Michael Lindsey Pennell

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ACADEMIC PREPARATION:

Ph.D. in Biostatistics, University of North Carolina at Chapel Hill, May, 2006

- Concentrations: Bayesian methodology, longitudinal data analysis, statistical applications in epidemiology and environmental health
- Dissertation: Bayesian Semiparametric Methods for Longitudinal, Multivariate, and Survival Data
- Advisor: Dr. David B. Dunson, currently at Duke University

M.S. in Biostatistics, University of North Carolina at Chapel Hill, 2002

- Master's Thesis: Identification of Multivariate Outliers in Environmental Data
- Advisor: Dr. Lawrence L. Kupper

Bachelor of Science, University of Puget Sound, Tacoma, WA, 2000

• Biology major, Math minor

HONORS AND AWARDS:

- James E. Grizzle Distinguished Alumnus Award, Department of Biostatistics, UNC-Chapel Hill, 2016.
- Excellence in Teaching Award, The Ohio State University College of Public Health, 2014
- Kupper Dissertation Publication Award, Department of Biostatistics, UNC-Chapel Hill, 2007
- Intramural Research Training Award, National Institute of Environmental Health Sciences, 2004-2006
- Student Paper Award, ASA Section on Bayesian Statistical Science, 2005
- Runner-up, Student Merit Award in Dose Response, Society for Risk Analysis, 2004
- Student Travel Award, Society for Risk Analysis, 2004
- Special Commendation, PhD Part II Exam, Dept. of Biostastics, UNC-Chapel Hill, 2003
- Predoctoral Trainee in Environmental Biostatistics, funded by the National Institute of Environmental Health Sciences, 2000-2003
- Delta Omega, Public Health Honors Society, UNC-Chapel Hill, 2002
- Graduated with honors in Biology, Magna Cum Laude, Univ. Puget Sound, 2000
- Phi Beta Kappa, National Honors Society, Univ. Puget Sound, 2000

RESEARCH INTERESTS:

- Design and analysis of Group Randomized Trials
- First hitting time models for survival analysis
- Joint modeling outcomes of different scales
- Nonparametric Bayes
- Statistical methods in toxicological risk assessment
- Statistical applications in biomedical research including cancer prevention, pathology, and veterinary medicine.

EXPERIENCE:

Associate Professor. Summer 2014-Present

Division of Biostatistics, College of Public Health, The Ohio State University

Assistant Professor, Fall 2006-Spring 2014

Division of Biostatistics, College of Public Health, The Ohio State University

Postdoctoral Trainee. Summer 2006

Biostatistics Branch, National Institute of Environmental Health Sciences

Mentor: Dr. David B. Dunson

Predoctoral Trainee, 2004-2006

Biostatistics Branch, National Institute of Environmental Health Sciences

Mentor: Dr. David B. Dunson

Research Assistant, 2001-2003

Energy Expenditures of Physical Activities in Youth (EEPAY) and Cardiovascular Health in Children (CHIC) studies (Dr. Joanne Harrell, P.I.)

School of Nursing, University of North Carolina at Chapel Hill

Grader, Fall 2002 and 2003

Probability and Statistical Inference I

Dept. of Biostatistics, University of North Carolina at Chapel Hill

Lecturer: Dr. Anastasia Ivanova

Teaching Assistant, Spring 2002

Principles of Statistical Inference

Dept. of Biostatistics, University of North Carolina at Chapel Hill

Lecturer: Dr. Craig Turnbull

Undergraduate Trainee, Summer 1998 and 1999

Department of Environmental Microbiology

Pacific Northwest National Laboratory, Richland, WA

Mentor: Dr. James Fredrickson

COURSES TAUGHT (all at The Ohio State University)

- A Problem Oriented Approach to Biostatistics. Spring 2008-2012.
- Design and Analysis of Studies in the Health Sciences I. Fall 2009, 2014, and 2017.
- Design and Analysis of Studies in the Health Sciences II. Spring 2007, 2013-2015.
- Introduction to SAS. Winter 2009.
- Practical Biostatistics for Biomedical Laboratory Researchers. Summer 2007-2009.
- Regression Methods in the Health Sciences. Fall 2012-2015.
- Advanced Regression Modeling for Time to Event Data (survival course for Biostat PhD students). Spring 2016, 2018, 2020.
- Applied Survival Analysis. Spring 2017, 2019.

DOCTORAL STUDENTS

- David Angeles, Biostatistics (2020-present). Tentative Dissertation Title: Bayesian Frailty Models for Eye Tracking Data.
- Woobeen Lim, Biostatistics (2018-present). Tentative Dissertation Title: Bayesian Semiparametric Joint Modeling of Longitudinal Predictors and Discrete and Categorical Outcomes.
- Sara Conroy, Co-Advisor, Epidemiology (Graduated 2019). Dissertation Title: A Novel Approach for Modeling Time to Event Data in Maternal Child Health. Current Position: Research Scientist, The Ohio State University Wexner Medical Center.
- Jonathan Race, Biostatistics (Graduated 2019). Dissertation Title: Semi-Parametric Survival Analysis via Dirichlet Process Mixtures of the First Hitting Time Model. Current Position: Research Scientist at Eli Lilly.
- Tao Xiao, Biostatistics (Graduated 2015). Dissertation Title: Bayesian Threshold Regression for Current Status Data with Informative Censoring. Current Position: Assistant Professor at Shenzhen University in China.
- Beom Seuk Hwang, Biostatistics (Graduated 2013). Dissertation: Semiparametric Bayesian Joint Modeling with Applications in Toxicological Risk Assessment. Runner-up, 2013 Student Paper Award, Risk Analysis Section of the American Statistical Association. Current Position: Associate Professor, Chung-Ang University, Seoul, South Korea.
- Roger Erich, Biostatistics (Graduated 2012). Dissertation: Regression Modeling of Time to Event Data using the Ornstein-Uhlenbeck Process. Current Position: Epidemiologist/Biostatistician, Solutions Through Innovative Technologies, Inc.

