CURRICULUM VITAE

 February 2022

VOLKER MAI, PhD, MPH

Associate Professor

Department of Epidemiology

College of Public Health and Health Professions and College of Medicine

Emerging Pathogens Institute

2055 Mowry Rd.

Univ. of Florida, Gainesville, FL USA

vmai@ufl.edu

Citizenship(s): USA, Germany

**Education**

**Master of Public Health (MPH)** 2000

Quantitative Methods, Harvard School of Public Health

**Doctor of Philosophy (PhD)** 1999

Dept. of Microbiology, University of Georgia

**Bachelor of Sciences** 1992

# University of Georgia, Major: Biochemistry

**Medical College (part time)** 1986 – 1990 Ernst Moritz Arndt Univ., Greifswald, Germany

**High School Diploma** 1985

W. Pieck OS, Neubrandenburg, GDR (East Germany)

## Professional Experience

##  University of Florida, Gainesville, FL

## *Associate Professor* (with tenure since 2016) 2012-Department of Epidemiology, College of Public Health and Health Professions and

College of Medicine

***Associate Member* 2007-**

Emerging Pathogens Institute, UF Health Cancer Center

## *Assistant Professor* 2007-2012 Department of Microbiology and Cell Biology, Institute of Food and Agricultural Sciences

 **Moffitt Cancer Center, Tampa, FL**

***Affiliate Member* 2010-**

Infectious Cancer Epidemiology group

## University of Maryland, Baltimore, MD

## *Assistant Professor* 2003-2007

## Dept. of Epidemiology and Preventive Medicine, School of Medicine

##  National Cancer Institute, Rockville, MD

## *Postdoctoral Cancer Prevention Fellow* 1999- 2002

## Office of Preventive Oncology

Nutritional Epidemiology Branch in the Division of Cancer Epidemiology and Genetics Laboratory of Nutrition and Molecular Carcinogenesis

##  University of Georgia, Athens, GA

## *Graduate student* 1993-1999

*Teaching Assistant*

Introductory Microbiology 1993-1996 Computational Skills in Microbiology 1997

Graduate Student Seminar 1998

TA-Mentor 1997-1998

CURO-TA (campus wide teaching network) 1998

*Research Assistant* 1994-1998

*Lab volunteer*1993

**Professional Affiliations**

American Society for Microbiology 1994-

American Association for the Advancement of Science 1994-

American Association for Cancer Research 2001-

**Professional and Academic Honors**

UF COM term professor 2016-2017 2017-2019

Illumina “Mini” worldwide challenge First prize winner (with Drs. Prosperi and Cottler) 2016

UF PHHP Dean’s Best Paper award,Dept. of Epidemiology 2014

UF PHHP Dean’s Best Paper award,Dept. of Epidemiology 2013

UF PHHP Dean’s Best Paper award,Dept. of Epidemiology 2012

AACR-AFLAC Scholar-in-Training Award 2002

NCI Prevention Fellowship Research Grant (10K) 2002

Intramural Research Award NCI (75K) 2001

Cancer PreventionFellowship Award (5 years)1999

Outstanding Graduate Teaching Award 1997

American Society for Microbiology Travel Grant 1997

Division O ASM Travel Award 1995

Graduate Teaching Supplement 1994

Graduated BS degree Magna Cum Laude 1992

ElectedPhi Beta Kappa 1992

**Languages (in addition to English)** **German:** native speaker **Russian:** SK II cert.

**Teaching activities**

UF Grant writing (course manager) 2013-

UF Cancer Epidemiology (course manager) 2013-

UF Bacterial and viral pathogens (course manager) 2009-2011

UF Journal Club (Co-course manager) 2008-2012

UMD Molecular Biology in Public Health Sciences (course manager) 2006-2007

UMD Molecular Epidemiology (Co-course manager) 2005-2007

UMD Cancer Epidemiology (course manager) 2004 -2006

UGA Introductory Microbiology 1993-1996

UGA Introductory Microbiology Laboratory 1993-1996

UGA Computational Skills in Microbiology 1997

UGA Graduate Microbiology Student Seminar 1998

*Supervision/Mentoring of students (graduate/postdoctoral)*

Xiaoyu Wang UF Postdoc

Maria Ukhanova UF Postdoc

Chris Young UF MD/resident fellow

Cara Frankenfeld NCI/ (postdoc)

Sheldon Waugh UF PhD student (research mentor 2014-17)

Tyler Culpepper UF PhD student (thesis supervisor 2013)

Jin Yao UF PhD student (thesis co-supervisor 2014)

Emily Klann UF PhD student (research mentor 2018-)

Yaser Alsahafi UF PhD student (thesis co-supervisor)

Alexander Gutalj UF MS student (thesis supervisor 2013)

Akemi Wijayabahu UF MS student (thesis supervisor 2017), PhD advisor 2019-

Upuli Dissanayake UF MS student (thesis supervisor 2019), PhD advisor 2019-

Mengxiong Wang UF MPH (project mentor)

Nicholas Kowalkowski UF MPH (mentor)

Jaquelyn Nagy UF MPH (mentor)

Kallen Shaw UF MPH (mentor)

Rachael Shaw UF MPH (mentor)

Nina Isakowich UMD MD/PhD student (UMB)

Jonathan Nelson UMD MD/PhD student (UMB)

Ying-ying Yu UMD PhD student (UMB Epidemiology)

Lisa Gardner UMD PhD student (UMB Epidemiology)

Brian Peters UMD PhD student (UMB Microbiology)

Steven Techtman UMD PhD student (UMB Life Sciences)

Quintece McCrary UMD PhD student (UMES/Food Sciences)

Amanda Dice UMD AAI J.H.W. Fellowship

**Journal Reviewer**

Journal of Probiotics and Health (editor) 2013-

Nature Pediatrics 2015-

Microbiome 2012-

American Journal of Gastroenterology 2010-

Applied and Environmental Microbiology 2004-

Cancer Epidemiology, Biomarkers & Prevention 2003-

Emerging Infectious Diseases 2003-

Diversity Research 2007-

Gut 2009-

International Journal of Cancer 2004-

Journal of Clinical Microbiology 2007-

Microbial Ecology 2007-

Mutation Research 2005-

Grant reviewer (ad hoc)

American Cancer Society IRG 2005-2007

Environmental Protection Agency 2007-2008

National Science Foundation 2010/2011

NIH, special emphasis panel “Microbial metabolites and cancer” 2010-

National Cancer Institute, Division for Cancer Epidemiology and 2015

Genetics, Intramural program review panel member

NIH Nutrition and Metabolic Processes (INMP) Study Section 2015

NIH conflicting applications study section 2016

NIH ZRG1 AARR 2016

NIH, ZRG1 EMNR (50) special emphasis panel 2017

ZRG1 IDM-R (02) 2017

NIH CRFS 2017

**Industrial Consultantships**

Intralytix Inc.(Baltimore, MD) , Matsutani Inc.(Japan), Genomic Nanosystems (Rockville, MD), Micropharma (Montreal Cananda).

**Professional Service**

UF PHHP Faculty Council, president elect 2016

UF Faculty Senate member, elected 2014-

UF PHHP Faculty Council, elected 2014-

UF SOM Faculty Council, elected 2013-2014

Faculty Search Committee chair Department of Epidemiology 2013-Admissions Committee Department of Epidemiology 2013-

Graduate Committee Department of Epidemiology 2012-

**Research Support**

Ongoing

NCI R21 (**PI**) 01/01/16-12/31/17 3.0CM

Big data approaches to link diet, microbiota and colorectal cancer

Scored 7th percentile July 2015

USDA NIFA AWARD 2015-68003-22971 (Jeon, KC PI) 01/01/15-12/31/17 1.0CM

Understanding antibiotic resistance occurrence and development of mitigation

technologies in cattle

**Role:** **Co-PI** responsible for microbiota analysis

NIH RO1 (Karst, S PI) 04/01/15-03/31/20 0.6CM

Role of Intestinal Bacteria in Human Norovirus Infection

**Role: Co-Investigator** responsible for microbiota analysis

NIH RO1 (Morris, G PI) 01/01/17-12/31/21 1.2CM

Cholera persistence, transmission, and clinical illness in Haiti

**Role: Co-Investigator** responsible for microbiota analysis

Pepsico (**PI** subcontract, B. Langkamp-Henken) 07/31/17-06/30/18 0.3CM

The effect of citrus beverages on gastrointestinal function in healthy adults; a randomized, double-blind, controlled clinical trial"

**Role: PI (subcontract)** responsible for microbiota analysis

UF bridge funding 05/31/17-04/30/18

Urinary estrogens and gut microbiome composition in healthy postmenopausal women

**Role: Co-PI** responsible for microbiota analysis

Completed

Bill and Melinda Gates Foundation 01/01/15-12/31/16

Microbiota development and NEC in preterm infants, Brazil

**Role: PI**, responsible for microbiota analysis

Matsutani/ADM (PI L-Henken, **Mai**) 04/30/16-04/30/17

Resistant maltodextrin supplementation and the effect on fecal bifidobacteria,

bowel function and dietary intake

**Role: PI** (subaward)

Illumina Mini Challenge (Prosperi, Cottler, **Mai**) 04/30/2016

Monitoring emerging infectious disease using high throughput sequencing

Role: Co-PI (responsible for sequencing)

FACCA (Yaghjyan/Egan) 08/1/2015 – 12/31/2016

Florida Academic Cancer Center Alliance (FACCA)

Gut microflora and estrogens: a new paradigm for breast cancer reduction?

