

WCU

WEST CHESTER UNIVERSITY

Applied Statistics Newsletter

Spring 2018

President's Corner

by *Sopheara Peoples*

Greetings,

Spring finally is here! Welcome back to the second edition of our alumni newsletter. I am very excited to share current and future events happening in the Applied Statistics program but first I would like to congratulate our 2018 class of Applied Statistics graduates!

For current and new enrollees, starting in Fall 2018, students will be able to get a Master's degree in Applied Statistics with a concentration in either Biostatistics or Business and Marketing Analytics. Students will also still have the option to get the more general Master's in Applied Statistics without a concentration.

To help prepare students who want to go into Medical Research, Pharmaceutical Statistics, and Bioinformatics, the Biostatistics concentration will allow students to choose from a wide variety of elective courses in areas such as Survival Analysis, Longitudinal Data Analysis, Data Mining, and Applied Bayesian Methods.



For students who are interested in careers in Business, Banking, Risk Management, or Marketing Analytics, the Business and Marketing Analytics concentration will allow students to choose from a wide variety of elective courses in areas such as Time Series, Marketing Analytics, Statistical Methods in Business and Finance, and Multivariate Data Analysis.

Students are encouraged to select a concentration at the time of application to the program but have the option of changing concentrations (or moving to the general degree) at any time while enrolled in the program. For more information or to refer a potential student please contact Dr. Rieger at rrieger@wcupa.edu.

In other great news, WCU has entered into a partnership with SAS to create Joint Statistical Analysis Certificate. For more information about the SAS Certificate please see: <http://support.sas.com/learn/ap/prof/cer/tprog.pdf>

In terms of future events, we are planning on having our annual Alumni Event in Fall 2018, we will send out the Save the Date soon. Please check out our Facebook page for more information and other announcements.

Scan the QR code for more information.



Finally, please check out our current course offering in the Summer, Fall and Winter 2018 (Page 5).

If you have any suggestions for newsletter content or want to write a feature for the newsletter, feel free to email us (contact information on Page 6). On behalf of our Alumni group, I thank you for reading this newsletter and looking forward to seeing everyone in Fall. Have a great Summer!

Alumni Update

April Taylor

Graduation year: 2011

Contact: taylorap@email.chop.edu

April's daytime job is as the Director of Quality and Patient Safety for the Children's Healthcare Associates at the Children's Hospital of Philadelphia.

Additional Leadership Roles

- Healthcare Quality Certification Commission, Commissioner
- National Association for Healthcare Quality Item Writing Team, Chair
- Mid-Atlantic Performance Excellence Award, Examiner
- Center for Healthcare Improvement and Patient Safety, Assistant Director and Core Faculty

Recent Publications

Webster J, Shaw K, Shea J, **Taylor A**, Verma R. Understanding the Variation in the Use of Screening DXA Scans in Pediatric Patients with Celiac Disease. *International Journal of Celiac Disease*.

Heneghan M, Hart J, Dewan M, Wu K, Hope K, **Taylor A** et al. No Cause for Alarm: Decreasing Inappropriate Pulse Oximetry Use in Bronchiolitics. *Hospital Pediatrics*.

Current Funded Projects

Accreditation Council for Graduate Medical Education (ACGME) Back to Beside Grant. *Shaping Patient and Housestaff Engagement in the Rounding Environment*.

Accreditation Council for Graduate Medical Education (ACGME) Back to Bedside Grant. *What's in a Name: Strengthening the Care Relationship from the Start*.

Health Resources and Service Administration (HRSA-16-055) *Strategic Approaches to Improving Access to Quality Health Care for Children and Youth with Epilepsy*



Alumni Update



Matt Baldwin

Graduation year: 2011

Contact: BaldwinMatt@prahs.com

Current position:

Senior Biostatistician at PRA Health Sciences

Current job description:

Develop analysis standards for clinical trials

Memberships:

DIA (active in Statistics Community) and ASA

Previous positions:

Biostatistician at Almac Clinical Technologies (Souderton, PA) 2012-2014

Statistician II at Tolmar, Inc (Fort Collins, CO) 2014-2016

Senior Biostatistician at Chiltern (Remote) 2017

Personal: Married (Becky), 3 girls (Kaley 5, Cami 3, Taya 2 months)