NATIONAL SERVICE:

Government:

- Committee to Review the Revised NTP Monograph on Systematic Review of Fluoride Exposure and Neurodevelopmental and Cognitive Health Effects, National Academies of Sciences, Engineering and Medicine, 2020
- Scientific Advisory Committee on Chemicals, Ad hoc member for review of Perchloroethylene, U.S. EPA, 2020
- Committee to Review the NTP Monograph on Systematic Review of Fluoride Exposure and Neurodevelopmental and Cognitive Health Effects, National Academies of Sciences, Engineering and Medicine, 2019

- Committee to Evaluate the IRIS Protocol for Inorganic Arsenic, Committee Member, National Academies of Sciences, Engineering and Medicine, 2019
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel, Ad hoc member, U.S. EPA, 2017
- Chemical Safety Advisory Subcommittee for 1-Bromopropane, U.S. EPA, 2016
- Libby Amphibole Asbestos Scientific Advisory Board Review Panel, U.S. EPA, 2012
- Trichloroethylene Scientific Advisory Board Review Panel, U.S. EPA, 2010

Professional Societies:

- Memberships:
 - o American Statistical Association (Sections on Bayesian Statistical Science, Biometrics, Risk Analysis)

Offices held:

- o Program Chair Elect, Section on Risk Analysis, American Statistical Association, 2015
- o Program Chair, Section on Risk Analysis, American Statistical Association, 2016
- o Chair Elect, Section on Risk Analysis, American Statistical Association, 2017
- o Chair, Section on Risk Analysis, American Statistical Association, 2018
- o Past Chair, Section on Risk Analysis, American Statistical Association, 2019
- o Co-chair of organizing committee for Bernard Harris Memorial Symposium: Risk in the 21st Centurty, May 10-11 2018, Raliegh, NC, www.harrissymposium.com

Other Service:

- o Reviewer, Section on Risk Analysis Student Paper Award, American Statistical Association, 2015-2019 (Chair in 2017).
- o Reviewer, Section on Bayesian Statistical Science Student Paper Award, American Statistical Association, 2014

Conferences:

- Organized invited session: "Bayesian Analysis Methods for Contemporary Study Designs in Toxicological Risk Assessment," Joint Statistical Meetings, Virtual Meeting, 2020.
- Organized topic contributed session: "Bayesian Statistical Methods for High-Throughput Toxicity Testing and Risk Assessment," Joint Statistical Meetings, Denver, CO, 2019.
- Organized invited session: "Time-to-Event Models for Human Health Risk Assessment," Conference on Lifetime Data Science, Storrs, CT, 2017.
- Organized topic contributed session: "Time-to-Event Models for Studies with Informative Censoring, Truncation, or Drop-out," Joint Statistical Meetings, Chicago, IL, 2016.
- Organized topic contributed session: "Recent Developments in the Design and Analysis of Cluster Randomized Trials," Joint Statistical Meetings, Boston, MA, 2014.
- Organized topic contributed session: "Stochastic models for longitudinal and survival data," Joint Statistical Meetings, San Diego, CA, 2012.
- Chaired contributed session: "Robust estimation for skewed and heavy tailed distributions," Joint Statistical Meetings, Denver, CO, 2008.

• Chaired and organized invited session: "Hierarchical modeling in environmental exposure and toxicological risk assessment," Spring Meeting of the Eastern North American Region of the International Biometrics Society, Arlington, VA, 2008.

Reviewer Positions:

- **Associate Editor:** Lifetime Data Analysis, 2014-Present
- Statistical Reviewer: Magnetic Resonance in Medicine, 2013-2014
- Article Reviewer (Frequency): Bayesian Analysis (1), Biometrical Journal (2), Biometrics (3), BMC Medicine (1), Computational Statistics and Data Analysis (2), Contemporary Clinical Trials (1), Environment International (1), Environmental Toxicology (1), Health Education and Behavior (1), Journal of the Royal Statistical Society, Series C (1), Journal of Statistical Computation and Simulation (3), Lifetime Data Analysis (3), Lung Cancer (1), Methodology and Computing in Applied Probability (1), Pediatric Research (1), Progress in Transplantation (1), Psychometrika (1), Scandinavian Journal of Statistics (1), Statistics and Computing (1), Statistics in Medicine (4), Toxicological Sciences (1)

UNIVERSITY COMMITTEES

- Biomedical Informatics Graduate Studies Committee, Fall 2013-Spring 2016.
- Grant Reviewer, Ohio State Comprehensive Cancer Center Intramural Research Program, 2014-2020.
- Biomedical Internal Review Board, The Ohio State University, Fall 2006-Winter 2007.

COLLEGE COMMITTEES

- College of Public Health Graduate Studies Committee, The Ohio State University, Fall 2011-Spring 2014.
- College of Public Health ISAC (information science advisory committee) committee, The Ohio State University, Winter 2011-Spring 2013.
- College of Public Health Research Day Planning Committee, 2016-2018.