The long-term objective of this project is to contribute to our understanding of the

intestinal microbiome as a determinant of plasma estrogen levels and in turn breast cancer risk

Role: Co-I

NSF ABI Development (Sun, **Mai**) 06/01/11-05/31/16

Advanced computational algorithms for deep interrogation of microbial communities

**Role: Dual PI** responsible for applications of bioinformatics tools

NIH 1 R01 HD059143-01. (Neu) 12/17/08-11/30/13 Microbiota in Preterm Infants and NEC

**Role: Co-PI** responsible for microbiota analysis

DoD AMSRD STTR phase II 06/01/11-05/31/14 Bacteriophage-based probiotic preparation for managing Shigella infections

**Role: PI** academic partner, with Intralytix, Inc. as industry partner

UF Opportunity Funding **(**Huigens, **Mai,** Shouguang**)** 01/09/14-05/31/16

Novel bromophenazine compounds to treat biofilm infections

**Role: Multiple-PI**, responsible for microbiota analysis and animal model development

SunMaid America 07/31/15-06/30/16

Effects of adding raisins to American diet on gut microbiota composition and activities

**Role: PI**

California Almond Board (**Mai, MPI**) 09/01/13-12/31/15

Effects of almond consumption on immune function and gut microbiota composition

**Role: Multiple-PI**, responsible for microbiota analysis

Wakunaga of America Co., Ltd.(PI L-Henken) 11/30/13 - 12/31/15

Probiotics and allergies

**Role: PI** (subaward)

Schwabe NA **(Mai, PI**) 02/01/14 – 12/31/15

Clinical trial of LAB pearl viability and microbiota composition

**Role: PI**

American Pulse Association **(Mai, PI)** 01/15/15-12/31/15

Effects of adding chick pea to American diet on gut microbiota

**Role: PI**

MRSGT CCE-107301 **(PI** Mai) 07/01/04 – 12/31/10

American Cancer Society (mentored career award)

Diet, Microflora and Colorectal Carcinogenesis in African Americans

DoD AMSRD STTR phase I 01/01/10-12/31/10

Bacteriophage-based probiotic preparation for managing Shigella infections

**Role: PI** academic partner, with Intralytix, Inc. as industry partner

NIH SBIR phase I 05/01/08 -04/30/09

Effects of bacteriophage administration against Listeria monocytogenes

**Role: PI** academic partner

Bill and Melinda Gates Foundation (PI Stine) 01/01/11-12/31/13

Metagenomic based discoveries of new viral and eukaryotic pathogens

**Role: Co-PI** on UFL subcontract for EM based viral detection

General Mills (Langkamp-Henken) 09/01/09 – 12/31/12

Immune modulation by adding fiber to the diet

**Role: Co-PI**

Wakunaga of America Co., Ltd.(PI L-Henken) 03/01/12 - 11/07/13

Probiotics on immune and intestinal health in healthy older adults

**Role: PI** (subaward)

Lallemand (Dahl) 02/01/2012-12/31/13 Evaluations of B.subtilis on GI survival

**Role: PI** (subaward)

GTC (Langkamp-Henken) 01/01/10 – 12/31/12

Effects of galacto-oligosacharides on immune function

**Role: Co-PI**

Bill and Melinda Gates foundation 10/30/07-12/31/10

New technologies for detection of diarrhea pathogens in developing countries

**Role: Co-PI** subcontract

CDC contract Hirshon (PI) 10/01/04 – 09/30/07

Diarrhea in Baltimore: Surveillance & Pathogen Detection

**Role: Co-PI**

Pending

NIH R21 (**M-PI,** Yaghjyan, **Mai**) submitted June 2017

Associations between breast microbiota and tissue genome methylation

NIH R21 (**M-PI,** Vedam-Mai, **Mai**) submitted February 2017

The role of gut microbiota in early PD development

NIH R01 (**Co-PI**) resubmission Fall 2017

Novel bromophenazine compounds to treat biofilm infections

CDC UO1 Center for infectious disease surveillance (**Co-I**) submitted Fall 2016

DoD (**Co-PI**, PI V, Vedam-Mai) submitted Fall 2016

The role of gut microbiota in early PD development

DHS (Prosperi, Mai) submitted Fall 2016

How to Tackle Emerging Vector-Borne Epidemics using Ecological Microbiomics

Viva5 Corporation contract (**PI**) submitted Fall 2016

Survival of Bacillus spores during GI transit

**Publications**

Original Research:

1. M.Engle, Y.Li, F.Rainey, S.DeBlois, **V.Mai**, A.Reichert, F.Mayer, P.Messner, and J.Wiegel. *Thermobrachium celere* gen. nov. sp. nov., a rapidly growing thermophilic, alkalitolerant, and proteolytic obligate anaerobe. International Journal of Systematic Bacteriology. 1996; **46:**1025-1033
2. **V.Mai**, W.Lorenz and J.Wiegel. Transformation of *Thermoanaerobacterium* JW/SL-YS485 with plasmid pIKM1 conferring kanamycin resistance. FEMS Microbiology Letters. 1997; **148:**163-167
3. **V.Mai**, W.Lorenz, J.Wiegel Advances in the development of a genetic

 system for *Thermoanaerobacterium*: Expression of genes encoding hydrolytic enzymes, development of a second shuttle vector, and integration of genes into the chromosome. Applied and Environmental Microbiology 2000;**66**:4817-4821