Alumni Spotlight: Dominique McDaniel

FOR MORE INFORMATION

Connect with Dominique via
LinkedIn at

[HTTPS://WWW.LINKEDIN.COM/IN/
DOMINIQUE-MCDANIEL-
BA081026/](HTTPS://WWW.LINKEDIN.COM/IN/DOMINIQUE-MCDANIEL-BA081026/)

Dominique Antoinette McDaniel is a proud graduate of West Chester University's Applied Statistics program (2012). Her decision to pursue a master of science in applied statistics began while working as an intern at Thomas Jefferson University in the Biostatistics Division. As an undergraduate student in mathematics at Jefferson she discovered how the field of statistics turned math into application. While at Jefferson Dominique also realized that biostatistics was not the only application of statistics, and there were many more areas that she could be introduced to by obtaining a master's degree.

At West Chester Dominique was able to complete a master's thesis on "Examining the Spatial Distributions of Alcohol Related Violence in the City of Philadelphia" which also led to a published paper. It was this research completed in her thesis that drove her initial interest in Bayesian Statistics.

After completing her master's degree, Dominique went on to work at Eli Lilly & Company as an Associate Statistical Analyst. During her time at Eli Lilly & Company, she took a deeper interest in the types of Bayesian analysis being conducted at Lilly. These analyses were primarily used for internal decision making, which mostly focused on deciding on dosing strategy and

understanding the probability of success of a clinical trial. In her time at Lilly she published two articles "Bayesian Modeling of Time Response and Dose Response for Predictive Interim Analysis of a Clinical Trial" and "Multi-population Tailoring Clinical Trials: Design, Analysis, and Inference Considerations" which she also presented at several conferences.

Dominique's research interests led her to Purdue University to pursue a PhD in Statistics. Her focus at Purdue has been on Bayesian Testing in Multiple Endpoint Studies Under Principle Strata.

She credits West Chester University with giving her tools needed to be a successful statistical analyst in the pharmaceutical industry.

Faculty Spotlight: Tom Short

Associate Professor



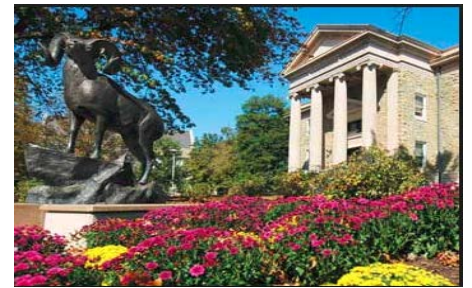
Tom Short arrived as a faculty member in the Statistics Program at WCU in time for the Fall 2016 semester. Since then he's been teaching courses in introductory statistics, regression, SAS, statistical theory, and capstones. Recently, Tom has been active in recruiting community-based service clients to provide data and contexts for students in WCU Statistics courses to work with.

Tom graduated as a math major from John Carroll University, a Jesuit school in the suburbs of Cleveland, Ohio. He then earned a master's degree and a Ph.D. in Statistics from Carnegie Mellon University. His first faculty position was at Villanova University, and he has also taught at IUP, John Carroll, and a couple of evening courses at Cleveland State University.

Tom is active in the Advanced Placement (AP) Statistics program, having served as a reader, table leader, question leader, and exam leader at the annual AP Statistics Reading. He also served a term on the AP Statistics Development Committee, which writes the exams.

Tom has served as an officer in the American Statistical Association chapters in Philadelphia, Pittsburgh, and Cleveland. He has also served on the ASA Council of Chapters Governing Board, and was elected to a term on the ASA Board of Directors. He's a Fellow of the American Statistical Association, an Accredited Professional Statistician (PStat®), and received the 2005 Mu Sigma Rho Statistics Education Award. He is a co-founder (with Rosemary Reshetar) of the Pennsylvania Statistics Poster Competition, and a Main Dish (with Ruth Carver and Janice Ricks) of the Philadelphia Area Statistics Teachers Association (PASTA).

