Stephanie J. Spielman

Contact Information

stephanie.spielman@gmail.com
`https://sjspielman.github.io`

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

Awards and Honors

Outstanding Teaching Award 2014
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 2009
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.

*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.

*Denotes undergraduate co-author.

Pre-prints

Spielman SJ†, Meyer, AG†, and Wilke CO. 2014. *Increased evolutionary rate in the 2014 West African Ebola outbreak is due to transient polymorphism and not positive selection.* bioRxiv doi: 10.1101/011429 .

†Co-first author.

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

Instructor, Introduction to Python Short Course May 2014
UT Austin, Center for Computational Biology and Bioinformatics

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*