

Sean D McCabe

PhD Candidate

Department of Biostatistics

University of North Carolina at Chapel Hill

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Education

University of North Carolina at Chapel Hill, Chapel Hill, NC, Present

- PhD Candidate in Biostatistics
 - Expected Graduation: May 2020
 - Advisors: Dr. Michael Love and Dr. Danyu Lin
 - Title: Statistical Methods for the Analysis of Multi-Omics and Multi-Study Datasets
- Master's in Biostatistics, December 2017
 - Master's Thesis: "Sample Size Considerations for Inferential and Formally Supportive Subgroup analyses in Stratified Sampling Designs" – Advisor: Dr. Gary Koch
 - Regina C. Elandt-Johnson Best Master's Paper Award

Purdue University, West Lafayette, IN, May 2014

- Double B.S. degree in Mathematics and Statistics
- Minor: Computer Science

Positions

- August 2019 – Present: Graduate Research Assistant, Biostatistics Core, Lineberger Comprehensive Cancer Center
- August 2018 – July 2019: Graduate Research Assistant, Multi-tissue and network models for next-generation EQTL studies
- August 2014 – August 2018: Training Grant Recipient, National Cancer Institute's Biostatistics for Genomics in Cancer (T32 CA106209-12)
- August 2012 – May 2014: Statistician, "Kranz Lab" Purdue University
- Summer 2011: Volunteer Statistician, Purdue Athletic Department

Awards/Honors

- North Carolina Chapter of the American Statistical Association
 - Chair of the Scholastic Council, 2019 - Present
 - Liaison to Industry Interests Group for the Scholastic Council, 2018 - 2019
- Regina C. Elandt-Johnson Best Master's Paper Award, 2018
- NC ASA and AISC Young Researcher Award, 2018
- President of University of North Carolina Biostatistics Student Association, 2017 - 2018
- Recipient of the National Cancer Institute's Biostatistics for Genomics in Cancer Training Grant: T32 CA106209-12 (August 2014 - August 2018)
- Dean's List (Fall 2010, Spring 2011, Fall 2011, Spring 2012, Fall 2012, Spring 2013, Fall 2013, Spring 2014)

- Semester Honors (Fall 2010, Spring 2011, Fall 2011, Fall 2012, Spring 2013, Fall 2013, Spring 2014)
- Mu Sigma Rho, member
- National Society of Collegiate Scholars, member
- Summer Institute in Biostatistics (SIBS) Madison, WI, 2013

Publications:

- **McCabe SD**, Lin DY, Love MI. (2018) "Consistency and overfitting of multi-omics methods on experimental data." *Briefings in Bioinformatics*. doi: 10.1093/bib/bbz070
- Brauchla M, Reidenbach K, Baker S, **McCabe SD**, and Kranz S. (2014) "The effects of increased dietary fiber intake on the self-reported quality of life of school-age children." *Health*, Vol 6, pp 115-122.
- Huss L, **McCabe SD**, Dobbs-Oates J, Burgess J, Behnke C, Santerre C, and Kranz S. (2013) "Development of Child-Friendly Fish Dishes to Increase Young Children's Acceptance and Consumption of Fish." *Food and Nutrition Sciences*, Vol 4 No. 10A, pp 78-87.
- Baker SL, **McCabe SD**, Swithers SE, Payne CR, and Kranz S. (2015) "Do healthy, child-friendly fruit and vegetable snacks appeal to consumers? A field study exploring adults' perceptions and purchase intentions." *Food Quality and Preference*, Vol 39, pp 202-208.

Non-Journal Articles:

- Hass Z, **McCabe SD**, and Craig B. "Easy to Criticize, Harder to Verify: Fourth and Goal in Post-2011 NFL Overtime." *Chance*. 2014.