DIVISION COMMITTEES

- Graduate Studies Committee, Interdisciplinary PhD Program in Biostatistics, The Ohio State University, Fall 2020-Summer 2020.
- Graduate Studies Chair, Interdisciplinary PhD Program in Biostatistics, The Ohio State University, Fall 2018-Summer 2020.
- Seminar Chair, Division of Biostatistics, College of Public Health, The Ohio State University Spring 2015-Fall 2017.
- Admissions committee, Interdisciplinary PhD Program in Biostatistics, The Ohio State University, Fall 2008-Spring 2011, Spring 2014-Spring 2018.
- Biostatistics chair search committee, College of Public Health, The Ohio State University, Fall 2007-Spring 2008, Fall 2014-Spring 2015.
- Graduate studies committee, Joint PhD Program in Biostatistics, The Ohio State University, Fall 2008-Spring 2011, Spring 2014-Spring 2018.
- Division of Biostatistics faculty search committee, The Ohio State University, Fall 2012-Spring 2013, Fall 2017-Spring 2018.

- Admissions committee (chair), Division of Biostatistics, The Ohio State University, Fall 2006-Spring 2008.
- Combined Biostatistics PhD program committee, Division of Biostatistics, The Ohio State University, Fall 2006-Spring 2007.
- Website committee, Division of Biostatistics, The Ohio State University, Fall 2006-Spring 2007.

GRANTS AND CONTRACTS:

Current, PI:

P01CA229143 04/11/2019-03/31/2024

NIH

Improving uptake of cervical cancer prevention services in Appalachia

Overall PI: Electra Paskett

Role: Core 3 (Biostatistics and Evaluation) Principal Investigator

Current, Co-I:

54605499 (Paskett) 12/20/2019-01/01/2022

Pfizer Inc

Turning the page on breast cancer

PI: Electra Paskett Role: Co-Investigator

Effort: 5%

UG3CA233282 09/19/2018-07/30/2023

University of Kentucky (NIH Prime)

Accelerating Colorectal Cancer Screening through Implementation Science (ACCSIS) in Appalachia

PI: Mark Dignan Role: Co-Investigator

Effort: 10%

UL1TR002733 06/29/2018-05/31/2023

NIH

The OSU Center for Clinical and Translational Science: Advancing Today's Discoveries to Improve

Health

PI: Rebecca Jackson Role: Co-Investigator

Effort: 5%

R01CA229306 06/07/2018-05/31/2021

NIH

Graphic and text-based warning labels to combat harm misperceptions.

MPI: Amy Ferketich/Marielle Brinkman

Role: Co-Investigator

Effort: 8%

Contract# SA-2016-11531

12/01/2017-07/31/2021

Sanofi-aventis

Effectiveness of a diabetes focused discharge order set among poorly controlled hospitalized patients transitioning to glargine U300 insulin.

PI: Kathleen Dungan Role: Co-Investigator

Effort: 8%

AGRMT DTD 10/02/2008

10/01/2006-09/30/2019

Breast Cancer Research Foundation

Breast Cancer Prevention through Nutrition Program

PI: Electra Paskett Role: Co-Investigator

Effort: 10%

P30 CA016058

12/01/2017 -11/30/2018

National Cancer Institute

OSU comprehensive cancer center support grant

PI: Michael Caliguiri Role: Co-Investigator

Effort: 5%

Past, PI:

18IPA1816723

09/01/2018-08/31/2019

NIOSH/CDC

Investigation of novel non-parametric Bayesian methodologies to link in vitro dose-response assays to longer term in vivo studies.

Role: PI Effort: 20%

Research Institute at Nationwide Children's Hospital

01/01/2010 - 12/31/2010

Infant Pulmonary Structure and Function Group Role: PI of memorandum of understanding (MOU)

Effort: 15%

351605

10/01/2009 - 09/30/2010

Research Institute at Nationwide Children's Hospital

Prime: Cystic Fibrosis Foundation (NCH PI: Robert Castile)

Changes in Lung Structure and Function in Children with Cystic Fibrosis

Role: Principal Investigator of Subcontract

Effort: 7.5%

343604

10/01/2009 - 09/30/2010

Research Institute at Nationwide Children's Hospital

Prime: Genentech (NCH PI: Robert Castile)

Efficacy of Pulmozyme in Infants and Young Children with Cystic Fibrosis

Role: Principal Investigator of Subcontract

Effort: 7.5%

University of Maryland 09/01/2006 - 08/31/2009

Prime: NIOSH/CDC, R01 OH008649 (PI: Mei-Ling Ting Lee) Threshold regression methodology for cancer risk assessment

Role: PI of Subcontract

Effort: 10%

Past, Co-I:

R21MD012800 08/22/2018-03/31/2019

NIH

A secondary analysis to identify HPV vaccination disparities across Hispanic subgroups in the United

States

PI: Paul Reiter

Role: Co-Investigator

Effort: 10%

R01CA134451 07/18/2014 - 05/31/2018

National Cancer Institute

Computer-based assessment of tumor microenvironment (TME) in Follicular Lymphoma.

