Reilly, K. C., Bailey, S. J., Lane, M. A., "13-Cis-retinoic acid alters serotonin reuptake transporter levels in RN46A-B14 raphe nuclei cells," FASEB Journal. (2007).

Park, E. Y., Wilder, E. T., Lane, M. A., "Retinol inhibits PI3K/Akt activity but does not affect IRS-1 and PI3K levels in retinoic acid-resistant human colon cancer cells," FASEB Journal. (2007).

Dillard, A., Lane, M. A., "Retinol reduces beta-catenin protein in retinoic acid-resistant colon cancer cells by increasing beta-catenin-RXR-alpha interaction in the nucleus and translocation into the cytosol," FASEB Journal. (2007).

Bailey, S. J., O'Reilly, K. C., Lane, M. A., "13-Cis-retinoic acid (Accutane) increases 5-HT1A receptor levels in vitro," J of Psychopharmacology. (2006).

O'Reilly, K. C., Wilder, E., Bailey, S. J., Lane, M. A., FASEB Summer Retinoids Conference, "13-Cis-retinoic acid alters serotonin and 5HT1A receptor levels and induces apoptosis in RN46A-B14 raphe nuclei cells." (2006).

Williams, E., Perkins, S., Smith, N., Hursting, S., Lane, M. A., "Carbohydrate restriction, dietary energy restriction and weight loss in obese mice: Metabolic insights," FASEB Journal. (2006).

Dillard, A., Lane, M. A., "Retinol decreases beta-catenin levels in retinoic acid- resistant colon cancer cell lines via a RXR-mediated degradation pathway," FASEB Journal. (2006).

Park, E. Y., Wilder, E. T., Lane, M. A., FASEB Summer Retinoids Conference, "Retinol inhibits all-trans-retinoic acid-resistant colon cancer cell invasion by reducing matrixmetalloproteinase (MMP) levels and PI3K/Akt activity." (2006).

O'Reilly, K. C., Johnson, E., Shumake, J., Gonzalez-Lima, F., Lane, M. A., National Society for Neuroscience Conference, "Effects of chronic 13-cis-retinoic acid (Accutane) administration on depression-related behavior in mice." (2005).

Wilder, E. T., Lane, M. A., Proceedings of the American Association for Cancer Research Annual Conference, "Retinol and retinoic acid inhibit the migration and invasion of retinoic-acid resistant colon cancer cells in vitro." (2005).

Dillard, A., Lane, M. A., Proceedings of the American Association for Cancer Research Annual Conference, "Retinol decreases beta-catenin levels in retinoic acid-resistant colon cancer cell lines through increased protein degradation." (2005).

Wilder, E. T., Pepper, M. R., Lane, M. A., FASEB Summer Retinoids Conference, "Retinoic acid and retinol reduce the migration of RA-resistant colon cancer cells through a basement membrane." (2004).

Dillard, A., Lane, M. A., FASEB Summer Retinoids Conference, "Retinol decreases beta-catenin levels in retinoic acid-resistant colon cancer cell lines." (2004).

Dillard, A., Lane, M. A., Presented at Aspen Cancer Meeting and Center for Research in Environmental Disease, MD Anderson, Conferences, "Retinol decreases beta-catenin protein levels in retinoic acid-resistant colon cancer cells." (2004).

Dillard, A., Leland, J., Wilder, E., Lane, M. A., "Retinol inhibits the growth of retinoic acid-resistant colon cancer cells via a retinoic acid independent mechanism," FASEB Journal. (2003).

Lane, M. A., Wilen, E., Gudas, L. J., "Correlation of 4-oxoretinol production with expression of CRABPI and CRABPII transcripts in embryonic stem cells," FASEB Journal. (2002).

Latimer, P., Wilder, E. T., Lane, M. A., FASEB Summer Retinoids Conference, "Retinol inhibits growth and induces apoptosis in retinoic acid resistant HCT-116 colon cancer cells." (2002).

Ng, S., Lane, M. A., Gudas, L. J., Proceedings of the American Association for Cancer Research Annual Conference, "Role of Cyp26 in stem cell differentiation." (2002).

Lane, M. A., Chen, A., Roman, S., Derguini, F., Gudas, L. J., FASEB Summer Retinoids Conference, "4-Oxoretinol production from retinol in embryonic stem cells in increased by the addition of exogenous retinoids." (2000).

Lane, M. A., Chen, A., Roman, S., Gudas, L. J., "Retinol metabolism is induced in embryonic stem cells by the removal of leukemia inhibitory factor," FASEB Journal. (1999).

Lane, M. A., Baldwin, R. L., Dawson, T. E., Jesse, B. W., "Dietary effects on sheep rumen morphological development," FASEB Journal. (1996).

Lane, M. A., Baldwin, R. L., Jesse, B. W., "Metabolic development of rumen epithelium does not occur in the absence of solid feed intake," FASEB Journal. (1995).

Lane, M. A., Baldwin, R. L., Jesse, B. W., "Sheep rumen metabolic development in response to different dietary treatments," Journal of Dairy Sci. (1995).

Lane, M. A., Jesse, B. w., "Infusion of physiological levels of volatile fatty acids stimulates rumen metabolic development in neonatal lambs," Journal of Animal Science. (1994).

Lane, M. A., Jesse, B. W., "Developmental changes in sheep ruminal ketogenic enzyme activity," Journal of Animal Science. (1993).

Wang, L. Q., Baldwin, R. L., Lane, M. A., Jesse, B. W., "Isolation and characterization of cDNA clones of genes undergoing differential expression during normal ruminal epithelial development," Journal of Animal Science. (1993).