1. **V.Mai**, J.Wiegel, W.Lorenz . Cloning and expression of a novel bifunctional xylosidase/arabinosidase from *Thermoanaerobacter ethanolicus* JW200. Gene. 2000; **247**:137-143
2. **V. Mai**, A. Flood, U. Peters, J. V. Lacey Jr., C. Schairer, and A. Schatzkin.Dietary fiber and risk of colorectal cancer in the Breast Cancer Detection Demonstration Project (BCDDP) Follow-up cohort. Cancer Causes and Control. International Journal of Epidemiology. 2003; **32**:234-239
3. **V. Mai**, L. Colbert, D. Berrigan, J. Lavigne, S. N. Perkins, R. Pfeiffer, E. Lanza, D.C. Haines, A. Schatzkin, S. D. Hursting. Calorie restriction and Diet Composition Modulate Spontaneous Intestinal Tumorigenesis in *ApcMin* Mice Through Different Mechanisms. Cancer Research. 2003; **63**:1752-1755
4. L. Colbert, **V.Mai,** S. Perkins, D. Berrigan, J. Lavigne, H. Wimbrow, P.Srinivas, S. Hursting Exercise and intestinal polyp development in APCMin mice. Medical Science Sport and Exercise. 2003;**35**:1662-1669
5. **V. Mai**,H.A. Katki, H. Harmsen, D. Gallaher, A. Schatzkin, D. J. Baer, B. Clevidence. Effects of a controlled diet and black tea drinking on the fecal microflora composition and the fecal bile acid profile of human volunteers in a double-blinded randomized feeding study. Journal of Nutrition. 2004;**134**:473-478
6. **V. Mai**, J.G. Morris. Colonic Bacterial Flora: Changing Understandings in the Molecular Age. Journal of Nutrition. 2004;**134**:459-464
7. **V. Mai**. Dietary Modification of Intestinal Microbiota. Nutrition Reviews. 2004;**62**: 235-242
8. **V. Mai**, A. K. Kant, A. Flood, J.V. Lacey Jr., C. Schairer, and A. Schatzkin. Diet quality and subsequent cancer incidence and mortality in a prospective cohort of women. International Journal of Epidemiology. 2005;**34**:54-60
9. J. Nataro, **V. Mai**, J. Johnson, W.C. Blackwelder, R. Heimer, S. Tirrell, S.E. Edberg, C.R. Braden, J.G. Morris Jr., J.M. Hirshon. Diarrheagenic E. coli in Baltimore and New Haven. Clinical Infectious Diseases 2006; **43**(4):402-7
10. H. Trachtman, E. Christen, A. Cnaan, J. Patrick, **V. Mai**, J. Mishra, A. Jain, N. Bullington, P. Devarajan. Urinary neutrophil gelatinase-associated lipocalcin in D+HUS: a novel marker of renal injury. Pediatric Nephrology 2006;21(7):989-94
11. L. H. Colbert, **V. Mai**, J. A. Tooze, S. N. Perkins, David Berrigan, S.D. Hursting. Voluntary Wheel Running Inhibits Polyp Development in APCmin Mice. Carcinogenesis 2006;**27**(10):2103-7
12. N.A. Cornick, A.F. Helgerson, **V. Mai**, V. Sharma, J.M. Ritchie and D.W.K. Acheson. In vivo transduction of stx-encoding phage in ruminants. Applied and Environmental Microbiology 2006;**72**:5086-5088
13. **V. Mai**, B. Greenwald, J. G. Morris, Jr., JP Raufman, O. C. Stine. Effect of bowel preparation and colonoscopy on post-procedure intestinal microbiota composition. Gut 2006;**55**(12):1822-3
14. **V. Mai**, C.R. Braden, J.Heckendorf, B. Pironis, J.M.Hirshon. Monitoring of stool microbiota in subjects with diarrhea indicates distortions in its composition. Clin. Microbiol. 2006;**44**(12):4550-2
15. J.C. Lunn, G. Kuhnle, **V. Mai**, C. Frankenfeld, D.E. Shuker, R.C. Glen, J.M. Goodman, J.R. Pollock, S.A.Bingham. The effect of haem in red and processed meat on the endogenous formation of N-nitroso compounds in the upper gastrointestinal tract. Carcinogenesis. 2007;28:685-690
16. **V. Mai**, L. H. Colbert, S. N. Perkins, A. Schatzkin, S.D. Hursting. Intestinal Microbiota: A Potential Diet-Responsive Prevention Target in ApcMin mice. Molecular Carcinogenesis. 2007; **46**(1):42-8
17. A. Flood, **V. Mai**, R. Pfeiffer, L. Kahle, A. T. Remaley, E. Lanza, A. Schatzkin. Elevated serum concentrations of insulin and glucose increase risk of recurrent of colorectal adenomas. Gastroenterology 2007;133(5)1423-9
18. A. Flood, **V. Mai**, R. Pfeiffer, L. Kahle, A. T. Remaley, C. J. Rosen, E. Lanza, A. Schatzkin. The Effectsof a High-Fruit and Vegetable, High-Fiber, Low-Fat Dietary Intervention on Serum Concentrations of Insulin, Glucose, IGF-I, and IGFBP-3. European Journal Clin. Nutr. 2008; **62**(2):186-
19. A. Flood,**V. Mai**, R. Pfeiffer, L. Kahle, C.J. Rosen, E. Lanza, A. Schatzkin. Serum concentrations of insulin-like growth factor and insulin-like growth factor binding protein 3 and recurrent colorectal adenomas. Cancer Epidemiol Biomarkers Prev. 2008; **17**(6):1493-8.
20. Mshvildadze, M., J. Neu, and **V. Mai**. Intestinal microbiota development in the premature neonate: establishment of a lasting commensal relationship? Nutr Rev. 2008; **66**:658-663.
21. Neu, J., M. Mshvildadze, and **V. Mai**. A roadmap for understanding and preventing necrotizing enterocolitis. Curr Gastroenterol Rep. 2008.**10**:450-457.
22. **V.Mai** and P. V. Draganov. Recent advances and remaining gaps in our knowledge of associations between gut microbiota and human health. World J Gastroenterol 2009 **15**:81-85.
23. Young, C., R. Sharma, M. Handfield, **V. Mai**, and J. Neu. Biomarkers for Infants at Risk for Necrotizing Enterocolitis: Clues to Prevention? Pediatr Res. 2009;65:91R-97R
24. Roesch, L. F., G. L. Lorca, G. Casella, A. Giongo, A. Naranjo, A. M. Pionzio, N. Li, **V. Mai**, C. H. Wasserfall, D. Schatz, M. A. Atkinson, J. Neu, and E. W. Triplett. Culture-independent identification of gut bacteria correlated with the onset of diabetes in a rat model. ISME J 2009; 3:536-48.
25. **V.Mai,** Q.M. McCrary,R. Sinha and M.Glei. Associations between dietary habits and body mass index with gut microbiota composition and fecal water genotoxicity: an observational study in African American and Caucasian American volunteers. Nutr. J. 2009;8:49
26. Mshvildadze, M., J. Neu, J. Schuster, D. Theraque, N. Li and **V. Mai**. Intestinal Microbial Ecology in Premature Infants Assessed with Non-Culture-Based Techniques. J. Pediatr. 2010;156:20-25
27. **V. Mai**, M. Ukhanova, L.Visone, T. Abuladze,and A. Sulakvelidze. Bacteriophage Administration Reduces the Concentration of Listeria monocytogenes in the Gastrointestinal Tract and ItsTranslocation to Spleen and Liver in Experimentally Infected Mice. Intern. J. Microbiol. 2010; doi:10.1155/2010/624234
28. **V. Mai**, M. Ukhanova, D. Baer. Understanding the Extent and Sources of Variation in Gut Microbiota Studies; a Prerequisite for Establishing Associations with Disease. Diversity 2010, 2(8), 1085-1096; doi:10.3390/d2091085

32. Y. Sun, Cai, Y., **V. Mai,** Farmerie, W., Yu, F., Li, J., Goodison, S. Advanced

 computational algorithms for microbial community ananlysis using massive 16S

 rRNA sequence data. Nucleic Acids Research. 2010. 38 (22): e205.

33. C. Hughes, Davoodi-Semiromi, Y., Colee, JC, Culpepper,T., Dahl, W., **V. Mai,**

 Christman, MC. and Langkamp-Henken, B. Galactooligosaccharide supplementation

 reduces stress-induced gastrointestinal dysfunction and days of cold or flu: a

 randomized, double-blind, controlled trial in healthy university students. AJCN. 2011. 93(6):1305-11. doi: 10.3945

34. J.M. Hirshon, Thompson, AD., Limbago, B., McDonald, LC.,Bonkosky, M., Heimer,

 R., Meek, J., **V. Mai**, V., C. Braden, Outpatient C.difficile Infection in Baltimore,MD

 and New Haven, CN. Emerging Infectious Diseases. 2011.17:1946

35. **V. Mai**, Young CM.,Ukhanova, M., Wang, X., Sun, Y., Casella, G., Theriaque, D.,

 Li, N., Sharma, R.,Hudak, M., J. Neu. Fecal Microbiota in Premature Infants Prior to

 Necrotizing Enterocolitis. PLoS ONE 2011 6(6) e20647. doi:10.1371

36. Y. Sun, Cai, Y., Wang, X. Farmerie, W., Knight, R., **V. Mai**. A Large-scale

 Benchmark Study of Existing Algorithms for Taxonomy-Independent Microbial

 Community Analysis. Briefings in Bioinformatics. 2012. 13:107 PM:21525143

37. M. Ukhanova, M. Culpepper, T., Baer, D., Gordon, D., Kanahori, S., Valentine, J.Neu, J., Sun, Y. Wang, X. and **V. Mai**. Gut microbiota correlates with energy gain from dietary fibre and appears to be associated with acute and chronic intestinal diseases. Clin. Microbiol. and Infection. 2012; 18S: 62-66

38. X. Wang, X. , Cai, Y., Sun, Y., Knight, R. and **V Mai**. Secondary structure information does not improve OTU assignment for partial 16S rRNA sequences. ISME. 2012. 6, 1277–1280; doi:10.1038/ismej.2011.187

39. B. Langkamp-Henken, C. Nieves, Jr., T. Culpepper #, A. Radford, S. Girard, C. Hughes, M. C. Christman, **V. Mai**, W. J. Dahl, T. Boileau, S.S. Jonnalagadda and F.Thielecke. Fecal Lactic Acid Bacteria Increased inAdolescents Randomized to whole-Grain but not Refined-Grain Foods, whereas Inflammatory Cytokine Production decreased Equally with Both Interventions. J. Nutrition 2012; 142:2025-32 doi10.3945/jn.112.164996)