PI: Metin Gurcan Role: Co-Investigator

Effort: 10%

Fred Hutchison Cancer Research Center 02/15/2013 - 01/31/2018

Prime: National Cancer Institute (1UM1CA173642-01, PI Anderson)

Women's Health Initiative Cancer Survivor Cohort

PI: Electra Paskett Role: Co-Investigator

Effort: 10%

2P50CA105632-06 04/01/2010 - 03/31/2016

National Cancer Institute, NCI

Reducing Cervical Cancer in Appalachia

PI: Electra Paskett

Role: Co-Investigator of Measurement and Analysis Core

Effort: 13%

1R01HL102450-01 04/01/2010 - 03/31/2015

National Heart, Lung, and Blood Institute, NIH Exercise Stress Cardiovascular Magnetic Resonance

PI: Orlando Simonetti Role: Co-Investigator

Effort: 10%

R01 HL095563 05/01/2009 -04/30/2014

National Heart, Lung, and Blood Institute/NIH

Iron and Atherosclerosis

PI: Subha Raman Role: Co-Investigator

Effort: 12%

Karyopharm Therapeutics

08/08/2011 - 09/30/2013

Evaluation of the biologic activity of CRM1 inhibitors against canine cancer cell lines

PI: Cheryl London Role: Co-Investigator

Effort: 1% Academic in 2012; 4% Academic in 2013

Pfizer Inc

11/01/2010-11/30/2013

Impact of Palladia/Piroxicam/Cyclophosphamide maintenance therapy on the survival time of dogs with appendicular osteosarcoma following amputation and carboplatin chemotherapy

PI: Cheryl London Role: Co-Investigator

Effort: 17% (Summer 2013 Only)

Tufts Medical Center

04/01/2013 - 12/31/2013

Patient Navigator Research Program

PI: Electra Paskett Role: Co-Investigator

Effort: 4% Academic and 3% Summer

1R01CA134451-01A1

05/01/2009 -02/28/2013

National Cancer Institute/NIH

Computer-Assisted Grading and Risk Stratification of Follicular Lymphoma

PI: Metin Gurcan Role: Co-Investigator

Effort: 12.5%

R01 CA116487

05/24/2007 - 02/28/2012

National Cancer Institute/NIH

Enhancing Colorectal Cancer Screening in Primary Care (TIME)

PI: Electra Paskett Role: Co-Investigator

Effort: 5%

R24 MD002785

05/28/2008 -01/31/2013

National Institutes of Health

CBPR Strategies to Increase Colorectal Cancer Screening in Ohio Appalachia

PI: Electra Paskett Role: Co-Investigator

Effort: 5%

D09CA-500 07/01/2009 - 06/30/2012

Morris Animal Foundation

Biologic Activity of the Curcumin Analog FLL32 Against Canine Osteosarcoma

PI: Cheryl London Role: Co-Investigator

Effort: 5%

UL 1RR025775 05/19/2008 - 04/30/2010

National Center for Research Resources/NIH

The Ohio State University Center for Clinical and Translational Science, Biostatistics Core

Role: Co-Investigator

Effort: 4%

1R21CA141603-01 08/13/2009 - 06/30/2011

National Cancer Institute, NIH

Examining the effect of a provider-delivered intervention among Medicaid smokers

PI: Amy Ferketich Role: Co-Investigator

Effort: 7.5%

AGMT DTD 11/05/2009

09/25/2009-06/30/2010

EXCMR Ltd.

Exercise stress cardiac magnetic resonance imaging

PI: Jennifer Dickerson Role: Co-Investigator

Effort: 5%

P50 CA015632-05S2

09/01/2007 - 08/31/2010

National Cancer Institute, NIH

Reducing cervical cancer in Appalachia (METHODOLOGICAL SUPPLEMENT)

PI: Electra Paskett Role: Co-Investigator

Effort: 15%

NCMHD/ R24MD002785

09/19/2008 - 01/31/2010

Supplement for regional seminar series on health disparities, CBPR strategies to increase colorectal cancer screening in Ohio Appalachia

PI: Electra Paskett Role: Co-Investigator

Effort: 5%

Joint Microchip Study

01/01/2008-12/31/2008

Bayer Health Care/Schering-Plough Home Ag

Evaluation of scanner sensitivity in detecting microchips of different frequencies in dogs and cats under controlled and shelter field conditions.

PI: Linda Lord Role: Co-PI Effort: 10%

Agrmnt dtd 11/5/07

01/01/2008-12/31/2008

AM ANIMAL HOSPITAL ASSOCIATION FDN

Evaluation of scanner sensitivity in detecting microchips of different frequencies in dogs and cats under controlled and shelter field conditions.

PI: Linda Lord Role: Co-PI Effort: 0%

P50-CA015632

09/30/2003-08/31/2008 (Supported 8/08)

National Cancer Institute/NIH

Reducing cervical cancer in Appalachia.

Core B: Biostatistics (Core PI: S. Lemeshow)

Role: Statistician, Biostatistics Core (36% for one summer month)

STATISTICAL METHODOLOGY PUBLICATIONS

Published or In press (15):

Race, J. (PhD Student), **Pennell, M.L. (corresponding author)**. (2020). Semi-parametric survival analysis via Dirichlet Process mixtures of the first hitting time model. *Lifetime Data Analysis*. In press.

Nattino, G., **Pennell, M.L.**, and Lemeshow, S. (2020). Assessing the goodness of fit of logistic regression models in large samples: a modification of the Hosmer-Lemeshow Test. *Biometrics*. **76**, 549-560.