2. Invited Talks, Lectures, and Presentations:

Lane, M. A., Kiel Colon Cancer Blue Tie Affair, "Nutrition and Colon Cancer," Keil Colon Cancer, Austin, TX, United States. (October 2016).

Lane, M. A., Undergraduate Research Day, "Distinguished researchers," Texas State Capital in Austin. (April 2013).

Additional Comments: Invited by Council of Public University Presidents and Chancellors.

Lane, M. A., Society for Microbiology, "Retinoids: cancer prevention and mood regulation," Texas State University. (November 2009).

Lane, M. A., Biology Department Seminar Series, "Vitamin A and colorectal cancer," Texas State University. (November 2009).

Lane, M. A., Biology Research Group, "Retinoids: cancer prevention and mood regulation," Texas State University. (September 2009).

Lane, M. A., Cancer Research Symposium, "Prevention of colorectal cancer metastasis by vitamin A," Texas State University. (April 2009).

Lane, M. A., "Inhibition of retinoic acid-resistant colon cancer growth and metastasis by retinol," Department of Nutrition, The University of Connecticut, Storrs, CT, United States. (May 2007).

Lane, M. A., Division of Pharmacology and Toxicology Seminar Series, "Inhibition of retinoic acid-resistant colon cancer growth and metastasis by retinol," The University of Texas at Austin, Austin, TX, United States. (January 2007).

Lane, M. A., "Inhibition of retinoic acid-resistant colon cancer growth and metastasis by retinol," Human Nutrition Division, Department of Preventive Medicine and Community Health, University of Texas Medical Branch, Galveston, TX, United States. (December 2006).

Lane, M. A., Cancer Biology Seminar Series, "Retinol inhibits colon cancer cell growth and invasion: role of PI3K and Akt," Marshall University, WV, United States. (October 2006).

Lane, M. A., FASEB Summer Retinoids Conference, "Retinol inhibits all-trans-retinoic acid-resistant colon cancer cell invasion by reducing matrix metalloproteinase (MMP) levels and PI3K/Akt activity." (June 2006).

Lane, M. A., Cancer Prevention, Diagnosis and Treatment Conference, "Ability of retinol to inhibit retinoic acid-resistant colon cancer growth and metastasis," Nutritional Intervention and Complementary Medicine from the Laboratory to the Community, San Antonio, TX, Cancer Institute, San Antonio, TX, United States. (January 2006).

Lane, M. A., Austin American Cancer Society Meeting, "Vitamin A as a chemotherapy for colon cancer," University of Texas at Austin, Austin, TX, United States. (April 2005).

Lane, M. A., American Cancer Society - Chapter meeting, "Vitamin A as a chemotherapy for colon cancer," Georgetown, TX, United States. (January 2005).

Lane, M. A., FASEB Summer Retinoids Conference, "Retinol decreases beta-catenin levels in retinoic acid-resistant colon cancer cell lines through a p53-independent mechanism." (June 2004).

Lane, M. A., Oncology Lecture Series, "Mechanism by with retinol inhibits RA-resistant colon cancer cell growth," The University of Bristol, Bristol, UK. (March 2004).

Lane, M. A., Seminar Series, "Retinol inhibits RA-resistant colon cancer cell growth," Rutgers—The State University of New Jersey, New Brunswick, NJ, United States. (October 2003).

Lane, M. A., Welch Summer Scholar Program Lecture Series, "Retinoids as cancer chemotherapy," Chemistry Department, The University of Texas at Austin, Austin, TX, United States. (July 2003).

Lane, M. A., Nutrition and Animal Science Departmental Seminar Series, "Retinol metabolism by CYP26: its relevance to embryonic stem cell differentiation and cancer," Texas A & M University, College Station, TX, United States. (September 2002).

Lane, M. A., Weekly seminar series- Department of Pharmacy, "Retinol metabolism by CYP26: its relevance to embryonic stem cell differentiation, development, and cancer," The University of Texas at Austin, Austin, TX, United States. (March 2002).

Lane, M. A., Texas Department of Mental Health and Mental Retardation Annual Meeting, "Vitamin A in cancer chemotherapy and chemoprevention," Austin, TX, United States. (March 2002).

Lane, M. A., Seminar Series, M.D. Anderson, "Retinol metabolism by CYP26: its relevance to embryonic stem cell differentiation, development, and cancer," Science Park, Smithville, TX, United States. (December 2001).

5. Other Works not in Print:

b. Works "in progress":

Journal Articles:

Alvarez, C. G., Smith, R. J., Crixell, S. L., & Lane, M. A. (In Preparation; Not Yet Submitted). The Food, Feelings, and Family Study: The effects of antenatal methyl-donor nutrient and n-3 polyunsaturated fatty acid intake on perinatal cognition, depression, anxiety, and attachment. *Maternal & Child Nutrition*.

c. Other Works Not in Print:

Internal Research Presentation as part of Nutrition & Foods Program's WINS seriess:

Lane, M. A., WINS, "Blame it on your mom: The impact of maternal diet during gestation and lactation on the mood, memory, and stress responsivity of young adult offspring," Nutrition & Foods Program, Texas State University, Texas State University, San Marcos. (October 2023).
WINS 2023-1.pdf

Posters:

Pfister, E. (Author), Lane, M. A., American Association for Cancer Research Annual Conference, "The ethyl ester forms of the n-3 fatty acids

eicosapentaenoic acid and docosahexaenoic acid decrease the proliferation, invasion, and matrixmetalloproteinase activity of colorectal cancer cells," American Association for Cancer Research, Atlanta, GA, United States. (April 2019).