Presentations:

- **Sean D McCabe**, Andrew Nobel, and Michael Love. "Latent Dirichlet Model to Compare Expressed Isoform Proportions to a Reference Panel." Joint Statistical Meetings; July 2019; Denver, CO
- **Sean D McCabe**, Danyu Lin, and Michael Love. "MOVIE: Multi-Omics Visualization of Estimated Contributions." Eastern North American Region of the International Biometric Society Spring Meeting; March 2019; Philadelphia, PA
- **Sean D McCabe**, Danyu Lin, and Michael Love. "Examination of Methods for Gene Expression Normalization in eQTL Studies." International Biometrics Conference; July 8-13; Barcelona, Spain

Poster Presentations:

- Arthur Q Tran, Stephanie A Sullivan, **Sean D McCabe**, Naim Rashid, and Victoria L Bae-Jump. "Relationship between body mass index (BMI) and gene expression profiles of cervical cancer in The Cancer Genome Atlas (TCGA) project."
- **Sean D McCabe**, Danyu Lin, and Michael Love. "Examination of Methods for Gene Expression Normalization in eQTL Studies." Joint Statistical Meetings; 2017 Jul 29-Aug 3; Baltimore, MD.
- Hass Z, Craig B , and **McCabe SD**. "NFL Overtime Rule Change: Kick the Field Goal or Go for It?" Joint Statistical Meetings; 2014 Aug 2-7; Boston, MA.
- Selena Baker, **Sean D McCabe**, Collin Payne, Susan Swithers, and Sibylle Kranz. "Do children like fruits and vegetables more when they are in fun shapes?" Next Generation Scholars Research Fair; 2013; Purdue University
- Mary C Brauchla, Sibylle Kranz, **Sean D McCabe**, and George P McCabe. "Does removing visual reminders of food eaten affect the amount of food preschool children will eat?" Next Generation Scholars Research Fair; 2013; Purdue University.
- Lyndsey R Huss, **Sean D McCabe**, Jennifer Dobbs-Oates, John Burgess, Carl Behnke, Charles R Santerre, and Sibylle Kranz. "Development of child-friendly fish dishes to increase 2-5 year old children's acceptance and consumption of fish" Ingestive Behavior Research Center Symposium on Eating Patterns, Diet Quality, and Energy Balance; 2013; Purdue University and Next Generation Scholars Research Fair; 2013; Purdue University.
- Selena L Baker, Katherine L Reidenbach, **Sean D McCabe**, Mary C Brauchla, and Sibylle Kranz. "Effects of High-Fiber Snacks on Health-Related Quality of Life in a Sample of School-Aged Children" Experimental Biology; 2013 Apr 20-24; Boston, MA.
- Selena L Baker, Katherine L Reidenbach, **Sean D McCabe**, Mary C Brauchla, and Sibylle Kranz. "Correlations between child and parent-reported pediatric health-related quality of life in a sample of 7 to 11-year-old schoolchildren" Experimental Biology; 2013 Apr 20-24; Boston, MA.

Abstracts:

- Baker S, **McCabe S**, Swithers S, Payne C, and Kranz S. "Children's liking of child-friendly shaped fruits and vegetables: dose shape influence liking?" FASEB Journal, Vol 28. No. 1 Supplement 1019.22, 2014.
- Baker S, **McCabe SD**, Swithers S, Payne C, and Kranz S. "Adults' attitudes toward purchasing intentions for child-friendly shaped healthy fruit and vegetable snacks." FASEB Journal, Vol. 28 No. 1 Supplement 1019.23, 2014.

- Kranz S, Brauchla MC, **McCabe SD**, and McCabe GP. "Will altering visual cues of food consumption affect food intake in preschool-age children?" FASEB Journal, Vol. 28 No. 1 Supplement 808.8, 2014.
- Baker S, Reidenbach KL, **McCabe SD**, Brauchla MC, and Kranz S. "Correlations between child and parent-reported pediatric health-related quality of life in a sample of 7 to 11-year-old schoolchildren." FASEB Journal, Vol. 27. No.1 Supplement 617.15, 2013

Professional Societies

- American Statistical Association, member
- Eastern North American Region of the International Biometric Society, member
- International Biometric Society, member

Activities

- STATCOM: Student-run organization that constructs and organizes surveys for various non-profit organizations (2013-2014).
- Attended the American Statistical Association's Joint Statistical Meetings – Montreal (2013) Seattle (2015) Baltimore (2017) Denver (2019)
- Attended the International Biometric Conference – Barcelona (2018)
- Attended the Eastern North American Region of the International Biometric Society Spring Meeting – Philadelphia (2019)

Skills

- Software: SAS, R, GitHub, MiniTab
- Languages: Java, Python, C, German