Hwang, B.S. (PhD student) and **Pennell**, **M.L.** (2018). Semiparametric Bayesian joint modeling of clustered binary and continuous outcomes with informative cluster size in developmental toxicity assessment. *Environmetrics*. **29**, e2526.

Xi, W. (MS student), **Pennell, M.L. (corresponding author)**, Andridge, R.A., and Paskett, E.D. (2018). Comparison of intent-to-treat strategies for pre-post studies with loss to follow-up. *Contemporary Clinical Trials Communications*. **11**, 20-29.

Erich, R. (PhD student) and **Pennell, M.L. (corresponding author)** (2015). Ornstein-Uhlenbeck threshold regression models for time to event data with and without a cure fraction. *Lifetime Data Analysis*. **21**, 1-19.

Hwang, B.S. (PhD student) and **Pennell**, **M.L.** (2014). Semiparametric Bayesian joint modeling of a continuous and binary outcome with applications in toxicological risk assessment. *Statistics in Medicine*. **33**, 1162-1175.

Guo, Y. (MS student), **Pennell, M.L.**, Pearl, D.K., Knobloch, T.J., Fernandez, S., and Weghorst, C.M. (2013). The choice of reference gene affects statistical efficiency in quantitative PCR data analysis. *Biotechniques.* **55**, 207-209.

Paul, P., **Pennell, M.L. (corresponding author)**, and Lemeshow, S. (2013). Standardizing the power of the Hosmer-Lemeshow goodness of fit test in large datasets. *Statistics in Medicine*. **32**, 67-80.

Xu, X., **Pennell, M.L.** (corresponding author), Lu, B., and Murray, D.M. (2012). Efficient Bayesian joint models for group randomized trials with multiple observation times and multiple outcomes. *Statistics in Medicine.* **31**, 2858-2871.

Pennell, M.L., Hade, E.M., Murray, D.M., and Rhoda, D.A. (2011). Cutoff designs for community-based intervention studies. *Statistics in Medicine*. **30**, 1865-1882.

Yu, L., Gulati, P., Fernandez, S.A., **Pennell, M.**, Kirschner, L., and Jarjoura, D. (2011). Fully moderated t-statistic for small sample size gene expression arrays. *Statistical Applications in Genetics and Molecular Biology.* **10**, Article 42.

Pennell, M.L., Whitmore, G.A., and Lee, M.-L.T. (2010). Bayesian random effects threshold regression with application to survival data with non-proportional hazards. *Biostatistics*. **11**, 111-126.

Pennell, M.L. and Dunson, D.B. (2008). Nonparametric Bayes testing of changes in a response distribution with an ordinal predictor. *Biometrics* **64**, 413-423.

Pennell, M.L. and Dunson, D.B. (2007). Fitting semiparametric random effects models to large data sets. *Biostatistics* **8**, 821-834.

Pennell, M.L. and Dunson, D.B. (2006). Bayesian semiparametric dynamic frailty models for multiple event time data. *Biometrics* **62**, 1044-1052.

Under Review (1):

Lim, W. (PhD Student), **Pennell, M.L.**, Naughton, M., and Paskett, E.D. Bayesian semiparametric modeling of longitudinal predictors with mixed scale and a binary outcome. Submitted to *Statistics in Medicine*.

PUBLICATIONS IN BIOMEDICAL JOURNALS (74):

Statistical Review Papers (2)

Rhoda, D.A., Murray, D.M., Andridge, R.R., **Pennell, M.L.,** and Hade, E.H. (2011). Studies with Staggered Starts – Multiple Baseline Designs and Group Randomized Trials. *American Journal of Public Health.* **101**, 2164-2169.

Murray, D.M., **Pennell, M.**, Rhoda, D., Hade, E.M., and Paskett, E.D. (2010). Designing studies that would address the multilayered nature of health care. *Journal of the National Cancer Institute Monographs*. **40**, 90-96.

Cancer Prevention and Survivorship (27)

- Reiter P.L., **Pennell M.L.**, Martinez, G.A., Perkins R.B., and Katz M.L. (2020). Provider recommendation for HPV vaccination across Hispanic/Latinx subgroups in the United States. *Human Vaccines and Immunotherapeutics*. In press.
- Reiter P.L., **Pennell M.L.**, Martinez, G.A., Perkins R.B., and Katz M.L. (2020). HPV vaccine coverage across Hispanic/Latinx subgroups in the United States. *Cancer Causes and Control.* **31**, 905-914.
- Lucas, F., **Pennell, M.**, et al. (2020). T-cell transcriptional profiling and immunophenotyping uncover LAG3 as a potential significant target of immune modulation in multiple myeloma. *Biol Blood Marrow Transplant.* **26**, 7-15.
- Paskett, E., **Pennell, M.**, et al. (2020). A multi-level model to understand cervical cancer disparities in Appalachia. *Cancer Prevention Research.* **13**, 223-228.
- Beverly, C.M. Naughton, M.J., **Pennell, M.L.**, et al. (2018). Change in longitudinal trends in sleep quality and duration following breast cancer diagnosis: Results from the Women's Health Initiative. *NPI Breast Cancer.* **4,** 15.
- Hastert, T.A., Young, G.S., **Pennell, M.L.**, et al. (2018). Financial burden among older, long-term cancer survivors: Results from the LILAC study. *Cancer Medicine*. **7**, 4261-4272.
- Reeves, K.W., **Pennell, M.L.**, et al. (2018). Predictors of vasomotor symptoms among breast cancer survivors. *Journal of Cancer Survivorship*. **12**, 379-387.
- Paskett, E.D., Caan, B.J., Johnson, L., Bernardo, B.M., Young, G.S., **Pennell, M.L.**, et al. (2018). The Women's Health Initiative (WHI) Life and Longevity after Cancer (LILAC) Study: description and baseline characteristics of participants. *Cancer Epidemiology, Biomarkers, and Prevention.* **27**, 125-137.
- Krok-Schoen, J., Bernardo, B., Weier, R., Peng, J., Katz, M., Reiter, P., Richardson, M., **Pennell, M.**, Tatum, C., Paskett, E. (2018). Belief about mandatory school vaccinations and vaccination refusal among Ohio Appalachian parents: Do demographic and religious factors, general health, and political affiliation play a role? *Journal of Rural Health.* **34**, 283-292.
- Katz M.L., Young G.S., Reiter P.L., **Pennell M.L.**, et al. (2017). Process evaluation of cancer prevention media campaigns in Appalachia Ohio. *Health Promotion Practice.* **18**, 201-210.
- Paskett, E.D., Krok-Schoen, J.L., **Pennell, M.L.**, et al. (2016). Results of a multilevel intervention trial to increase Human Papillomavirus (HPV) vaccine uptake among adolescent girls. *Cancer Epidemiology, Biomarkers, and Prevention.* **25**, 593-602.