40. T. Culpepper and **V.Mai**. Evidence for Contributions of Gut Microbiota to Colorectal

 Carcinogenesis. Curr Nutr. Rep. 2012; doi 10.1007/s13668-012-0032-0

41. **V.Mai**, R.M. Torrazza, M. Ukhanova, X. Wang, Y. Sun, N. Li, J. Schuster, R. Sharma, M.L. Hudak, J. Neu. Distortions in Development of Intestinal Microbiota Associated with Late Onset Sepsis in Preterm Infants. PLoS ONE 2013; 8(1) e52876

42. X. Wang, J. Yao. Y. Sun and **V. Mai**. M-pick, a modularity-based method for OTU picking of 16S rRNA sequences. BMC Bioinformatics. 2013, 14:43 doi:10.1186 IF 3.0

43. V.Antharam, E. Li, A.Ishmael, A.Sharma, **V. Mai**, K. Rand, and G.Wang. Intestinal dysbiosis and depletion of butyrogenic bacteria in Clostridium difficile infection and nosocomial diarrhea. Journal of Clinical Microbiology 51(9):2884-92 IF4.1

44. R.M. Torrazza, N. Li, C. Young, F. Kobeissy, M.Chow, S.Chen, **V. Mai**, R. Sharma, M.Hudak, J. Shuster and J. Neu. Pilot Study Using Proteomics to Identify Predictive Biomarkers of Necrotizing Enterocolitis From Buccal Swabs In very low Birth Birth Weight Infants. Neonatology 2013;104:234-242 IF 2.6

45. B.Lindsay†, M.Pop†, M. Antonio†, A. W. Walker†, **V.Mai†,** D. Ahmed†,J.Oundo†, B. Tamboura†, S. Panchalingam, M. M. Levine, K. Kotloff, S. Li, L.Magder, J. N. Paulson, B.Liu, U. Ikumapayi, C. Ebruke, M. Dione,M.Adeyemi, R. Rance, M. D. Stares, M. Ukhanova, B. Barnes, I. Lewis, F. Ahmed, M. Taifur Alam, R.Amin, S. Siddiqui, J.B. Ochieng, E.Ouma, J.Juma, E. Mailu, R.Omore, C.E. O’Reilly, J. Hannis, S. Manalili, J. DeLeon, I.Yasuda, L. Blyn, R. Ranken, F. Li, R.Housley, D. Ecker, M. A. Hossain‡, R.F. Breiman‡, J. G. Morris‡, T. McDaniel‡, J. Parkhill‡,D. Saha‡, R. Sampath‡, O. C. Stine‡, J.P. Nataro‡. Alternative Methods of Bacterial Pathogen Detection: Culture, GoldenGate®, Universal Biosensor®, 16S rRNA-Gene Survey. J. Clin. Microbiol. (published online ahead of print on 24 July 2013) IF 4.1

46. **V. Mai.** Health Benefits Mediated by Probiotics - How Can we Better Establish

 Them? J Prob Health 2013, 1:3

47. R.M. Torrazza, M. Ukhanova, N. Li, , R. Sharma, M.Hudak, J. Shuster, J. Neuand **V. Mai**. Intestinal Microbial Ecology and Environmental Factors Affecting Necrotizing Enterocolitis. PLosONE 2013 doi:10.1371 IF 3.7

48. M. Ukhanova, X.Wang, D. J. Baer, J. A. Novotny, M. Fredborg, V.Mai. Effects of almond and pistachio consumption on gut microbiota composition in a randomized cross-over human feeding study BJN 2014; 18:1-7 (epub ahead of print) IF 3.45

49. D. Hickman, M. K. Jones, S. Zhu, E. Kirkpatrick, D. A. Ostrov, X. Wang, M. Ukhanova, Y. Sun, **V. Mai**, M.Salemi, and S. M. Karst. The Effect of Malnutrition on Norovirus Infection mBio 2014 mBio 5(2):e01032-13 IF 5.7

50. R.Sharma, D.F. Kraemer, R.M. Torrazza, **V. Mai**, J.Neu, J. Shuster,M. L. Hudak. Packed Red Blood Cell Transfusion Is Not Associated with Increased Risk of

 Necrotizing Enterocolitis in Premature Infants. J. Perinatology 2014

51. D. J. Baer, K.S. Stote, T.Henderson, D. R. Paul, K, Okuma, H.Tagami, S. Kanahori, D.T. Gordon, W.V. Rumpler, M. Ukhanova, T. Culpepper, X. Wang, **V. Mai** Metabolizable Energy Value of Resistant Maltodextrin in Diets Consumed by Adult Men Is Variable and Consistent with Other Fiber Sources and Resistant Maltodextrin Consumption Alters Fecal Microbiota Composition. J Nutr. 2014: (epub ahead of print)

52. A. Hanfi, T. Culpepper, **V. Mai**, A. Anand, A.L. Ford, M. Ukhanova, M. Christman, T.A. Tompkinson, W. Dahl. Evaluation of B. Subtilis RO179 on gastrointestinal viability and general wellness: a randomized, double-blind, placebo-controlled trial in healthy adults. Beneficial Microbes 2014 doi:10.3920

53. M.Pop, A.W. Walker, J. Paulson, B. Lindsay, M. Antonio, M. A.Hossain, J. Oundo, B.Tamboura, **V.Mai**, I.Astrovskaya, H. C. Bravo, R.Rance, M.Stares, M. M. Levine, S. Panchalingam, K.Kotloff, U. N Ikumapayi, C.Ebruke, M.Adeyemi, D. Ahmed, F. Ahmed, M.T. Alam, R. Amin, S. Siddiqui, J.B Ochieng, E. Ouma, J. Juma, E. Mailu, R.Omore, J. G.Morris, R.F Breiman, D. Saha, J.Parkhill, J. P. Nataro and O. C.Stine. Diarrhea in young children from low-income countries leads to large-scale alterations in intestinal microbiota composition. Genome Biology 2014 15:R76 IF 10.3

54. S. J. Spaiser , T. Culpepper, C. Nieves Jr. , M.Ukhanova , **V.Mai**, S.S. Percival,

 M.C. Christman, B.Langkamp-Henken. Lactobacillus gasseri KS-13, Bifidobacterium bifidum G9-1, and Bifidobacterium longum MM-2 ingestion induces a less inflammatory cytokine profile and a potentially beneficial shift in gut microbiota in older adults: a randomized, double-blind, placebo-controlled, crossover study. JACN 2014 Vol. 0, No. 0, 1–11

55. J.Yao, Q. Mao, S. Goodison, **V. Mai,** Y. Sun. Feature selection for unsupervised learning through local learning. Pattern Recognition Letters. 2015, 100-107. DOI:10.1016/j.patrec.2014.11.006

56. **V.Mai**, M. Ukhanova, M. Li, M. Reinhard and A. Sulakvelidze. Bacteriophage

 administration significantly reduces Shigella colonization and shedding by Shigella-

 challenged mice without deleterious side effects and altering the gut microbiota. Bacteriophage 2015 DOI: 10.1080/21597081.2015.1088124

57. A.T. Garrison, Y. Abouelhassan, D.Kallifidas, F. Bai, M. Ukhanova, **V. Mai**, S. Jin, H. Luesch and R.W. Huigens III. Halogenated Phenazines that Potently Eradicate Biofilms, MRSA Persister Cells in Non-Biofilm Cultures, and Mycobacterium tuberculosis. Angewandte Chemie Intern. Edition 2015 DOI:10.1002/anie.201508155

58. M. Qi, Y. Cai, Z. Wei, **V.Mai**, Y. Sun. Parallel Hierarchical Clustering in Linearithmic Time for Large-Scale Sequence Analysis IEEE ICDM 2015

59. W. Dahl, A.M. Ford, J.A. Coppola, D. Lopez, W. Combs, A. Rohani, M. Ukhanova, T. Culpepper, T. Tompkins, B. Langkamp-Henken and **V.Mai**. Calcium Phosphate Supplementation Increases Fecal Lactobacillus spp. in a Randomized Trial of Young Adults. Beneficial Microbes 2016. 7(1):3-10 DOI: 10.3920/BM2014.0168