Patterson, R. D. (Presenter/primary author), Pilcher, R. (Co-author), Saikia, G. (Co-author), Khurana, F. (Co-author), Lane, M. A. (Co-author), Koh, G. Y. (Co-author), Zhu, J. (Corresponding author), NUTRITION 2024, the American Society for Nutrition's annual flagship meeting, "Effect of Maternal Methyl-Donor Nutrients Supplementation to an Obesogenic Diet on Hepatic Lipolytic Gene Expression and Trimethylamine N-oxide Among Offspring," American Society for Nutrition, Orlando, FL, United States. (June 1, 2025).
Patterson Pilcher ASN Poster 2025-1.pdf

Patterson, R. D. (Presenter/primary author), Skinner, C. (Co-author), Saikia, G. (Co-author), Khurana, F. (Co-author), Lee, N. (Co-author), Suh, J. H. (Co-author), Lane, M. A. (Co-author), Koh, G. Y. (Co-author), Zhu, J. (Corresponding author), NUTRITION 2024, the American Society for Nutrition's annual flagship meeting, "Effect of maternal methyl-donor nutrients supplementation to a high-fat, high-sucrose diet during pregnancy and lactation on the risk of glycolipid disorders among offspring," American Society for Nutrition, Chicagp, IL, United States. (June 30, 2024).
Patterson_ASN_Poster_2024 FINAL FOR ASN-2.pdf

Lane, M. A., Farber, C. M. (Author), Zhu, J. (Author), Koh, G. Y. (Author), Renteria, K. (Author), Ritter, J. (Author), Muraida, J. (Author), Rivers, C. (Author), McKenzie, A. (Author), Translational Health Showcase, "Effect of maternal methyl-donor nutrients supplementation to a high-fat, high-sucrose diet during pregnancy and lactation on the risk of glycolipid disorders among offspring," Texas State University. (March 1, 2024).
Lane et al Transational Health Showcase Poster 2024-1.pdf

Lane, M. A. (Presenter/author), Farber, C. M., Zhu, J. (author), Koh, G. Y. (author), Renteria, K. (author), Ritter, J., Muraida, J., Rivers, C., McKenzie, A. L., Interdisciplinary Nutrition Sciences Symposium: Obesity and the brain across the life course, "Methyl donor nutrient supplementation during early life does not prevent the detrimental effects of a Western-type diet on behavior but does alter learning and memory," University of North Carolina, Chapel Hill, University of North Carolina, Chapel Hill, NC, United States. (September 13, 2023).
INSS 2023 abstract-1.docx
Lane et al INSS UNC Poster 2023-1.pdf

Lane, M. A. (Presenter/Author), Farber, C. M. (Author), Renteria, K. (Author), Ritter, J. (Author), Muraida, J. (Author), Rivers, C. (Author), Koh, G. Y. (Author), Zhu, J. (Author), Health Scholar Showcase,

"Maternal Consumption of a Western-type Diet During Gestation and Lactation Increases Depression-Related Behavior and Novelty Reactivity but not Body Weight in Rat Offspring," Texas State University, Texas State University, San Marcos. (April 2023).
Lane et al Translational Health Poster 2023-1.pdf

Smith, R., Alvarez, C., Crixell, S., Lane, M. A. (Presentor, Author), Health Scholar Showcase, "The Food, Feelings, and Family Study: comparison of the efficacy of traditional methods, social media, and broadcast email to recruit pregnant women to an observational, longitudinal nutrition study," Texas State University, San Marcos, United States. (April 2021).

Additional Comments: I made and presented the poster. Additional authors contributed to the collection and analysis of data (Smith, Alvarez) or conception of the project (Crixell).

Pfister, E. (Author), Lane, M. A., Experimental Biology 2017, "Free, ethyl- and methyl- ester eicosapentaenoic acid inhibit the proliferation of human and murine colon cancer cells in vitro," American Society of Nutrition, Chicago, IL, United States. (April 2017).

Martinez, M., Hurst, A., Reynolds, C. P. (Author), Lane, M. A. (Senior Author), Experimental Biology 2017, "The proliferation and invasion of low passage number human colon cancer cell lines is inhibited by retinoids," American Society of Nutritional Sciences, Chicago, IL, United States. (April 2017).

C. Scholarly / Creative Grants and Contracts:

1. Funded External Grants and Contracts:

Lane, Michelle A (Principal), Percent Contribution: 100%. Keil Colon Cancer Foundation, $1,500.00. (Funded: November 1, 2015 - Present). Gift.
Additional Comments: Donation

Lane, Michelle A (Principal). Heather Custer Memorial Fund, $8,000.00. (Funded: April 1, 2013 - Present). Gift.
Additional Comments: Donation

Shumake, J (Principal), Lane, Michelle A (Other). Effect of infant formula additive on rodent cognition, Mead Johnson Nutritionals, $50,000.00. (Funded: August 1, 2011 - August 2013). Contract.
Additional Comments: Consultant

Lane, Michelle A (Principal). Interaction between vitamin A and PI3K in colorectal tumor progression, American Institute for Cancer Research, $164,921.00. (Funded: January 1, 2009 - December 31, 2011). Grant.

Lane, Michelle A (Principal). Does retinol prevent colorectal cancer metastasis?, National Institutes of Health, National Cancer Institute, $312,840.00. (Funded: December 1, 2006 - November 30, 2009). Grant.

Lane, Michelle A (Principal). Effect of Accutane on the serotonergic pathway, RoAccutane Foundation, $6,600.00. (Funded: January 1, 2007 - December 31, 2008). Grant.

Lane, Michelle A (Principal). Retinol inhibition of retinoic acid-resistant colon cancer cell growth, American Cancer Society, $710,000.00. (Funded: July 1, 2003 - June 30, 2007). Grant.

Lane, Michelle A (Principal). Postdoctoral Fellowship: 4-Oxoretinol: potential new chemotherapeutic agent, National Institutes of Health, National Cancer Institute, $108,342.00. (Funded: August 10, 1998 - July 31, 2001). Grant.