- Katz, M.L., Reiter, P.L., Young, G.S., **Pennell, M.L.**, Tatum, C.M., and Paskett, E.D. (2015). Adherence to multiple cancer screening tests among women living in Appalachia Ohio. *Cancer, Epidemiology, Biomarkers, and Prevention.* **24**, 1489-1494.
- Krok-Schoen, J., Katz, M.L., Oliveri, J., Young, G., **Pennell, M.**, Reiter, P., Plascak, J., Slater, M.D., Krieger, J., Tatum, C.M., and Paskett, E.D. (2015). A media and clinic intervention to increase colorectal cancer screening in Ohio Appalachia. *BioMed Research International*. Article number 943152.
- Krok-Schoen, J.L., Young, G.S., **Pennell, M.L.**, Reiter, P.L., Katz, M.L., Post, D.M., Tatum, C.M., and Paskett, E.D. (2015). Testing Interventions to Motivate and Educate (TIME): A group randomized trial of a multi-level intervention to improve colorectal cancer screening. *Preventive Medicine Reports.* **2**, 306-313.
- Llanos, A.A., **Pennell, M.L.**, Young, G.S., Tatum, C.M., Katz, M.L., and Paskett, E.D. (2015). No association between colorectal cancer worry and within-guidelines screening behaviors among residents of Appalachian Ohio. *Journal of Public Health*. doi: 10.1093/pubmed/fdu031.
- Plascak, J.J., Llanos, A.A., **Pennell, M.L.**, Weier, R.C., and Paskett, E.D. (2014). Neighborhood factors associated with time to resolution following an abnormal breast or cervical cancer screening test. *Cancer, Epidemiology, Biomarkers, and Prevention.* **23**, 2819-2828.
- David, P., **Pennell, M.L.**, Foraker, R.E., Katz, M.L., Buckworth, J., and Paskett, E.D. (2014). How are previous physical activity and self-efficacy related to future physical activity and self-efficacy? *Health Education and Behavior*. **41**, 573-576.
- Foraker, R.E., **Pennell, M.**, Sprangers, P., Vitolins, M.Z., DeGraffinreid, C.R., and Paskett, E.D. (2014). Effect of a low-fat or low-carbohydrate weight-loss diet on markers of cardiovascular risk among premenopausal women: a randomized trial. *Journal of Women's Health.* **23**, 675-680.
- Llanos, A.A., Krok, J.L., Peng, J., **Pennell, M.L.**, Olivo-Marston, S., Vitolins, M.Z., Degraffinreid, C.R., Paskett, E.D. (2014). Favorable effects of low-fat and low-carbohydrate dietary patterns on serum leptin, but not adiponectin, among overweight and obese premenopausal women: a randomized trial. SpringerPlus. **3**, 175.
- Llanos, A.A., Krok, J.L., Peng, J., **Pennell, M.L.**, Vitolins, M.Z., DeGraffinreid, C.R., and Paskett, E.D. (2014). Effects of a walking intervention using mobile technology and interactive voice response on serum biomarkers of obesity among postmenopausal women at increased breast cancer risk. *Hormones and Cancer.* **5**, 98-103.
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Environmental and Occupational Epidemiology (4)

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Cupul-Uicab, L.A., Hernandez-Avila, M., Terrazas-Medina, E.A., **Pennell, M.L.**, and Longnecker, M.P. (2010). Prenatal exposure to the major DDT metabolite 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene (DDE) and growth in boys from Mexico. *Environmental Research.* **110**, 595-603.

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Health Services (2)

Richter, J., McAlearney, A.S., and **Pennell, M.** (2016). The influence of organizational factors on patient safety: examining successful handoffs in health care. *Health Care Management Review.* **41**, 32-41.

Richter, J., McAlearney, A.S., and **Pennell, M.** (2015). Evaluating the effect of safety culture on error reporting: a comparison of managerial and staff perspective. *American Journal of Medical Quality*. **30**, 550-558.

Medical Imaging (6)

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Niazi, M.K.K, Abas, F.S., Senaras, C., **Pennell, M.**, et al. (2018). Nuclear IHC enumeration: A digital phantom to evaluate the performance of automated algorithms in digital pathology. *PLOS ONE*. **13**, e0196547.