60. W.J. Dahl, A.Ford, M. Ukhanova, R. Ali, A. Radford, M. Christman, **V. Mai**. Resistant potato starch (RS4) influences laxation with phylum level changes in microbiota: a randomized study in young adults. Br.J. Nutr. 2016 DOI: 10.1016/j.jff.2016.02.013

61. A. Burns, M. Zitt, B. Langkamp-Henken, **V. Mai**, M. Ukhanova and W. Dahl. Diet quality improves for parents and children when almonds are incorporated into their daily diet: a randomized, crossover study. Nutrition research 2016 DOI:10.1016/j.nutres.2015.11.004

62. **V. Mai**, M. Prosperi, L. Yaghjyan. Moving microbiota research towards establishing causal associations that represent viable targets for effective public health interventions Annals of Epidemiology Microbiome Symposium 2016 DOI:10.1016/j.annepidem.2016.03.011

63. De. Oliveira, F.P., Mendes, R.H., P. Dobbler, **V. Mai**, V. Pylro, Refasco, L.F., L. Roesch, I. Schwartz. Phenylketonuria and gut microbiota: a controlled study based on next-generation sequencing. PLosOne 2016 DOI:10.1371/journal.pone.0157513

64. **V. Mai**, S. Waugh, D. Byrd, D. Simpson, M. Ukhanova. Novel encapsulation improves recovery of probiotic strains in fecal samples of human volunteers. Appl Microbiol Biotechnol 2016

DOI 10.1007/s00253-016-7915-8

65. R.G. Burrus, J. A. Hogsette, P. E. Kaufman, J. E. Maruniak, A.H. Simonne, **V. Mai**. Prevalence

of Escherichia coli O157:H7 From House Flies (Diptera: Muscidae) and Dairy Samples in North

 Central Florida. J.Med.Entomology 2016 DOI: <http://dx.doi.org/10.1093/jme/tjw205>

66. L. Roesch, R. C. Silveira, A. L. Corso, P. T. Dobbler, **V. Mai**, B. S. Rojas, Á. M. Laureano,

R. S. Procianoy. Diversity and composition of vaginal microbiota of pregnant women at

risk for transmitting Group B Streptococcus treated with intrapartum penicillin 2017 PONE-D-16-

 34100R2

67. J. C. Dennis-Wall, T. Culpepper, C. Nieves, C.C. Rowe, A. M., Burns, C. T. Rusch, A. Federico,

 M. Ukhanova, S. Waugh, **V. Mai**, M.C. Christman5 and B. Langkamp-Henken (2017). Probiotics

 (Lactobacillus gasseri KS-13, Bifidobacterium bifidum G9-1 and Bifidobacterium longum MM-

2) improve rhinoconjunctivitis-specific quality of life in individuals with seasonal allergies: a

double-blind, placebo-controlled, randomized trial. The American Journal of Clinical Nutrition.

2017 105(3), 758-767

68. M. Pammi, J. Cope, P..I Tarr, B. Warner, A. Morrow, **V. Mai**, K.E Gregory, S. Kroll, V.

 McMurtry, M. Ferris, L. Engstrand, H. Engstrand Lilja, E. B Hollister, J.X Versalovic, J. Neu.

 Intestinal Dysbiosis in Preterm Infants Preceding Necrotizing Enterocolitis: A Systematic Review

and Meta-analysis. Microbiome 2017

69. Y. Cai, W. Zheng, J. Yao, Y. Yang,**V. Mai,** Q. Mao,Y. Sun. ESPRIT-Forest: Parallel Clustering

of Massive Amplicon Sequence Data in Subquadratic Time. PLOS Computational Biology

2017

70. P. I. Costea , G.Zeller1, S.Sunagawa1, E. Pelletier , A.Alberti, F. Levenez, M. Tramontano,

M. Driessen, R. Hercog, F.-E. Jung, J. R. Kultima, M. R. Hayward, L. P. Coelho, E. Allen-

Vercoe, L.Bertrand, M. Blaut, J. Brown, T.Carton, S. Cools-Portier, M. Daigneault, M. Derrien,

A.Druesne, W.M. de Vos , B. B. Finlay, H. J. Flint, F. Guarner, M. Hattori, H.Heilig, R. A. Luna,

J. van Hylckama Vlieg, J. Junick, I. Klymiuk, P.Langella, E. Le Chatelier, **V. Mai**,

C. Manichanh, J. C. Martin, C. Mery, H. Morita, P. O’Toole, C. Orvain, K. R. Patil, J. Penders,

S. Persson, N. Pons, M.Popova, A. Salonen, D. Saulnier, K. P. Scott, B. Singh, K. Slezak,

P. Veiga, J.Versalovic, L. Zhao, E.G. Zoetendal, S. D. Ehrlich, J. Dore, P. Bork. Towards

standards for human fecal sample processing in metagenomic studies. Nature Biotechnology

2017 35(11):1069-1076

71. P. Dobbler, R. Procianoy, **V. Mai**, R.Silveira, A.Corso, B. Rojas, L. Roesch. Low microbial

 diversity and abnormal microbial succession is associated with Necrotizing Enterocolitis in

 preterm infants. Frontiers in Microbiology 2017 15;8:2243 DOI:10.3389/fmicb.2017.02243

72. D.Li, T. Gehrke. **V. Mai** and L. Yaghjyan. Interactions of family history of breast cancer with

 radiotherapy in relation to the risk of breast cancer recurrence. Journal of Breast Cancer

2017 20(4): 333–339

73. A.H.C van Bruggen, M. He, K. Shin, **V. Mai**, K.C. Jeong, M.R. Finckh, J.G. Morris.

Environmental and health effects of the herbicide glyphosate. Science of the Total Environment. 2018 616-617: 255-268

74. S. Rich., K. Egan, L. Mao, **V. Mai**, L. Yaghjyan. Interactions of coffee consumption and

postmenopausal hormone use in relation to breast cancer risk in UK Biobank. Cancer Causes &

Control 2018 29(6):519-525

75. A. Burns, R.Solch, J.D. Wall, **V.Mai**, M.Ukhanova, D.Gordon, C.Nieves, M. Christman,

B. Langkamp-Henken. In healthy adults resistant maltodextrin produces a greater change in fecal

bifidobacteria counts and increases stool wet weight: a double-blind, randomized, controlled

crossover study. Nutrition Research doi 10.1016/j.nutres.2018.09.007

76. S. Markland, T. A. Weppelmann, Z. Ma1, S. Lee, R. A. Mir, L. Teng, A.Ginn, C. Lee, M.

Ukhanova, S. Galindo, C. Carr, N. DiLorenzo5, S. Ahn, J.-H. Mah, H.-Y. Kim, **V. Mai**, R.

Mobley, J. G. Morris, and K.C. Jeong. High Prevalence of CefotaximeResistant Bacteria in

 Grazing Beef. Cattle: A Cross Sectional Study. Frontiers in Microbiology

77. J. L. Pope, Y. Yang, R. C. Newsome, W.Sun, X. Sun, M.Ukhanova, J.Neu, J.-P. Issa, **V. Mai**, and

C. Jobin. Microbial Colonization Coordinates the Pathogenesis of a Klebsiella pneumoniae Infant

 Isolate" Scientific Reports 2019

78. A. T. Wijayabahu, S. G. Waugh, M. Ukhanova and **V. M**ai. Dietary raisin

intake has limited effect on gut microbiota composition in adult volunteers. Nutrition Journal 2019 18:14 https://doi.org/10.1186/s12937-019-0439-1

79. A.Santos de Freitas; P.C. Thiago Dobbler; **V.Mai**; R.S. Procianoy;

R. C Silveira; A. Lúcia Corso; L. Roesch. Defining microbial biomarkers for risk of

preterm labor. Brazilian Journal of Microbiology (accepted July 2019)

80. A. Zanella, R. C Silveira, L. F. Wurdig Roesch, A. L. Corso, P.Thiago Dobbler, **V. Ma**i,

R. S.Procianoy. Influence of own mother´s milk and different proportions of formula on intestinal microbiota of very preterm newborns PONE (accepted May 19)

81. J. C. Dennis-Wall, A. M. Burns, R. J. Solch, M.Ukhanova, W. J. Dahl, M. C. Christman, T.

Boileaud, M. Brauchlad, J.-E Shin, C. Nieves, Jr., **V. Mai**, B. Langkamp-Henken. A beverage

containing orange pomace improves laxation and modulates the microbiome in healthy adults: a

randomised, blinded, controlled trial” Journal of Functional Foods (accepted June 2019)

82. P. Dobbler; **V. Mai**, R. Soibelmann Procianoy; R. Cássia Silveira

A.L. Corso; L. F.Wurdig Roesch. The vaginal microbial communities of healthy expectant

Brazilian mothers and its correlation with the newborn’s gut colonization. World Journal of

Microbiology and Biotechnology (accepted October 2019)

83. U.A. Dissanayake, M. Ukhanova, Z. D. Moye, A. Sulakvelidze and **V. Mai**. Bacteriophages

reduce pathogenic Escherichia coli counts in mice without distorting gut microbiota. Frontiers

in Microbiology 2019 <https://doi.org/10.3389/fmicb.2019.01984>

84. M.S. Tagliamonte, S. G. Waugh, M. Prosperi, **V. Mai,** An Integrated Approach for Efficient

 Multi-Omics Joint Analysis. In Proceedings of the 10th ACM International Conference on

Bioinformatics, Computational Biology and Health Informatics 2019 (pp. 619-625).