Lane, Michelle A (Principal). Robert White-Stevens Graduate Fellowship in Nutrition, Robert White-Stevens Foundation, $16,000.00. (Funded: 1994 - 1996). Grant.

2. Submitted, but not Funded, External Grants and Contracts:

Lane, Michelle A. Interventions to reduce depressive behaviors in young, adult offspring exposed to a Western-type diet during neurodevelopment, National Institutes of Health, Federal, $587,355.00. (Submitted: September 24, 2025, Funded: September 1, 2026 - August 31, 2029). Grant.
R16 resubmission Sept 2025 final packet (1)-1.pdf
Additional Comments: Role: Sole PI, 100% effort.
Despite a promising priority score, this proposal was not funded and was resubmitted in Sept, 2025.

Kornienko, Alexander Vladimir (Principal), Percent Contribution: 50%, Lane, Michelle (Principal), Percent Contribution: 50%. Targeting colon cancer with tumor site selective prodrugs, National Institutes of Health, Federal, $1,824,737.00. (Submitted: 2021, Funded: 2022 - 2027). Grant.

Kornienko, Alexander Vladimir (Principal), Percent Contribution: 50%, Lane, Michelle (Co-Principal), Percent Contribution: 25%, La Clair, Jim (Co-Principal), Percent Contribution: 18%, Bonnet, Sylvestre (Co-Principal), Percent Contribution: 7%. Guidelines for the Discovery and Development of Photoactivated Chemotherapy for Colorectal Cancer, NIH, Federal, $1,691,818.00. (Submitted: October 2021, Funded: June 1, 2022 - May 31, 2027). Grant.

Kornienko, Alexander Vladimir, Percent Contribution: 50%, Lane, Michelle (Principal), Percent Contribution: 50%. Targeting colon cancer with tumor site selective prodrugs, CPRIT, State, $1,824,437.00. (Submitted: 2021, Funded: 2022 - 2025). Grant.

Kornienko, Alexander Vladimir (Principal), Percent Contribution: 50%, Lane, Michelle A (Co-Principal), Percent Contribution: 25%, La Clair, Jim (Co-Principal), Percent Contribution: 12.5%, Bonnet, Sylvestre (Co-Principal), Percent Contribution: 12.5%. Photoactivated Chemotherapy for Colorectal Cancer, NIH, Federal, $464,990.00. (Submitted: October 2023, Funded: July 2024 - Present). Grant.

Kornienko, Alexander Vladimir (Principal), Percent Contribution: 50%, Lane, Michelle A (Principal), Percent Contribution: 50%. Novel Prodrug Approaches for Colon Cancer, NIH, Federal, $1,825,700.74. (Submitted: June 2023, Funded: April 2024 - Present). Grant.

Kornienko, Alexander Vladimir (Principal), Percent Contribution: 50%, Lane, Michelle A (Co-Principal), Percent Contribution: 25%, La Clair, Jim (Co-Principal), Percent Contribution: 12.5%, Bonett, Sylvestre (Co-Principal), Percent Contribution: 12.5%. Photoactivated Chemotherapy for Colorectal Cancer, NIH, Federal, $451,850.00. (Submitted: February 2023). Grant.

Salcedo, Ramona (Co-Principal), Percent Contribution: 80%, Lane, Michelle A (Co-Principal), Percent Contribution: 20%. VISFATIN Inhibition in Obesity-induced NASH and Progression to HCC, Cancer Prevention and Research Institute of Texas (CPRIT), State, $698,334.00. (Submitted: June 6, 2018). Grant.

CPRIT proposal Salcedo Lane 2018-1.pdf

Lane, Michelle (Principal), Percent Contribution: 100%. Prevention of colorectal cancer metastasis by n-3 polyunsaturated fatty acids: mechanism and mouse model, American Institute for Cancer Research, Private / Foundation / Corporate, $165,000.00. (Submitted: May 10, 2018). Grant.

AICR proposal packet 2018 final submission-1.pdf

Additional Comments: Lane, Michelle (Principal Investigator), Percent Contribution: 100%. Prevention of colorectal cancer metastasis by n-3 polyunsaturated fatty acids: mechanism and mouse model, American Institute for Cancer Research, Private / Foundation / Corporate, $165,000.00. Not Funded: (Submitted: May 10, 2018). Grant.

AICR proposal packet 2018 final submission-1.pdf

Additional Comments: I am the sole Principal Investigator on this proposal. In January 2018, I submitted a Letter of Intent. Only a small number of letters (approximately 20% of the 360+ submitted) were selected to submit full proposals. Being selected to submit a full proposal to the AICR is an honor in and of itself. My letter was selected to become a full proposal over well-established faculty at R1 institutions.

Lane, Michelle (Principal), Percent Contribution: 100%. Prevention of colorectal cancer metastasis by n-3 polyunsaturated fatty acids in a new, syngeneic and orthotopic murine model., Elsa U Pardee Foundation, Private / Foundation / Corporate, $188,494.50. (Submitted: December 2017). Grant.

Lane, Michelle (Principal), Percent Contribution: 100%. Behavioral change due to omega-3 fatty acids via PPARs and myelination, Whitehall Foundation, Private / Foundation / Corporate, $225,000.00. (Submitted: April 2017). Grant.

Lane, Michelle (Principal), Percent Contribution: 100%. Beneficial effects of omega-3 fatty acids on myelination, emotional resilience, and maternal attachment in a rat model., March of Dimes, Private / Foundation / Corporate, $400,000.00. (Submitted: April 2017). Grant.

LAne, Michelle (Supporting), Percent Contribution: 10%. Geospatial and Cancer Communication Technology Core Facility Support Award, CPRIT Core Facility Support Award, State, $5,121,995.00. (Submitted: January 2017). Grant.

