

**Stephanie T. Chen**  
Department of Statistics  
North Carolina State University  
email: stchen3@ncsu.edu  
Citizenship: USA

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## SUMMARY

Statistics Ph.D. student seeking full-time employment starting Summer 2019. Problem-solver with experience applying statistical methods such as longitudinal and functional data techniques to large datasets. Proficient in R, SAS, Python, JMP, SPSS, and LaTeX. Experience communicating technical results to a diverse audience in verbal and written form. Able to work in a team or independently with little oversight. Comprehensive background in physical/life sciences.

## EDUCATION

<b>Ph.D.</b>	Statistics Thesis: Topics in Functional Data Analysis	North Carolina State University	<b>2019</b>
<b>M.A.</b>	Statistics	North Carolina State University	<b>2016</b>
<b>B.S.</b>	Environment (honors), Ecology Minors: Geology, Statistics	University of Michigan - Ann Arbor	<b>2013</b>

## EXPERIENCE

*Graduate Summer Intern* May 2018 - July 2018

### **Sandia National Laboratories**

- Supported industrial and national security projects using functional data methods and data visualization, including presentations and written reports for customers

*Science Advisor (previously Graduate Industrial Trainee)* May 2017 - Present; 2015 - 2016

### **International Pharmaceutical Aerosol Consortium on Regulation & Science**

Supervisor: Dr. Beth Morgan, Ph.D., Pearl Therapeutics

- Developed new data-driven model for variability of inhaled/nasal products; designed and conducted comprehensive SAS simulation study of FDA's PBE approach
- Led weekly teleconference for industry working group; prepared technical reports and manuscripts for publication; presented internal IPAC-RS webinar

*Collaborator; Fetal Growth, Pregnancy & Newborn Outcomes group* May 2016 - Present

### **HBGDki initiative, Bill & Melinda Gates Foundation**

- Collaborated on projects modeling ultrasound measurements using nonparametric methods and impact of gestational diabetes using propensity score matching

*Fulbright Student Scholar* Aug 2013 - Apr 2014

### **Northwest University, Xian, China**

Advisor: Dr. Songtao Guo

- Designed and conducted nutritional study of captive golden-snub nosed monkeys at two Chinese zoos including observational fieldwork and labwork
- Publication written with Chinese collaborators submitted to *Int. J. of Primatology*

*Paleobotany Research Assistant* Aug 2009 - Apr 2013

### **University of Michigan - Ann Arbor**

Advisors: Dr. Selena Smith & Dr. Nathan Sheldon

- Processed and analyzed ancient soil phytoliths and isotopes for environmental reconstruction
- Two first-author presentations and publications in *Palaeogeog.*, *Palaeoclimato.*, *Palaeoeco.*

## TEACHING

*Teaching Assistant/Grader* Aug 2014 - May 2015

### **North Carolina State University**

**University of Michigan - Ann Arbor**

- Advised current and prospective students on academic progress, led orientation sessions, and organized & staffed department events

**AWARDS**

- S-STEM awardee, for student development **2014**  
North Carolina State University, National Science Foundation
- Fulbright Student Scholarship (China), for research and collaboration **2013**  
Fulbright Program, U.S. State Department
- International Institute Fellowship (\$5000), for honors thesis research **2012**  
University of Michigan - Ann Arbor

**PUBLICATIONS**

- **Chen ST**, Xiao L, Staicu AM (submitted) A Bootstrap-based Goodness-of-Fit Test of Covariance for Functional Data. *Biometrics*.
- Morgan BE, **Chen ST**, et al. (2018) Performance of the Population Bioequivalence (PBE) Statistical Test Using an IPAC-RS Database of Delivered Dose from Metered Dose Inhalers. *AAPS PharmSciTech*. 19: 1410-1425.
- **Chen ST**, et al. (submitted) Nutrient Balancing by Captive Golden Snub-nosed Monkeys (*Rhinopithecus roxellana*). *Int. Journal of Primatology*.
- **Chen ST**, Smith SY, Sheldon NS, Stromberg CAE (2015) Regional-scale variability in the spread of grasslands in the late Miocene. *Palaeogeog., Palaeoclimato., Palaeoeco.* 437: 42-54.
- **Chen ST**, Smith SY (2013) Phytolith Variability in Zingiberales: A tool for the reconstruction of past tropical vegetation. *Palaeogeog., Palaeoclimato., Palaeoeco.* 370: 1-12.
- **Chen ST** (2013) Nutritional Ecology of Captive Golden Snub-nosed Monkeys. Undergraduate Honors Thesis, University of Michigan. (received Highest Honors)

**PRESENTATIONS**

- **Chen ST**, Xiao L, Staicu AM (2018) Model Testing for Generalized Scalar-on-Function Linear Models. Joint Statistical Meetings, Vancouver, BC.
- **Chen ST**, Xiao L, Staicu AM (2017) Testing the Adequacy of Linear Mixed Effects Models. Joint Statistical Meetings, Baltimore, MD.
- **Chen ST**, Smith SY, Sheldon NS, Stromberg CAE (2012) Tracking the Spread of Ancient Grasslands. Geological Society of America, Charlotte, NC.
- **Chen ST**, Smith SY (2011) Phytolith Variability in Zingiberales: A Tool for the Reconstruction of Past Tropical Vegetation. Geological Society of America, Minneapolis, MN.

**SKILLS**

**Programming:** R, SAS, JMP, Python, SPSS, LaTeX

**Languages:** English (native), Mandarin Chinese (fluent)

**RELEVANT COURSEWORK**

Survival Analysis, Missing Data, Multivariate Statistics, Bayesian Statistics, Longitudinal Data, Advanced Inference, Statistical Computing, Design of Experiments, Spatial Statistics

**EXTRA-CURRICULAR ACTIVITIES**

Functional Data Reading Group	Webmaster	2017 - Present
Wake County Animal Center	Volunteer Dog-Walker	2014 - Present
Statistics Graduate Student Association	Treasurer	2016 - 2018
Humane Society of Huron Valley	Volunteer Dog-Walker	2010 - 2013
Michigan Ice Carving Team	Member/President	2010 - 2013/2012-2013