85. S.M. Boyles, C. N. Mavian, E. Finol, M. Ukhanova, C. J.

Stephenson1,6,8\*\*, Gabriela Hamerlinck1,7,8, Seokyoung Kang1,2,8, Caleb Baumgartner9,

M. Geesey, I. Stinton, K. Williams, D.K. Mathias, M. Prosperi,

**V. Mai**, M. Salemi, E. A. Buckner, J. A. Lednicky, A. R.

Rivers, R R. Dinglasan. Under-the-radar dengue virus infections in natural

populations of Aedes aegypti mosquitoes. BioRxiv 2020

86. E. Klann, M. Ukhanova, M. Tagliamonte, V. Vedam-Mai, **V. Mai**. A study of gut microbiota

 dynamics in Parkinsonian mice. ACS Chem. Neurosci. 2020, 11, 20, 3267–3276

87. E. Klann, M. Ukhanova, M. Tagliamonte,L.Yaghjyan, **V.Mai**. Microbiota composition in

bilateral healthy breast tissue and breast tumors, Cancer Causes and Control 2020

doi: 10.1007/s10552-020-01338-5

88. S. Rich. E. Klann, V. Richards, A.T. Wijayabah, B. Vaughn. **V.Mai**, R. Cook. A review of

potential microbiome-gut-brain axis mediated neurocognitive conditions in persons living with

HIV. Brain Behav Immun Health. 2020 Nov 2;9:100168.doi: 10.1016/j.bbih.2020.100168

89. L.Yaghjyan; **V. Mai**; X.Wang; M. Ukhanova; M. Tagliamonte; Y. C. Martinez; S. N. Rich; K. M.

Egan. Gut microbiome, body weight, and mammographic breast density in healthy postmeno-pausal women. Cancer Causes Control.2021 Jul;32(7):681-692.doi: 10.1007/s10552-021-01420-6

90. C. Rusch, M.Beke, L. Tucciarone, K. Dixon, C. Nieves Jr.,**V. Mai**, T.Stiep, T. Tholanikunnel,

A. Ramirez-Zamora, C. Hess, B. Langkamp-Henken. The effect of a Mediterranean diet

intervention ongastrointestinal function in Parkinson’s disease(the MEDIPD study): study protocol for a randomized controlled trial. BMJ Open. 2021 Sep 22;11(9):e053336. doi: 10.1136/bmjopen-2021-053336

91. C. Rusch; M. Beke; L.Tucciarone; C. Nieves; M. Ukhanova; M. S. Tagliamonte; **V. Mai**; Joon H. Suh; Y. Wang; S. Chiu; B. Patel; A.Ramirez-Zamora; B.Langkamp-Henken

Mediterranean diet adherence in people with Parkinson’s disease reduces constipation symptoms and changes fecal microbiota after a 5-week single-arm pilot study. Frontiers in Neurology December 2021doi: [10.3389/fneur.2021.794640](https://doi.org/10.3389/fneur.2021.794640)

92. A. T. Wijayabahu, A.M. Mickle, **V. Mai**, C. Garvan , T.L. Glover,

R. L. Cook, J. Zhao, M. K. Baum, R. B. Fillingim, and K. T. Sibille. Associations between Vitamin D, Omega 6:Omega 3 Ratio, and Biomarkers of Aging in

Individuals Living with and without Chronic Pain.Nutrients. 2022 Jan 9;14(2):266.

doi: 10.3390/nu14020266

93. L.V. Dornelles, R.S.Procianoy, L.F. Roesch, A. Corso, P. T. Dobbler, **V. Mai**, R.C.L.

Silveira. Meconium microbiots predicts clinical early-onset neonatal sepsis in preterm neonates.

J Matern Fetal Neonatal Med. 2022 May;35(10):1935-1943.doi:10.1080/14767058.2020.1774870

94. **V. Mai**, A.M. Burns, R.J. Solch, J.C. Dennis-Wall, M. Ukhanova, B. Langkamp-Henken.

Resistant Maltodextrin Consumption in a Double-Blind, Randomized, Crossover Clinical Trial

Induces Specific Changes in Potentially Beneficial Gut Bacteria. Nutrients. 2022 May 25;14(11):2192.doi: 10.3390/nu14112192

95. R.J. Solch-Ottaianoa, T.C. Judkinsa, S.H. Matotta, C. E. McDermotta,

C.Nieves, Jr., Y.Wanga, J. Coleec, M. S. Tagliamontede, U. Dissanayakee, **V.Mai**, S.S. Percival, B. Langkamp-HenkenaHigh polyphenolic cranberry beverage alters fecal microbiota but not gut permeability following aspirin challenge in healthy obese adults: A randomized, double-blind, crossover trial. J. of Functional Foods. 2022

Books/Book Chapters:

1. **V.Mai** and J.Wiegel. Recombinant DNA applications in Thermophiles. **In:** Manual of Industrial Microbiology, 2nd edition. 1998. p. 511-519. ASM Press Washington DC

2. **V. Mai**, M. Pop, M. Schell. Metagenomic Analysis of Human Gut Microbiota. **In**:Metagenomics, R. Li (editor), 2011. Nova

3. J.Neu, C. Young and **V. Mai**. The developing intestinal microbiome: Implications for the neonate. In: Avery's Diseases of the Newborn, 9/e, Ch. 72 Gleason/Devaskar, 2012. Elsevier

4. J. Neu and **V.Mai**. The Developing Intestinal Microbiome and its Relationship to Health and Disease. In: Gastroenterology and Nutrition. Neonatology Questions and Controversies. Ch. 5 p.59-67 2nd edition. 2012. Saunders and imprint of Elsevier

5. T. Culpepper, M. Ukhanova, D. Baer, S. Kanahori, K. Okuma, H. Tagami, D. Gordon and **V. Mai**. Fecal microbiota composition is affected by resistant maltodextrin, and bifidobacteria counts correlate with energy gain. In: Dietary Fiber and Health. Ch 19. 269-278. 2012. CRC press

Letters/Communications:

1. **V. Mai**, J.G. Morris, O.C. Stine. Timing in Collection of Stool Samples. Science 2005;310:218

2. **V. Mai**, J.G. Morris. Need for Prospective Cohort Studies to Establish Human Gut

 Microbiome Contributions to Disease Risk. JNCI 2013. 105:1850-51

3. **V. Mai**, O.C. Stine. Bowel preparation for colonoscopy: Relevant for the gut's microbiota. Gut 2015

 doi:10.1136/gutjnl-2014-308937

**Presentations**

1.M.Engle, J.Brill, S.DeBlois, **V.Mai**, F.Rainey and J.Wiegel (1994) Anaerobic

 alkali- thermophiles, a novel group of fast growing bacteria. Abstracts IUMS 7th

 Intern. Congress of Bact. and Appl. Microbiol. Division

2. **V.Mai** and J.Wiegel (1996) Transfer and expression of ADH and PDC from *Z.mobilis* in *Thermoanaerobacterium* JW/SL-YS485. Thermophile 96 poster abstracts

3. **V.Mai**, W.Lorenz and J.Wiegel (1996) Development of a genetic system for the Gram-type positive, thermophilic anaerobe *Thermoanaerobacterium* JW/SL-YS485. Ann. Meet. ASM abstracts #O-75

4. **V.Mai** and J.Wiegel (1997) Transfer and expression of two mannanases in *Thermoanaerobacterium* JW/SL-YS485. Southeastern Branch ASM abstracts

5. **V.Mai** and J.Wiegel (1997) Transfer and expression of heterologous genes in *Thermoanaerobacterium* JW/SL-YS485. Ann**.** Meet. ASM abstracts # O-45

6. **V.Mai** and J.Wiegel (1998) Cloning into Anaerobic Thermophiles Ann. Meet. SIM abstracts #P-85

7. **V.Mai** and J.Wiegel (1998) Expression of mannanases and cellulases in *Thermoanaerobacterium* JW/SL-YS485. Ann. Meet. ASM abstracts # O-63

8. **V. Mai**, A.Flood, J. V. Lacey Jr., C. Schairer, E. Lanza, , and A. Schatzkin.