Additional Comments: Melinda Villigran is the PI on this multi-investigator proposal. I wrote the section regarding a DNA/biomarker core facility.

Lane, Michelle A (Principal), Percent Contribution: 97%, Gonzalez-Lima, F (Supporting), Percent Contribution: 1%, Barrett, D (Supporting), Percent Contribution: 1%, Shumake, J (Other), Percent Contribution: 1%. Beneficial effects of omega-3 polyunsaturated fatty acids on brain, behavior, and emotional resilience in a multiparous, multigenerational rat model, March of Dimes Individual Investigator Research Awards, Other, $400,000.00. (Submitted: July 1, 2016). Grant.

Lane, Michelle A (Principal), Percent Contribution: 80%, Gonzalez-Lima, F (Supporting), Percent Contribution: 2%, Barrett, D (Supporting), Percent Contribution: 10%, Shumake, J (Other), Percent Contribution: 10%. Beneficial effects of omega-3 polyunsaturated fatty acids on brain, behavior, and emotional resilience in a multiparous, multigenerational rat model, National Institutes of Health, R15, Federal, $461,466.00. (Submitted: February 26, 2016). Grant.

Additional Comments: This proposal was scored but not funded in this first round. This mechanism is no longer supported by the NIMH.

Lane, Michelle A (Principal). Prevalance of prevention of colorectal cancer metastasis by dietary vitamin A, American Institute for Cancer Research, $165,000.00. (Submitted: May 2014). Grant.

Lane, Michelle A (Principal). Beneficial effects of omega-3 fatty acids on maternal and offspring behaviors associated with post-partum depression and cognition, March of Dimes Individual Investigator Research Awards, $200,000.00. (Submitted: April 2013). Grant.

Lane, Michelle A (Principal). Test of a new Model for the Dietary Prevention of Colorectal Cancer Metastasis: Effectiveness and Mechanism of Action of Dietary Vitamin A Supplementation, CPRIT Individual Investigator Research Awards, $538,427.00. (Submitted: May 23, 2012). Grant.

Lane, Michelle A (Principal). Novel Chitosan-NPs for Longitudinal Imaging and Regulation of Colorectal Cancer, National Institutes of Health, National Cancer Institute, SBIR, $100,000.00. (Submitted: November 8, 2010). Grant.

Lane, Michelle A (Principal). Conformation of retinol when inhibiting PI3K, National Institutes of Health, National Cancer Institute, R15, $437,312.00. (Submitted: February 25, 2010). Grant.

Lane, Michelle A (Principal). Does dietary vitamin A supplementation induce depression-related behavior?, National Institutes of Health, National Institute of Mental Health, R15, $199,630.00. (Submitted: February 25, 2010). Grant.

Lane, Michelle A (Principal). Development of novel vitamin A analogues that inhibit colorectal cancer progression, NHARP preproposal, $447,949.00. (Submitted: September 15, 2009). Grant.

Koke, J (Principal), Lane, Michelle A (Other). Acquisition of multiphoton imaging capability at Texas State University, NSF Major Research Instrumentation, $825,825.00. (Submitted: August 10, 2009). Grant.

3. Funded Internal Grants and Contracts:

Lane, Michelle A, Crixell, Sylvia L. Diet, BFNF, and BPA Exposure as Predictors for Postpartum Behavioral Impairment in Low Income Women, Research Enhancement Program, Texas State University, $16,000.00. (Submitted: October 2017, Funded: January 2018 - Present). Grant.

Kornienko, Alexander Vladimir (Co-Principal), Percent Contribution: 50%, Lane, Michelle A (Co-Principal), Percent Contribution: 50%. Evaluation of 7-deazahypoxanthine derivatives as cancer chemotherapeutic agents, ORSP Research Accelerator, Texas State University, $20,000.00. (Submitted: February 2022, Funded: February 2022 - May 2023). Grant.

Lane, Michelle A. Mouse Models of Advanced, Non-Resectable, Metastatic Stage 4 Colorectal Cancer, Research Enhancement Program, Texas State University, $8,000.00. (Submitted: October 2021, Funded: February 2022 - May 31, 2023). Grant.

2021 REP CRC mouse models-1.pdf
Additional Comments: **Goal:** To generate clinically relevant mouse models of advanced, non-resectable stage 4 colorectal cancer which will serve as preliminary data in R01 proposals submitted to the NIH. The proposal document is attached.

Lane, Michelle A (Principal). Developmental Leave Supplemental Grant Award, Texas State University, $20,000.00. (Funded: September 1, 2015 - December 31, 2015). Grant.

Lane, Michelle A (Principal). Treatment of depression with omega-3 fatty acids, Research Enhancement Program, Texas State University, $8,000.00. (Funded: January 1, 2012 - August 31, 2012). Grant.

Lane, Michelle A (Co-Principal). Role of human gut microflora in colon cancer metastasis, Research Enhancement Program, Texas State University, $16,000.00. (Funded: January 12, 2009 - August 31, 2010). Grant.

Lane, Michelle A (Principal). Does Accutane cause depression?, University of Texas at Austin Fiscal Year Research Grants, $5,645.00. (Funded: September 1, 2004 - August 31, 2005). Grant.

Lane, Michelle A (Principal). Research Internship, The University of Texas at Austin, $16,000.00. (Funded: September 2, 2002 - May 31, 2003). Grant.

Lane, Michelle A (Principal). Retinol metabolism and signaling in colon cancer, Summer Research Award, The University of Texas at Austin, $12,000.00. (Funded: June 1, 2002 - August 31, 2002). Grant.

