# Stephanie J. Spielman

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#### Education

## University of Texas at Austin, Austin, TX.

Expected May 2016

Ph.D. in Ecology, Evolution, and Behavior

Advisor: Claus O. Wilke, PhD

Brown University, Providence, RI.

2010

2009

Sc.B. in Biology, with Honors Advisor: Daniel M. Weinreich, PhD

#### Awards and Honors

# NIH Ruth L. Kirschstein National Research Service Award 2015-2017

Predoctoral Fellow, Sponsor Dr. Claus Wilke

Outstanding Teaching Award 2014

 $\operatorname{UT}$  Austin, Biology Instructional Office

UT Austin EEB Travel Grant 2013

UT Austin, Department of Integrative Biology

SMBE Graduate Student Travel Grant 2013

Society for Molecular Biology and Evolution

UT Austin Integrative Biology Graduate Recruitment Fellowship 2011

UT Austin, Department of Integrative Biology

# Undergraduate Teaching and Research Award

Brown University

## Peer-reviewed Publications

**Spielman SJ**, Dawson ET\*, and Wilke CO. 2014. Limited utility of residue masking for positive-selection inference. Mol Biol Evol 31(9):2496 - 2500.

Shahmoradi A, Sydykova DK\*, **Spielman SJ**, Jackson EL, Dawson ET\* Meyer AG, and Wilke CO. 2014. *Predicting evolutionary site variability from structure in viral proteins: buriedness, flexibility, and design*. J Mol Evol 79:130 - 142.

Tien MZ\*, Meyer AG, Sydykova DK\*, **Spielman SJ**, and Wilke CO. 2013. *Maximum allowed solvent accessibilites of residues in proteins*. PLoS One 8(11):e80635.

**Spielman SJ** and Wilke CO. 2013. *Membrane environment imposes unique selection pressures in transmembrane domains of G-protein coupled receptors.* J Mol Evol 76(3):172 - 182.

<sup>\*</sup>Denotes undergraduate co-author.

#### Submitted Manuscripts

**Spielman SJ**, Kumar K\*, and Wilke CO. Comprehensive, structurally-curated alignment and phylogeny of vertebrate biogenic amine receptors. In review, PeerJ. preprint: https://peerj.com/preprints/571.

**Spielman SJ** and Wilke CO. The relationship between dN/dS and scaled selection coefficients. In review, Mol Biol Evol.

#### **Pre-prints**

**Spielman SJ**<sup> $\dagger$ </sup>, Meyer, AG<sup> $\dagger$ </sup>, and Wilke CO. 2014. Increased evolutionary rate in the 2014 West African Ebola outbreak is due to transient polymorphism and not positive selection. In review, Mol Biol Evol. bioRxiv doi: 10.1101/011429.

# Presentations and Posters

#### Molecular Evolution of Membrane Proteins.

2013

Contributed talk at Mechanisms of Protein Evolution II Conference, Aurora, CO.

# Membrane environment imposes unique selection pressures on GPCRs.

2013

Contributed poster at Annual BEACON Congress, East Lansing, MI.

#### Teaching

#### TA, Undergraduate Biostatistics

Fall 2013

UT Austin, Department of Statistics and Data Science

## TA, Undergradute Evolution

Spring 2013

UT Austin, Department of Integrative Biology

#### TA, Undergraduate Biostatistics

Fall 2012

UT Austin, Department of Statistics and Data Science

### TA, Undergraduate Evolutionary Biology

Fall 2009

Brown University, Department of Biology

## Academic Service

#### Undergraduate Biostatistics curriculum development

2012

UT Austin, Department of Statistics and Data Science

Ad hoc referee: Molecular Biology and Evolution, PLoS Pathogens

<sup>\*</sup>Denotes undergraduate co-author.

<sup>&</sup>lt;sup>†</sup>Authors contributed equally.