 Dietary Fiber and CRC in the BCDDP follow-up cohort. 2001, AACR #4103

9. **V. Mai**, A. Schatzkin, and S. Hursting. Effects of calorie restriction, diet composition, and exercise in a genetic mouse model (MIN) of intestinal cancer. **(invited speaker)** 2002 FASEB

10. **V. Mai**, B. Clevidence, and A. Schatzkin. Effects of a controlled diet and black

 tea drinking on the fecal flora composition of human volunteers in a double-

 blinded randomized feeding study. 2002 American Society for Microbiology #3136

1. **V. Mai**, L. Colbert, D. Berrigan, J. Lavigne, P. Srinivas, S. N. Perkins, R. Pfeiffer, E. Lanza, A. Schatzkin, S. D. Hursting. Effects of calorie restriction and diet composition on intestinal carcinogenesis in *ApcMin* (Min) mice. 2002 AACR Frontiers in Cancer Prevention Research # B302
2. **V. Mai** Dietary modification of colonic bacteria **(invited speaker)** 2003 FASEB
3. **V. Mai**, A. Patel, H. Zeytin, J. Greiner, S. Perkins, S. Hursting. Effects of a calorie restricted diet and a low risk diet on intestinal flora composition and immune parameters in a dietary prevention study of intestinal carcinogenesis in *ApcMin* (Min) mice. 2003 American Society for Microbiology E-120
4. **V. Mai** **(invited speaker)** 2003 Intestinal microflora and carcinogenesis. Grand rounds. Iowa State University
5. **V. Mai** **(invited speaker)** L. Colbert, A. Patel, H. Zeytin, J. Greiner, S. N. Perkins, S. D. Hursting. Caloric restriction, microbial flora and immune status. 2004 AACR Colon Cancer in Murine Models and Humans.
6. **V. Mai** **(invited speaker)** The role of the intestinal microflora in colorectal carcinogenesis. 2004 GI Grand Rounds UMB, Baltimore, MD
7. **V. Mai** **(invited speaker)** The role of the intestinal microflora in colorectal carcinogenesis. 2004 Conference on statewide academic health center’s cancer initiatives. Baltimore, MD
8. J.M.Hirshon, L.Harris. R. Heimer. J. Meek, **V. Mai**, C. Braden. Unexplained diarrhea sentinel surveillance. 2004 Intern. Conference on Emerging Diseases
9. A. Flood, **V. Mai**, R. Pfeiffer, L. Kahle, A. Remaley, C. Rosen, E. Lanza, A. Schatzkin. Effects of a High-Fiber, High-Fruit and Vegetable, Low-Fat Dietary Intervention on Serum Concentrations of Insulin, Glucose, IGF-I and IGFBP-3. 2004 Society for Epidemiological Research
10. **V. Mai** **(invited speaker)** Diet, Intestinal Microflora and Carcinogenesis. 2004 Longrifles Prostate Cancer and Inflammation. JHU, Baltimore, MD
11. L. Colbert, **V. Mai**, S. Perkins, J. Tooze, S. Hursting. Voluntary exercise decreases intestinal tumor burden in *ApcMin* (Min) mice. ACSM 2005
12. N. Cornick , A. Helgerson, J. Ritchie, K. Strauss, D. Acheson, **V. Mai**. In vivo transduction of stx-encoding phage in a ruminant model. 2005 American Society for Microbiology
13. **V. Mai**. H. Harmsen, J.Nataro, S. Gill, G.W. Welling, G. Morris, C.Stine. Comprehensive characterization of the fecal microflora of a human volunteer. 2005 American Society for Microbiology, Beneficial Microbes
14. Q. McCrary, Q. Lin, C. J. Boushey, R. Sinha, and **V. Mai.** Diet and microflora composition in African American and Caucasian American residents of the Eastern Shore of Maryland. 2005 American Institute for Cancer Research
15. Q. McCrary, Q. Lin, C. J. Boushey, R.Sinha, C. Frankenfeld and **V. Mai.** Diet mediated differences in fecal microflora composition as a potential factor contributing to the high burden of CRC in African Americans. AACR Cancer Prevention Conference 2005
16. **V. Mai** **(invited speaker)** The role of the intestinal microbiota in colorectal carcinogenesis. Cancer Prevention Fellowship Lecture, National Cancer Institute 2005
17. V.Mai **(invited speaker)** Intestinal microbiota and colorectal carcinogenesis. Purdue University 2006
18. L. Sansbury, A. Flood, A. Bergen, **V. Mai**, M. Cantwell, A. Schatzkin, E. Lanza. DNA repair gene polymorphisms, insulin resistance, and risk of adenomatous polyp recurrence. Keystone 2006
19. A. Flood, **V. Mai**, R. Pfeiffer, L. Kahle, A. T. Remaley, C. J. Rosen, E. Lanza, A. Schatzkin. Serum Insulin, Glucose, IGF-I, and IGFBP-3 and recurrence of colorectal adenomas. North American Congress of Epidemiology 2006
20. **V. Mai** **(invited speaker)** Potential contributions of the human microbiota to increased colorectal cancer risk in African Americans. Departmental Lecture. Department of Epidemiology and Preventive Medicine, Univ. of MD 2006
21. **V. Mai** **(invited speaker)** The potential contributions of the human microbiota to carcinogenesis. Viral Epidemiology Branch, Div. of Cancer Epidemiology and Genetics, NCI 2006
22. A. D. Winchester, D.Boucaud, C. Timmons, T. and **V.Mai**. Development of a new cell line used to screen for Upstream Stimulatory Factor (USF) modulating protein. 2006 AACR General meeting abstract #888
23. **V.Mai**, Microbiota in health and disease. Planning group on foodborne diseases. Institute of Medicine 2007 **(invited speaker)**
24. Gut microbiota and infectious diseases. ICDDR research day, Bangladesh 2007 **(invited lecture)**
25. Administration of specific bacteriophage for the prevention of foodborne disease. American Society for Microbiology Beneficial Microbes 2008
26. Gut microbiota and colorectal carcinogenesis. American Society for Preventive Ecology Annual Meeting 2009 **(invited speaker)**
27. **V.Mai,** M. Ukhanova, D. Baer. S. Kanhori, D. Gordon. Effects of RM on fecal microbiota. EB 2009
28. M. Mshvildadze, N. Li, M. Ukhanova, J. Neu, **V. Mai**. Comprehensive Pyrosequencing Based Analysis of Fecal Microbiota Composition in Preterm Infants. Pediatrics Annual eeting 2009
29. **V. Mai**, M. Ukhanova\*, D. Baer, K. Okuma, H. Tagami, S. Kanahori, D. Gordon. Effects of RM on fecal microbiota composition. FASEB J. 2009 23:719.9
30. C. Nieves, K. Herrlinger, A. Byard\*, M. Ukhanova, V. Mai, B. Langkamp-Henken. FOS alters microbiota. FASEBJ. 2009 23:907.3
31. D. Baer, V. Mai, K. Okuma, H. Tagami, S. Kanahori, D. Gordon. W. Rumpler. Metabolizable energy value of RM. FASEB J. 2009 23:541.4
32. A. Shore, C. Nieves\*, A. Maki, M. Ukhanova, **V. Mai**, R. Cousins, B. Langkamp-Henken. Effects of zinc deficiency on colonic microbiota. FASEB J. 2010,
33. V. Mai. The growth and diversity of the (intestinal) microbiotia as affected by dietary fiber. Vahouny Fiber symposium, Washington DC 2010 **(invited lecture and panelist)**
34. T.Culpepper, M. Ukhanova, **V.Mai**. Gut microbiota associated with colorectal polyp prevalence. American Society for Microbiology Annual Meeting 2010
35. V. Mai. New 16S rRNA Sequence Data Mining Tools Help Identify Gut Microbes Associated with Colorectal Polyp Prevalence. INRA Gut Microbiology, Aberdeen 2010 **(invited speaker)**
36. V. Mai. National Cancer Institute (NCI) workshop, "Human Microbiome, HIV Infection and Cancer" Bethesda, MD September 2010 **(invited speaker)**