Lane, Michelle A (Principal). Role of retinol in colon cancer treatment, Human Ecology Indirect Cost Funds, The University of Texas at Austin, $6,000.00. (Funded: June 1, 2002 - August 31, 2002). Grant.

4. Submitted, but not Funded, Internal Grants and Contracts:

Rudzinsky, W (Co-Principal), Lane, Michelle A (Co-Principal). Mitigation of cancer cell proliferation through regulation of beta-catenin expression via delivery of chitosan/siRNA, Research Enhancement Program, Texas State University, $16,000.00. (Submitted: 2011). Grant.
Additional Comments: submitted for 2011 competition

D. Scholarly / Creative Fellowships, Awards, Honors:

Award / Honor Recipient: Health Scholar Showcase Winner, Texas State University. April 2021 - 2021

Award / Honor Recipient: Presidential Award for Excellence in Scholarly /Creative Activities, College of Applied Arts, Texas State University.

2011
Additional Comments: Runner up

Award / Honor Nominee: Presidential Research Award for Excellence in Scholarly/Creative Activities, College of Applied Arts, Texas State University.
2009

Award / Honor Recipient: Department of Human Ecology Research Award, The University of Texas at Austin.
2006

Fellowship Recipient: Aspen Cancer Conference.
2004

Award / Honor Recipient: Northeastern American Society of Animal Science Graduate Student Presentation Competition, Northeastern American Society of Animal Science.
1995
Additional Comments: First place

E. Scholarly / Creative Professional Development Activities Attended:

Workshop, "SuRE Grantsmanship Bootcamp," SuRE Resource Center. (August 20, 2024 - August 21, 2024).

Conference Attendance, "Experimental Biology 2016," San Diego, CA, United States. (April 2, 2016 - April 6, 2016).

IV. SERVICE

A. Institutional

1. University:

Member, Honor Code Council. (August 2024 - Present).

Additional Comments: This council hears and determines the outcome of cases regarding violations of the university’s honor code for academic integrity.

Member, IACUC. (2008 - Present).

Additional Comments: Review animal protocols submitted by Texas State University Faculty. Inspect animal facilities on campus and set university policies regarding the use of vertebrate animals in research at Texas State University.

Member, University Radiation Safety Committee. (2008 - December 30, 2020).

Additional Comments: Review use of isotope on campus

Organizer, FCS Vivarium/Comparative Research Facility Development. (August 2010 - May 2020).

M. Lane Exhibit 1-3.pdf

Additional Comments: I have actively worked to spearhead the construction of a vivarium on campus since 2010. In 2017 I began working with architects, engineers, and contractors to design and construct the FCS vivarium. This vivarium serves the entire university community, allowing TxState to attract extramural research funding in the biomedical sciences, and move towards R1 status. Beginning in the spring, I met with the facilities Project Manager architects, engineers, and lead contractor for 2-5 hours each week, including summer, to discuss all aspects of facility design and operation. I contributed to the vivarium proposal sent to the Texas State University System Coordinating Board which secured $4,000,000 in funding for the construction of this facility that will open in Summer 2020. Construction started in February 2019 and substantial completion occurred on time in August 2019. During this time I met each week with the construction team, reviewed quotes and co-authored sole source documents for equipment. I also wrote the first vivarium operating budget in Spring 2019 and initiated the operations manual for this facility. A file detailing my work in this project since 2010 has been uploaded here. In the Spring of 2020 my duties were turned over to the director of the CRF. The CRF will open in Feb, 2021.

Member, Presidential Award for Scholarly/Creative work. (2013 - 2016).

Member, Freeman Center Advisory Council. (2012 - 2015).

Additional Comments: Provide guidance regarding management of the Freeman Ranch.

Chair, Institutional Animal Care and Use Committee (IACUC). (2010 - 2015).

Additional Comments: Oversee all research and teaching involving vertebrate animals at Texas State University. Report directly to federal government's Office of Laboratory Animal Welfare. The IACUC is the equivalent of the IRB for research involving vertebrate animals.

Chair, Vivarium Committee. (2009 - 2015).

Additional Comments: Lead author of proposal to build a vivarium at university. Compiled data concerning animal research requirements that was used by external consultants to determine cost of a vivarium on campus.

Member, Faculty Search Committee, Biology Department. (2010 - 2011).

Additional Comments: Reviewing 75 applicants for an assistant professor position in biology

College representative, Principal Investigator Council. (2009 - 2010).
Additional Comments: The goal of this organization was to facilitate research and serve as an advisory group to the Chief Research Officer (council disbanded in 2010).

Member, Biological Sciences Research Group. (2008 - 2010).
Additional Comments: Search for funding opportunities and foster collaborative research in the biological sciences

Organizer, Research Grant Database Search. (2008 - 2010).
Additional Comments: Worked with Dr. Blanda and Proposal Development Office to evaluate electronic databases that can be used by faculty to search for funding opportunities (project finished in 2010)

University's faculty representative, Federal Demonstration Partnership. (2008 - 2010).
Additional Comments: This organization works with federal funding agencies to revise and reduce the paperwork load for PIs of federal grants.

Member, Institutional Animal Care and Use Committee. (2007 - 2008).
Additional Comments: Review animal protocols submitted by UT investigators

Speaker, Women in Science. (2007).
Additional Comments: Presented overview of my research program to female undergraduate students

Speaker, Honors Colloquium. (2006).
Additional Comments: Presented class to prospective nutrition majors in which they designed a study to examine the efficacy of low-carbohydrate diets

Organizer, Faculty Women's Association. (2005).
Additional Comments: Organized and hosted new professor luncheon

Organizer, Seminar Series in Nutritional Sciences. (2004 - 2005).
Additional Comments: Invited speakers and organized monthly seminar series

Participant, Career Night at St. Edward's University. (2004).
Additional Comments: Panel member in discussion of potential careers in the biological sciences.