Abasa, F.S., Shana'ah, A., Christian, B., Hasserjiand, R., Louissaint, Jr., A., **Pennell, M**., et al. (2017). Computer-assisted quantification of CD3+ T cells in follicular lymphoma. *Cytometry: Part A.* **91**, 609-621.

Fauzi, M.F., **Pennell, M.**, Berkman, S., et al. (2015). Classification of follicular lymphoma: the effect of computer aid on pathologists grading. *BMC Medical Informatics and Decision Making*. **15**, 115.

Lozanski, G., **Pennell, M.**, Shana'ah, A., Zhao, W., Gewirtz, A., Racke, F., Hsi, E., Simpson, S., Mosse, C., Alam, S., Swierczynski, S., Hasserjian, R.P., and Gurcan, M.N. (2013). Inter-reader variability in follicular lymphoma grading: conventional and digital reading. *Journal of Pathology Informatics*. **4**, Article 30.

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Perinatal and Reproductive Epidemiology and Toxicology (6)

Rogers, L.K., Young, C.M., **Pennell, M.L.**, Tipple, T.E., Leonhart, K.L., and Welty, S.E. (2012). Plasma lipid metabolites are associated with gestational age but not bronchopulmonary dysplasia. *Acta Paediatrica*. **101**, e321-e326.

Valentine, C., Morrow, G., **Pennell, M.**, Morrow, A., Hodge, A., Haban-Bartz, A., Collins, K., Rogers, L. (2012). Randomized control trial of docosahexanoic acid supplementation in Midwestern U.S. human milk donors. *Breastfeeding Medicine*. **8**, 86-91.

Rogers, L.K., Valentine, C.J., **Pennell, M.L.**, Velten, M., Britt, R.D., Dingess, K., Zhao, X., Welty, S.E., and Tipple, T.E. (2011). Maternal DHA supplementation decreases lung inflammation in hyperoxia-exposed newborn mice. *Journal of Nutrition*. **141**, 214-222.

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Basso, O, **Pennell, M.L.**, Chen, A., and Longnecker, M.P. (2010). Mother's age at menarche and offspring size. *International Journal of Obesity*. **34**, 1766-1771.

Chen, A., **Pennell, M.L.**, Klebanoff, M.A., Rogan, W.J., and Longnecker, M.P. (2006). Maternal smoking during pregnancy in relation to child overweight: follow-up to age 8 years. *International Journal of Epidemiology*. **35**, 121-130.

Sports Medicine (5)

Ithurburn, M.P., Evans, K.D., Thomas, S., Schmitt, L., Paterno, M., **Pennell, M.L.**, and Magnussen, R. (2019). Clinical measures associated with knee function over two years in young athletes after ACL reconstruction. *Knee.* **26**, 355-363.

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Harrell, J.S., McMurray, R.G., Baggett, C.D., **Pennell, M.L.**, Pearce, P.F., and Bangdiwala, S.I. (2005). Energy costs of physical activities in children and adolescents. *Medicine and Science in Sports and Exercise*. **37**, 329-336.

McMurray, R.G., Baggett, C.D., Harrell, J.S., **Pennell, M.L.**, and Bangdiwala, S.I. (2004). Feasibility of the Tritrac R3D accelerometer to estimate energy expenditure in youth. *Pediatric Exercise Science*. **16**, 219-230.

Tobacco Control (5)

Klein, E.G., Alalwan, M.A., **Pennell, M.L.**, Angeles, D., Brinkman, M., Keller-Hamilton, B., Roberts, M.E., Nini, P., and Ferketich, A.K. (2020). Waterpipe warning placement and risk perceptions: an eyetracking study. *American Journal of Health Behavior*. In press.

Moumen M., Brinkman M., Keller-Hamilton B., Teferra A.A., Roberts M.E., Klein E.G., Nini P., **Pennell M.**, and Ferketich A.K. (2020) . Waterpipe Tobacco Warnings Need to Inform Users of Harm: Evidence from Studies with Young Adults. *Tobacco Regulatory Science*, In press.

Ferketich, A.K., **Pennell, M.**, Sieber, E., Wang, L., Adolph, M.D., Farietta, T., Jin, Y., and Wewers, M.E. (2014). Provider delivered tobacco dependence treatment to Medicaid smokers. *Nicotine and Tobacco Research.* **16**, 786-793.

Nelms, E., Wang, L., **Pennell, M.**, Wewers, M.E., Sieber, E., Adolph, M.D., Paskett, E.D., Ferketich, A.K. (2014). Trust in physicians among rural Medicaid-enrolled smokers. *Journal of Rural Health.* **30**, 214-220.

Ferketich, A.K., Liber, A., **Pennell, M.**, Nealy, D., Hammer, J., McGovern, M., and Berman, M. (2010). Clean indoor air ordinance coverage in the Appalachian region of the United States. *American Journal of Public Health* **100**, 1313-1318.

Veterinary Medicine (9)

London, C.A., Gardner, H.L., Mathie, T., Stingle, N., Portela, R., Pennell, M.L., et al. (2015). Impact of toceranib/piroxicam/cyclophosphamide maintenance therapy on outcome of dogs with appendicular osteosarcoma following amputation and carboplatin chemotherapy: a multi-institutional study. PLOS ONE **10**, e0124889.