37. V. Mai. 18th Scientific Symposium of the Lilly Foundation entitled "Microbiome: Discovering the last human body organ” Madrid, Spain 2010 ( **invited speaker**)
38. V. Mai. Metagenomic Studies of Microbiota and Human Health. 2011 EMBL Heidelberg, Germany (**invited lecture**)
39. V. Mai. Microbiota Changes Associated With Onset of Necrotizing Enterocolitis. Human Microbiome Conference, Vancouver, Canada 2011 (**selected speaker**)
40. **V.Mai**, M. Ukhanova, T. Culpepper, X. Wang, D. Baer. Human gut microbiota changes after consumption of almonds or pistachios EB 2012
41. T. Culpepper, S. Girard, W. Dahl, B. Langkamp-Henken, **V. Mai**. Effects of GOS on the gut microbiota of aged adults EB 2012
42. S. Girard, T. Culpepper, W. Dahl, **V. Mai**, B. Langkamp-Henken. GOS decrease the probability of upper respiratory tract infection EB 2012
43. B. Langkamp-Henken, S. Girard, **V. Mai**, W. Dahl. Immune Modulating Nutraceuticals and Functional Foods EB2012
44. R. Murgaz Torrazza, **V. Mai**, R. Sharma, M. Hudak, D. Schuster, J. Neu. Buccal Swab IL-1ra in Necrotizing Enterocolitis: A Predictive Marker. EB 2012
45. R. Murgaz Torrazza, **V. Mai**, M.Ukhanova, R. Sharma, M. Hudak, D. Schuster, J. Neu. Alteration in Intestinal Microbiota and NEC in Very Low Birth Weight Infants. PAS13
46. **V.Mai**, M. Ukhanova, R. Sharma, R. Murgaz Torrazza M. Hudak, D. Schuster, J. Neu. Distortions in fecal microbiota development correlate with Late Onset Sepsis (LOS) and Necrotizing Enterocolitis (NEC) in Preterm Infants. Microbiome Elsevier, Lisboa, Portugal 2013
47. T.Culpepper, V. Vedam-Mai, M. Ukhanova, X. Wang, **V. Mai**. Investigating Microbiota Contributions to Colorectal Polyp Prevalence. ASM 2013
48. **V.Mai**. Associations between gut microbiota and colorectal carcinogenesis. Moffitt Cancer Center, Infectious carcinogenesis group. 2013 (**invited lecture**)
49. **V.Mai**. Study Design, Bioinformatics and Biostatistics Challenges in Microbiota Studies. UF Genetics Institute. 2013 (**invited lecture**)
50. **V.Mai** Linking fiber intake with microbiota associated health benefits. IFT13. 2013 **(invited lecture)**
51. T. Culpepper, J.-A. Coppola, D. Lopez, A.Rohani, **V. Mai**, W.Dahl. The Effect of Calcium Supplementation on Gastrointestinal Survival of Lactobacillus ssp. Probiotics 2013
52. M. Ukhanova, **V. Mai**, M. Li, J. Woolston, C. Carter and A. Sulakvelidze. Phagebiotics: bacteriophages as new class of probiotics for managing gut microflora. Probiotics, Roma 2013
53. G. Hinkley, T. Ngo, M. Ukhanova, J. Munson, **V.Mai**, S. Roberts. Investigating the influence of oral exposure to silver nanoparticles on intestinal microbiota in non-human primates. American. Soc. of Toxicology 2014
54. G. Hinkley, T. Ngo, M. Ukhanova, J. Munson, S. Roberts, **V.Mai**. Investigating the influence of oral exposure to silver nanoparticles on intestinal microbiota in non-human primates. EPI Research Day 2014
55. A. Anand, M. Ukhanova, V. Mai, W. Dahl, A. Ford. The Effect of Pea Hull Fiber on Microbiota Composition. EPI Research Day 2014
56. T. Culpepper, S.J. Spaiser, C. Nieves, Jr., M. Ukhanova, N. Mohamad, **V. Mai**, S. S. Percival, M.C. Christman, B.Langkamp-Henken. Bifidobacterium bifidum G9-1, Bifidobacterium longum MM2, and Lactobacillus gasseri KS-13 ingestion induces a potentially beneficial shift in gut microbiota and impacts cell-mediated immunity in older adults: a randomized, double-blind, placebo-controlled, cross-over study. EB2014
57. **V.Mai**. Study Design, Bioinformatics and Biostatistics Challenges in Microbiota Studies. Soy Board of America 2014 (**invited lecture**)
58. T. Culpepper, M. Ukhanova, X. Wang, Y. Sun, **V. Mai**. Associations between diet, gut microbiota and markers of CRC risk. Metabolism and Cancer 2014
59. T. Culpepper, M. Ukhanova, L. Yaghjyan, S. Sites, Y. Sun, M. Prosperi, **V. Mai**. Correlations between diet, gut microbiota and epithelial methylation pattern with CRC risk. AACR Frontiers in Cancer Prevention research 2014 DOI: 10.1158/1940-6215.PREV-14-A31
60. **V.Mai**. Challenges in linking gut microbiota to relevant health measures. Moffitt Cancer Center grand Rounds 2014 (**invited lecture**)
61. J. L. Pope, Y.Yang, X. Sun, M. Ukhanova, J. Neu, **V. Mai**, C. Jobin. A clinical isolate of Klebsiella from infants with NEC induces colonic inflammation. AGA 2015 #Su 1874
62. Linking diet and gut microbiota with mechanisms affecting colorectal carcinogenesis, a need for new 'big data' approaches. Shands Health Cancer Center 2015 **(invited lecture)**
63. Tree Nuts and the Gut: Supporting a Healthy Microbiota 12th European Nutrition Conference Berlin, Germany 2015 **(invited lecture)**
64. J.C. Dennis, T. Culpepper, C. Nieves Jr., M. Ukhanova, **V. Mai**, M. Christman, B. Langkamp-Henken. Probiotics and Health related Quality of life in individuals with seasonal allergies EB 2016 # D389
65. **V.Mai.** Contributions of Gut Microbiota to Health Benefits of Dietary FiberEB 2016
66. **V.** **Mai**, S. Waugh, D.J. Simpson, F.R. Hadjimiry, M. Ukhanova. Consumption of roasted chick peas results in increased excretion of oral bacteria in feces. EB 2016 #D61
67. A. Wijayabahu**,** S. Waugh, M. Ukhanova, A. Carughi, **V. Mai** Effects of sun-dried raisin consumption on fecal microbiota compositionEB2017
68. C. Mavian, S. Kang, M. Ukhanova, E. Buckner, S. M. Boyles, D. K. Mathias, M. Salemi, **V. Mai**, M. Prosperi, R. Dinglasan. Metagenomic identification of natural Wolbachia infection of Floridian *Aedes aegypti*. EPI Research Day 2018
69. R.S. Procianoy, A. Zanella, A. Corso, R.C. Silveira, **V. Mai**, L. Roesch. Preterm infants’ fecal microbiota in the neonatal period fed exclusively with own’s mother milk. Pediatric Academic Science conference 2018
70. Establishing Causality in Microbiota Research ICEID 2018, Atlanta GA invited speaker
71. B. Langkamp-Henken, J. C. Dennis-Wall, A.M. Burns, R. J. Solch, M. Ukhanova, W. J. Dahl, M. C. Christman, T. Boileau, M.Brauchla, J.-E Shin, C. Nieves, Jr., **V. Mai** Effects of orange pomace fibre on measures of digestive health **FE**NS 2019
72. R. J. Solch, M. Beke, M. Ukhanova, **V. Mai,** B. Langkamp-Henken, Differing Associations Between the Most Abundant Genera of the Fecal Microbiome and Sex, Fiber Intake Score, Stress, Stool Consistency and BMI in Healthy Young Adults. P24-043-20 NUTRITION 2020
73. E. Klann, J. Williamson, M. Tagliamonte, M. Ukhanova, H. Chim, J. R.,Asirvatham, L. Yaghjyan, **V. Mai.** Differences in microbiota between tumor and normal breast tissue AACR microbiome March 2020
74. M.S. Tagliamonte, S. G. Waugh, M. Prosperi, **V. Mai,** An Integrated Approach for Efficient

Multi-Omics Joint Analysis. In Proceedings of the 10th ACM International Conference on

Bioinformatics, Computational Biology and Health Informatics.