Project for four, seventh grade boys at a New York City public school

Participant, SURGE (Science Undergraduate Research Group) Research Fair. (2004).

Additional Comments: Participated in faculty panel discussing why we do research and the importance of research

University Mentor, WISDOM. (2003 - 2004).

Additional Comments: Mentored undergraduate female student concerning various aspects of her experience at UT Austin

Member, Women in Science. (2002 - 2004).

Additional Comments: An organization of female faculty in the College of Natural Sciences whose purpose was to promote science education and mentor female undergraduate students in the natural sciences

Organizer, University-Wide New Faculty Seminar Planning Committee. (2002).

Additional Comments: Planned orientation seminars for incoming faculty.

3. Department/School:

Member, Search committee member tenure track assistant professor in Nutrition. (August 2025 - Present).

Additional Comments: Member of search committee to hire tenure track Assistant Professor in Nutrition, resulted in hire of Dr. Temi Ibiyemi.

University Mentor. (December 2021 - Present).

Additional Comments: I currently serve as faculty mentor to one assistant professor in Nutrition: Drs. Koh. Previously, I mentored Drs. Salcedo-Price and Zhu.

Program Area Coordinator, Nutrition and Foods, Program Area Coordinator, Nutrition and Foods. (January 1, 2020 - Present).

Additional Comments: As Program Area Coordinator (PAC) I am responsible for schedule all NUTR courses, maintaining faculty WLC documents, developing and reporting learning outcomes, and curriculum/program development. I also lead nutrition program meetings and work with students and university administration.

Chair, Merit review revisions committee. (March 2024 - December 2025).

Additional Comments: In 2024 I served as chair of the committee to revise how merit review was conducted in the School of FCS. I led meetings and revised the merit review form to reflect faculty input. Taught faculty how to use the new merit review form. In 2025 I revised this form to reflect faculty comments.

Member, Search Committee Member for Assistants Professors in Nutrition. (August 2024 - April 2025).

Member, Search committee member tenure track assistant professor in Nutrition. (August 2023 - March 2024).

Additional Comments: Member of search committee to hire tenure track Assistant Professor in Nutrition.

Member, Search committee open rank tenure track faculty in Nutrition. (August 2022 - February 2023).

Additional Comments: Member of search committee to hire tenure track faculty in Nutrition.

Advocate for faculty safety in response to mass shooting threat, Advocate for faculty safety in response to mass shooting threat. (January 2022 - January 2023).

Additional Comments: . In Jan 2022 a student in the Nutrition program posted a threat of mass shooting in several social media outlets. For two weeks following this event, other than time spent in the classroom, all of my time was consumed by communication with faculty, administrators, and law enforcement. This fall the student applied for and was readmitted to the university. During the fall semester I spent approximately two weeks of my time, taken together, emailing and meeting with university faculty officials. In the end, the student was allowed back on campus despite my exhaustive efforts and the support of School and College leadership.

Chair, Search Committee Lecturer in Nutrition. (August 2022 - December 2022).

Additional Comments: Chaired search for non-tenure track lecturer in Nutrition. Search resulted in the hiring of Ms. Leia Downs, MS, RD, LD

Member, Search Committee for Didactic Program in Dietetics (DPD) Coordinator in Nutrition and Foods. (August 2021 - May 2022).

Additional Comments: Member of search committee that hired a new Didactic Program in Dietetics Director. Search resulted in hiring of Christy Youens, MS, RD, LD.

Chair, Search Committee for Associate/Full Professor in Nutrition and Foods. (August 2021 - March 2022).

Additional Comments: Chair of search committee for Associate or Full professor in Nutrition. Closed with no hire.

Co-Program Coordinator, Nutrition and Foods. (January 2020 - June 15, 2020).

Co-Chair, Nutrition Faculty Search Committee. (August 2019 - April 2020).

Additional Comments: This service resulted in the hire of Dr. Gar Yee Koh.

Graduate Advisor, MS in Human Nutrition. (August 2012 - December 31, 2019).

M. Lane Exhibit 2-2.pdf

Additional Comments: As Graduate Advisor (or Program Area Coordinator; PAC) I recruit, admit, and advise all MS students in our program consisting of 45-50 students. I was compensated for my time with one course release per regular semester. As Graduate PAC I mentored a new Graduate PAC in FCS, maintained and expanded the NUTR MS website, held online and on campus information sessions to recruit applicants, participated in GEMS and the MS/DI open house, answered email from and held appointments with potential applicants, reviewed all applications for three admissions deadlines per year (approximately 50-70 applications total), arranged GA and fellowship funding for MS NUTR students, hosted orientation for new students in fall and spring cohorts, nominated students for fellowships and scholarships, communicated important deadlines to all MS NUTR students, compiled, proctored, and submitted the results of two comprehensive examinations per year, entered degree audits for all students, worked with the graduate college to maximize financial aid for MS students, allotted graduate travel funds, individually met with any MS student requesting to do so, attended two hooding ceremonies, served as graduate marshall for the Spring 2018 commencement ceremony, submitted course/curriculum changes, wrote and submitted graduate learning outcomes. An attachment detailing my work over almost eight years in this position is attached.

Member, Nutrition faculty search committee, Assistant/Associate Professor. (August 2018 - March 2019).

Additional Comments: Search committee for ongoing search for Assistant/ Associate Professor in Nutrition

Member, Family and Consumer Sciences Director Search Committee. (May 2018 - November 2018).

Additional Comments: Search committee that resulted in hiring of Dr. Behnke.

Member, Nutrition faculty search committee, Assistant Professor. (September 2017 - March 2018).

