Philip Andrew White

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Education

- Doctor of Philosophy: Statistical Science; Duke University; 2019
  - Dissertation: Topics in Bayesian Spatiotemporal Prediction of Environmental Exposure
  - Committee: Alan Gelfand (chair), Fan Li (co-chair), Colin Rundel, and Ben Goldstein
- Master of Science: Statistics; Brigham Young University; 2015
  - Thesis: Bayesian Gaussian Process Model for Antarctic Surface Mass Balance and Proposing New Field Measurements
  - Committee: C. Shane Reese (chair), William F. Christensen, and Shannon Tass
- Bachelor of Science: Applied Physics; Brigham Young University; 2014
  - Graduated *Magna Cum Laude*; speaker at college graduation
  - Senior Thesis: Bayesian Model for Antarctic Surface Mass Balance
  - Minors: Mathematics, Scandinavian Studies

Professional Experience

- Assistant Professor; Brigham Young University; 2019 – Present
- Data Science Intern: Disease Risk Modeling; The Climate Corporation; 2018

Peer-Reviewed Publications

- **P. White** and E. Porcu (2019), "Towards a Complete Picture of Stationary Covariance Functions on Spheres Cross Time," *Electronic Journal of Statistics*, Vol. 13, No. 2, 2566-2594. link.
- **P. White**, C.S. Reese, W. Christensen, and S. Rupper (2019+), "A Model for Antarctic Surface Mass Balance and Ice Core Site Selection," *Environmetrics*. link.
- **P. White**, A. Gelfand, E. Rodrigues, and G. Tzintzun (2019), "Pollution State Modeling for Mexico City," *Journal of the Royal Statistical Society - Series A*, Volume 182, Issue 3, 1039-1060. link.
- **P. White** and E. Porcu (2019), "Nonseparable Covariance Models on Circles Cross Time: A Study of Mexico City Ozone," *Environmetrics*, Volume 30, Issue 5. link
- **P. White**, C. Berrett, S. Tass, and M. Findlay (2018+), "Modeling Efficiency of Foreign Aid Allocation in Malawi," *The American Statistician*. link
- **P. White**, A. Gelfand, and T. Utlaut (2017), "Prediction and model comparison for areal unit data," *Spatial Statistics*, Volume 22, Part 1, 89-106. link
- J. S. Colton, D. Meyer, K. Clark, D. Craft, J. Cutler, T. Park, and **P. White** (2012), "Long-Lived electron spins in a modulation doped (100) GaAs quantum well," *Journal of Applied Physics*, Volume 112, Issue 8. link

Under Review

- **P. White** and A. Gelfand, "Multivariate Functional Data Modeling with Time-varying Clustering." link

- **P. White** and A. Gelfand, "Generalized Evolutionary Point Processes: Model Specifications and Model Comparison."
- M. Gruen, **P. White**, and B. Hare, "Do veterinarians or the public believe dog breed differ in pain sensitivity."

Other Publications

- P. White (2019), "Topics in Bayesian Spatiotemporal Prediction of Environmental Exposure," Ph.D. Dissertation, Duke University.
- P. White (2015), "Bayesian Gaussian Process Model for Antarctic Accumulation and Proposing New Field Measurement," Masters Project, Brigham Young University.
- P. White (2014), "ORCA final report," *2014 Journal of Undergraduate Research* [Online], Brigham Young University.
- P. White (2014), "Quantifying Climate Change: Bayesian Model for Antarctic Surface Mass Balance," Senior Thesis, Brigham Young University.

Posters and Presentations

- "Multivariate Functional Data Modeling with Time-varying Clustering"
  - New England Statistics Symposium (2019)
  - Joint Statistical Meetings (2019)
- "Pollution State Modeling for Mexico City"
  - ASA ENVR Workshop - Statistics for the Environment: Research, Practice and Policy (2018)
- "Nonseparable Covariance Models on Circles Cross Time: A Study of Mexico City Ozone"
  - Duke Department of Statistical Science 701 Seminar Series (2018)
  - International Conference on Advances in Interdisciplinary Statistics and Combinatorics (AISC) (2018)
  - Brigham Young University (2018)
  - RAND (2018)
  - Los Alamos National Labs (2018)
- "Prediction and Model Comparison for Areal Unit Data"
  - Duke Department of Statistical Science 701 Seminar Series (2018)
  - Society of Duke Fellows (2017)
- "Gaussian Process Model for Antarctic Surface Mass Balance and Ice Core Site Selection,"
  - American Geophysical Union (2017), New Orleans, LA.
  - Brigham Young University Student Research Conference (2015), Provo, UT.
  - Conference on Data Analysis (2014), Poster, Santa Fe, NM.
  - Brigham Young University Student Research Conference (2014), Provo, UT.
- "Studies of electron spin in GaAs quantum dots,"
  - American Physical Society Meetings (2013), Baltimore, MD.
- "Photoluminescence Decays in Cadmium Telluride,"
  - Brigham Young University Student Research Conference (2013), Provo, UT.