Tom has collaborated and consulted with a variety of researchers and companies, with much of his published research being associated with Nursing research. Tom is now writing textbooks for introductory statistics with his lead co-author, Roxy Peck, and others. Tom and his spouse, Darlene, live in Malvern, and between them have six adult children.



Post Master's Certificate of Advanced Study in Applied Statistics

We are excited to announce our Post Master's Certificate of Advanced Study in Applied Statistics which will begin in the Spring semester of 2018. This Certificate is an official West Chester University degree designed for students who have already successfully completed a Master's degree in Statistics or a similar field. It is a degree for those who are looking for a way to competitively differentiate themselves from while also staying up-to-date with the rapidly evolving field of Statistics. To complete this Certificate students are required to 12 credits of elective courses above and beyond what was used to complete their Master's degree. New elective courses such as Bayesian Modeling, R Programming, Marketing Analytics, Advanced Categorical Analysis are examples of courses that may comprise a Certificate. (See Curriculum page for additional course.)

For more information please contact Professor Rieger at rrieger@wcupa.edu

Upcoming Classes

All course syllabi are available at:

<https://www.wcupa.edu/sciences-mathematics/mathematics/gradstat/curriculum.aspx>

Summer 2018

STA540: Statistical Consulting (Rieger) (SUMMER SESSION 1)

Elective course for MS degree

Prerequisite: STA511 and STA512

Mondays and Wednesdays 6:00-10:00

Class will also meet on May 29 and May 31

STA539: Bayesian Modeling (Short) (June 26 – July 26)

Elective course for MS degree

Prerequisite: STA506, STA511

Tuesdays and Thursdays 6:00-10:00

STA534: Time Series (McClintock) (SUMMER SESSION 2)

Elective course for MS degree

Prerequisite: STA511 and STA512

Mondays and Wednesdays 6:00-10:00

FALL Semester 2018

STA504: Mathematics Statistics I with Calculus Review (Crossett)

Required for MS degree

Section 01: Tuesday 5:45-9:30

STA505: Mathematical Statistics I (Crossett)

Required for MS degree

Section 01: Thursday 4:15-7:00

Section 02: Thursday 7:15-10:00

STA507: Categorical Data Analysis (Short)

Required for MS and Certificate degrees

Prerequisites: STA511 and STA512

Section 01: Monday 4:15-7:00

Section 02: Monday 7:15-10:00

STA511: Introduction to Statistical Programming

Required for MS and Certificate degrees

Section 01: Wednesday 12:00-2:45 (Gallop)

Section 02: Wednesday 4:15-7:00 (McClintock)

Section 03: Wednesday 7:15-10:00 (McClintock)

STA513: Intermediate Linear Models (Gallop)

Required for MS degree

Prerequisite: STA511, STA512, STA505, STA506

Section 01: Tuesday 5:45-9:30

Section 02: Thursday 5:45-9:30

STA531 – Statistical Methods in Clinical Trials (Godbold)

Elective for MS degree

Prerequisite: STA511, STA512

Section 01: Wednesday 5:45-8:30



Get Involved!

Want to volunteer with the Applied Statistics program or Applied Statistics Alumni Group? Consider helping out with the newsletter, planning our next networking event, offering an internship for current students, or organizing an educational session for students, alumni and faculty.

Or contribute money toward our WCUPA Applied Statistics Alumni Fund to help support student tuition scholarships, opportunities for students to present their work at national meetings, as well as alumni events.

To donate, click on the link below:

<https://www.wcufoundation.org/page.aspx?pid=284>

Fund Name, enter "Statistics" and then select any of the funds.

If you have any question, comments or suggestions, please contact:

- ❖ Sopheara Peoples
sopheara.siek@gmail.com
- ❖ John Bragger
john_bragger@comcast.com
- ❖ Amos Odeleye
statisticalliance@gmail.com



Enter search criteria

Fund Name:

Fund Number:

Applied Statistics Scholarship
Fund Number: 2136-607
Category: Annual - Restricted

Applied Statistics Endowment
Fund Number: 2136-807
Category: WCU Endowment

M.S. Applied Statistics Operating Fund
Fund Number: 2136-951FN
Category: Annual - Restricted

Applied
Statistics
Newsletter