

**Stephanie T. Chen**  
Eli Lilly and Company  
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## EDUCATION

<b>Ph.D.</b>	Statistics	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

*Research Scientist, Advanced Analytics & Data Science – US Commercial*      June 2019 - Present  
**Eli Lilly and Company**

- Provide advanced analytics support to brand and marketing teams in Biomedicines, covering project planning, data collection, analysis, and presentation
- Methodology used includes machine learning, causal inference, designed experiments, optimization, generalized linear models, and segmentation implemented in R

*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 - Dec 2018  
**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 with Chinese collaborators in *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 2018 - Present; Aug 2014 - May 2015  
**North Carolina State University**

- ST 502: Statistical Inference II; lead practice sessions, created solutions, graded homework
- STAT 311: Introduction to Statistics; held office hours, graded homework

**University of Michigan - Ann Arbor**

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

**AWARDS**

- Certificate of Appreciation, for outstanding technical work **2018**  
International Pharmaceutical Aerosol Consortium on Regulation & Science
- 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
- PitE Individual Grant (\$500), for conference travel **2012**  
University of Michigan - Ann Arbor

**PUBLICATIONS**

- **Chen ST**, Xiao L, Staicu AM (in review) Model Testing for Generalized Scalar-on-Function Linear Models. *Technometrics*.
- Feng Y, Xiao L, Li C, **Chen ST**, Ohuma EO (2020) Correlation models for monitoring fetal growth. *Statistical Methods in Medical Research*. <https://doi.org/10.1177/0962280220905623>.
- **Chen ST**, Morgan BE, et al. (2019) Performance of the Population Bioequivalence Test with Impactor-Sized Mass Data. *AAPS PharmSciTech*.
- **Chen ST**, Xiao L, Staicu AM (2019) A Smoothing-based Goodness-of-Fit Test of Covariance for Functional Data. *Biometrics*. <https://doi.org/10.1111/biom.13005>.
- **Chen ST**, Luo X., et al. (2018) Nutrient Balancing by Captive Golden Snub-nosed Monkeys (*Rhinopithecus roxellana*). *Int. J. Primatology*. 39: 1124-1138.
- 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**, 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.

**SKILLS**

**Programming:** R (dplyr, ggplot2, Shiny, Markdown), SAS, JMP, Python, SPSS, LaTeX

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

**EXTRA-CURRICULAR ACTIVITIES**

Indianapolis Animal Care Services	Volunteer Dog-Walker	2019 - Present
WCAC (Raleigh, NC) & HSHV (Ann Arbor, MI)	Volunteer Dog-Walker	2010 - 2019
Statistics Graduate Student Association	Treasurer	2016 - 2018
Michigan Ice Carving Team	Member/President	2010 - 2013/2012-2013