Additional Comments: Search Committee that hired Dr. Cassandra Johnson

Chair, FCD faculty search. (August 2015 - February 2016).
Additional Comments: Chair FCD search committee which resulted in the hiring of two assistant professors.

Member, faculty search committee—Nutrition, tenure track position. (2013).

School Representative, College review committee for REP proposals. (2013).
Additional Comments: Review REP proposals for CAA

School Representative, Graduate Council. (2008 - 2013).
Additional Comments: Attend graduate council meetings to discuss issues concerning graduate education

Chair, School Seminar Committee. (2008 - 2011).
Additional Comments: Organized seminar committee and selection of seminar speakers

Organizer, Jean Andrews Visiting Professor. (2007).
Additional Comments: Invited, organized and hosted five day visits of prominent nutritional scientists

Member, Departmental Awards Committee. (2005 - 2007).

Member, Graduate Admissions- University of Texas at Austin. (2002 - 2007).
Additional Comments: Reviewed graduate admissions

Member, Part A committees- Prelim. (2002 - 2007).

Chair, Part A committees- Prelim. (2006).

Board Representative, Institutional Review Board. (2002 - 2006).
Additional Comments: Review research proposals involving human subjects from departmental faculty members

Chair, Graduate Admissions- University of Texas at Austin. (2005).
Additional Comments: Reviewed graduate admissions candidates, organized committee meetings, and oversaw admissions process

Member, Graduate admissions committee- University of Texas at Austin. (2004).
Additional Comments: Reviewed graduate admissions candidates

Organizer, Jean Andrews Visiting Professor. (2003).
Additional Comments: Invited, organized and hosted five day visits of prominent nutritional scientists

Member, Nutritional Sciences Curriculum Committee. (2001 - 2002).

Additional Comments: Reviewed and revised the undergraduate program in nutrition

Participant, Nutritional Sciences Vision Committee. (2001 - 2002).
Additional Comments: Helped formulate a new vision for the Division of Nutrition

B. Professional:

Reviewer / Referee, Obesity. (February 2026).

Reviewer / Referee, Neurobiology of Learning and Memory. (December 2024).

Reviewer / Referee, Journal of Nutritional Biochemistry. (November 2024 - December 2024).

Reviewer / Referee, Department of Human Sciences, Sam Houston State University. (November 2024).

Additional Comments: I served as an external evaluator for tenure for an assistant professor in the Department of Human Sciences, Sam Houston State University.

Reviewer / Referee, World Journal of Gastrointestinal Oncology. (June 2024).

Reviewer / Referee, Molecular Biology Reports. (February 2024).

Reviewer / Referee, Behavioural Brain Research. (2023).

Reviewer / Referee, IDeA Networks of Biomedical Research Excellence (INBRE) Program for Puerto Rico. (August 2016 - 2021).

Additional Comments: Review two research proposals submitted to the University of Puerto Rico's Medical Science INBRE research program each fall.

Associate Editor, BioMed Central Research Notes. (2014 - 2021).

Additional Comments: Review 1-4 articles per year, find peer reviewers for articles, make decisions regarding publication of articles.

Reviewer / Referee, Nutrition and Cancer. (2020).

Editorial Review Board Member, Nutrigenomics section of Frontiers in Genetics. (2014 - 2020).

Reviewer / Referee, Frontiers in Nutrition, Nutrigenomics. (July 2020).

Reviewer / Referee, Journal of Functional Foods. (February 2020).

Reviewer / Referee, Nature Genetics. (August 2018 - December 2018).

Additional Comments: Peer reviewer of manuscript submitted to Nature Genetics. Nature is the premier scientific journal publisher in my field. The 2018 impact factor for this journal was 27.125. It is an honor to review for this journal.

Reviewer / Referee, Experimental Biology and Medicine. (2008 - 2014).

Grant Proposal Review, Hungarian Scientific Research Fund (OTKA). (2010).

Grant Proposal Review, State of New Jersey CRISP/USDA proposals. (2008).

Grant Proposal Review, UK Cancer Research Foundation. (2008).

Reviewer / Referee, Cancer Research. (2008).

Chair, American Society of Nutritional Sciences, Experimental Biology. (2003).
Additional Comments: Vitamin A and Retinoids Minisymposium: Reviewed and programmed 22 abstracts into oral and poster presentation sessions, presented overview lecture, and moderated discussion.

C. Community:

Speaker, American Cancer Society Meeting, University of Texas at Austin, TX. (April 2005).
Additional Comments: Vitamin A as a Chemotherapy for Colon Cancer

Speaker, American Cancer Society- Chapter meeting, Georgetown, TX. (January 2005).
Additional Comments: Vitamin A as a Chemotherapy for Colon Cancer

D. Organization Memberships:

American Association for Cancer Research. (2002 - 2022).

UT/MD Anderson Cancer Center, Science Park Research Division (formerly CRED). (2004 - 2020).

Additional Comments: The Science Park campus of MD Anderson was closed in 2020.

Adjunct Associate Professor, Psychology Department, The University of Texas at Austin. (2009 - 2019).

American Society of Nutritional Sciences. (1992 - 2018).

E. Service Honors and Awards:

Award / Honor Recipient: College of Applied Arts Nominee for Presidential Service Award, College of Applied Arts.

2020

Lane Nomination Form-1.pdf
Letters of Support Lane Presidential Service Award-1.pdf
Lane Narrative Service Award-1.pdf
M. Lane Exhibit 1-1.pdf
M. Lane Exhibit 2-1.pdf

Additional Comments: . I was nominated by FCS and the CAA for the Presidential Service Award in recognition of my work to establish and build the first rodent vivarium at TxState University and my 8 years of service as the graduate PAC for Nutrition. The award packet detailing my service is uploaded to Digital Measures.