London, C.A., Bernabe, L.F., Barnard, S., Kisseberth, W.C., Borgatti, A., Henson, M., Wilson, H., Jensen, K., Ito, D., Modiano, J.F., Bear, M.D., **Pennell, M.L.**, Saint-Martin, J.R., McCauley, D., Kauffman, M., Shacham, S. (2014). Preclinical evaluation of the novel, orally bioavailable selective inhibitor of nuclear export (SINE) KPT-335 in spontaneous canine cancer: results of a Phase I study. PLOS ONE **9**, e87585.

Bernabe, L.F., Portela, R., Nguyen, S., Kisseberth, W.C., **Pennell, M.**, Yancey, M.F., and London, C.A. (2013). Evaluation of the adverse event profile and pharmacodynamics of toceranib phosphate administered to dogs with solid tumors at doses below the maximum tolerated dose. *BMC Veterinary Research*. **9**, 190.

Couto, J.I., Bear, M.D., Lin, J., **Pennell, M.**, Kulp, S.K., Kisseberth, W.C., and London, C.A. (2012). Biologic activity of the novel small molecule STAT3 inhibitor LLL12 against canine osteosarcoma cell lines. *BMC Veterinary Research*. **8**, 244.

Lutz, E.A., Hoet, A.E., **Pennell, M.**, Stevensen, K., and Buckley, T.J. (2013). Non-outbreak related *Staphylococcus* spp. in a veterinary hospital. *American Journal of Infection Control.* **41**, 648-651.

Fossey, S.L., Bear, M.D., Kisseberth, W.C., **Pennell, M.**, and London, C.A. (2011). Oncostatin M promotes STAT3 activation, VEGF production, and invasion in osteosarcoma cell lines. *BMC Cancer*. **11**, 125.

McMahon, M.B., Bear, M.D., Kulp, S.K., **Pennell, M.L.**, and London, C.A. (2010). Biological activity of gemcitabine against canine osteosarcoma cell lines in vitro. *American Journal of Veterinary Research*. **71**, 799-808.

Lord, L.K., **Pennell, M.L.**, Ingwersen, W., and Fisher, R.A. (2008). Sensitivity of commercial scanners to microchips of various frequencies implanted in dogs and cats. *Journal of the American Veterinary Medical Association* **233**, 1729-1735.

Lord, L.K., **Pennell, M.L.**, Ingwersen, W., Fisher, R.A., and Workman, J.D. (2008). In vitro sensitivity of commercial scanners to microchips of various frequencies. *Journal of the American Veterinary Medical Association* **233**, 1723-1728.

Other (1)

Reiter P.L., **Pennell, M.L.**, Katz, M.L. Acceptability of a COVID-19 vaccine among adults in the United States: how many people would get vaccinated? *Vaccine* In press.

INVITED PRESENTATIONS:

Local

Efficient Bayesian joint models for group randomized trials with multiple observation times and multiple outcomes. Invited talk given to the Department of Mathematics and Statistics, Ball State University, Muncie, IN, November, 2011.

Cutoff designs for community intervention studies. Methodology seminar given to the Initiative in Population Research, Ohio State University, Columbus, OH, April, 2010.

Bayesian threshold regression for time to event data. Invited talk given at Ohio State-Case Western-Cleveland Clinic Biostatistics Symposium, May, 2009.

Modeling survival data using Bayesian random effects threshold regression. Invited talk given to the Department of Statistics, The Ohio State University, Columbus, OH, October, 2008.

A Bayesian nonparametric test for dose-response data. Environmental Exposure and Health Data Seminar hosted by the Divisions of Epidemiology and Environmental Health Sciences in the College of Public Health and the Department of Statistics, The Ohio State University, Columbus, OH, February, 2007.

Bayesian nonparametric and semiparametric methods for correlated data with applications in chemoprevention and toxicology. Invited talk given to the Department of Mathematics and Statistics, Miami University, Oxford, OH, November, 2006.

Bayesian semiparametric methods for longitudinal and survival data. Invited talk given to the Division of Biostatistics, The Ohio State University School of Public Health, Columbus, OH, November, 2005.

National/International

A Bayesian semiparametric first hitting time model for latent fetal development. Invited talk given at the Conference on Lifetime Data Science, Pittsburgh, PA, May, 2019.

Bayesian threshold regression for multivariate current status data with informative censoring. Invited talk given at the Conference on Lifetime Data Science, Storrs, CT, May, 2017.

Bayesian threshold regression for current status data with informative censoring. Invited talk given to the Department of Biostatistics, UNC-Chapel Hill, April, 2016.

Bayesian threshold regression for informatively censored current status data. Invited talk given at the Spring Meeting of the Eastern North American Region of the International Biometric Society, Baltimore, MD, March, 2014.

Ornstein-Uhlenbeck threshold regression models for time to event data. Invited talk given at the International Chinese Statistical Association Applied Statistics Symposium, Boston, MA, June, 2012.

Regression modeling of time to event data using the Ornstein-Uhlenbeck Process. Invited talk given at the Conference on Risk Assessment and Evaluation of Predictions, Silver Spring, M.D., October, 2011.

A two step method for fitting semiparametric random effects models to large data sets. Invited talk given at the Spring Meeting of the Eastern North American Region of the International Biometric Society, Atlanta, GA, March, 2007.

Fitting semiparametric random effects models to large data sets. Invited talk given at the International Chinese Statistical Association Applied Statistics Symposium, Storrs, CT, June, 2006.