# Stephanie T. Chen

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

**EDUCATION** 

Ph.D. Statistics North Carolina State University 2019
 Thesis: Model Testing for Functional Data

M.A. Statistics North Carolina State University 2016
B.S. Environment (honors), Ecology University of Michigan - Ann Arbor 2013

Minors: Geology, Statistics

### **EXPERIENCE**

Graduate Industrial Trainee

May 2017 - Present; May 2015 - May 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; wrote technical report and academic paper for publication; prepared and will present upcoming webinar to industry

Collaborator; Fetal Growth, Pregnancy & Newborn Outcomes group Healthy Birth, Growth, and Development knowledge initiative (HBGDki) May 2016 - Present

## Bill & Melinda Gates Foundation

- Prepared report of fetal growth and birth outcomes across 20 developing countries
- Collaborative projects modeling ultrasound measurements using longitudinal/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 2 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

Aug 2014 - May 2015

## North Carolina State University

• Grader STAT 311: Introduction to Statistics

Environment (PitE) Peer Advisor

Jan 2011 - May 2013

## University of Michigan - Ann Arbor

- Advised current and prospective students on academic progress; lead orientation sessions
- Organized and staffed department events, including recruitment and guest lectures

#### **AWARDS**

• S-STEM awardee, for student development	<b>201</b> 4
North Carolina State University, National Science Foundation	
• Fulbright Student Scholarship (China), for research and collaboration Fulbright Program, U.S. State Department	2013
• International Institute Fellowship (\$5000), for honors thesis research University of Michigan - Ann Arbor	2012

### **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*.
- 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, April 2013. (received Highest Honors)

### **PRESENTATIONS**

- Chen ST, Xiao L, Staicu AM (2017) Testing the Adequacy of Linear Mixed Effects Models. Joint Statistical Meetings, Baltimore, MD.
- Chen ST, Xiao L (2016) Testing the Adequacy of Linear Mixed Effects Models. Functional Data Reading Group, Raleigh, NC.
- 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, Python, SPSS, JMP, LaTex Languages: English (native), Mandarin Chinese (fluent)

### RELEVANT COURSEWORK

Survival Analysis, Missing Data, Multivariate Statistics, Bayesian Statistics, Statistical Practice (Consulting), Longitudinal Data, Advanced Inference, Statistical Computing, Design of Experiments, Spatial Statistics, Research Ethics

## **EXTRA-CURRICULAR ACTIVITIES**

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