Courses Taught

- Professor

- Brigham Young University
  - Statistics 641: Fall 2019
  - Swedish 201: Winter 2012
  - Swedish 202: Fall 2011, Fall 2012
- Duke University
  - Statistics 111 (Probability and Statistics): Summer 2017 (Term I)

- Teaching Assistant
  - Duke University
    - Statistics 322/522 (Design of Surveys and Causal Studies): Spring 2019
    - Statistics 944 (Spatial Statistics): Fall 2018
    - Statistics 444/644 (Spatio-temporal Modeling): Spring 2018, Fall 2018
    - Statistics 532 (Theory of Inference): Fall 2017
    - Statistics 111 (Probability and Statistics): Spring 2017

External Funding

- Pending
  - "Analysis Methods for Multivariate Point Patterns on Linear Networks," submitted to the National Science Foundation (Role: Co-PI, Amount: $321,845), submitted 2019.
  - "Quantifying Snow and Glacier Response to Climate and Aerosol Forcings in High Mountain Asia," submitted to the National Aeronautics and Space Administration (Role: PI for BYU portion; Amount: $256,328), submitted 2019.

Fellowships, Scholarships, and Awards

- Professor
  - STATMOS Workshop - Young Researcher Travel Award, 2019 (Amount: $1,500)
- Student
  - James B. Duke Fellowship Recipient, Duke University, 2015-2019 (Amount: $20,000)
  - ENVR Workshop - Statistics for the Environment: Research, Practice and Policy, Student travel award, 2018 (Amount: $1,500)
  - Department of Statistical Science TA of the Year, 2018 (Amount: $1,500)
  - Statistical Science First Year Fellowship, Duke University, 2015-2016
  - Brigham Young University Student Research Conference Session Winner, 2014 and 2015
  - Conference on Data Analysis Student Travel Award, 2014 (Amount: $1,000)
  - Office of Research and Creative Activities Grant, Brigham Young University, 2014 (Amount: $1,500)
  - Statistics Department scholarship (masters), 2014-2015 (Amount: $1,500)
  - Outstanding Performance within the Second Year of Graduate School, Department of Statistics, Brigham Young University, 2015
  - C. Bryant Copley Scholarship, Brigham Young University Physics Department, 2013-2014
  - Dean's List, Brigham Young University, College of Life Sciences Dean's List (2008, 2010-2011); College of Physical and Mathematical Sciences Dean's List (2011-2014)
  - Distinguished Math Performance, Brigham Young University Department of Mathematics, 2011 and 2012

- Brigham Young University full-tuition scholarship, 2007-2008; 2010-2013
- Brian Watkins Scholarship, 2007: for excellent high school student athletes

Statistical Consulting Experience

- Arbinger Institute; Farmington, Utah; 2019 – Present
- Department of Clinical Sciences, North Carolina State University, College of Veterinary Medicine; Raleigh, NC; 2019 – Present
- Hare Lab, Duke University, Department of Evolutionary Anthropology; Durham, NC; 2017 – 2019

Professional Service

- Student Mentoring

Year Graduated	Student	Role	Position Following Graduation
2020	Maryanne Allen	Research Mentor	Not yet completed
2020	Derik Mehl	Research Mentor	Not yet completed
2020	Shelby Taylor	MS Committee Member	Not yet completed
2020	Hannah Peterson	U of U MS Committee Member	Not yet completed

- Departmental Service
  - Seminar Coordinator (Jul 2019 - Present)
- Peer Review For:
  - 2019: Environmetrics; Journal of Agricultural, Biological and Environmental Statistics; Spatial Statistics; Stochastic Environmental Research and Risk Assessment
  - 2018: Environmetrics

Memberships

- American Statistical Association: 2014-Present
- International Society for Bayesian Analysis: 2017-Present
- American Geophysical Union: 2017-Present