

Kenneth W. Latimer

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EDUCATION:

Ph.D., The Institute for Neuroscience 2010-2015
The University of Texas at Austin
Advisors: Jonathan W. Pillow, Alexander C. Huk
Dissertation: *Statistical approaches for unraveling the neural code in the visual system*

B.S. in Computer Science, *magna cum laude* 2005-2010
University of Colorado, Boulder
minor in mathematics, certificate in cognitive science

RESEARCH EXPERIENCE:

Postdoctoral Fellow September 2015-present
University of Washington, Seattle
Advisor: Adrienne Fairhall

Undergraduate Research Assistant 2009-2010
Computational Cognitive Neuroscience Lab
University of Colorado, Boulder
Advisor: Randall C. O'Reilly
Undergraduate thesis: *A neural network model for object recognition in cluttered scenes using motion and binocular disparity*

Undergraduate Research Assistant 2006-2010
Center for LifeLong Learning and Design
University of Colorado, Boulder

HONORS & AWARDS:

Center for Perceptual Systems Training Grant recipient 2014-2015
UT Austin Office of Graduate Studies, Professional Development Travel Award 2012
UT Austin Dean's Excellence Award 2010

TEACHING EXPERIENCE:

TA, The University of Texas at Austin
Kenneth W. Latimer, CV

Updated 10/13/2016

Quantitative Methods in Neuroscience (NEU 366M) Fall 2013
Instructor: Dr. Ila Fiete
Vertebrate Neurobiology (BIO 365R) Fall 2012
Instructor: Dr. George Pollak

Summer Courses:

Summer Workshop on the Dynamic Brain September 2016
Guest Lecture: Fitting statistical models to neural data with
maximum likelihood methods

SERVICE:

Co-Organizer, Theoretical Neuroscience Journal Club (UW, Seattle) 2016-present
Co-Organizer, Computational and Theoretical Neuroscience Journal Club 2014-2015
(UT Austin)
Treasurer, Neuroscience Graduate Student Association (UT Austin) 2012-2013
Ad-hoc reviewer: PLoS Computational Biology, Neural Computation, Neural
Information Processing Systems 2016, COSYNE 2016

PUBLICATIONS:

Latimer KW, Yates JL, Meister MLR, Huk AC, & Pillow JW (2016). Response to Comment on
“Single-trial dynamics of spike trains in parietal cortex reveal discrete steps during
decision-making.” *Science*, 351(6280):1406.

Latimer KW, Yates JL, Meister MLR, Huk AC, & Pillow JW (2015). Single-trial dynamics of
spike trains in parietal cortex reveal discrete steps during decision-making. *Science*,
349(6244):184:187.

Latimer KW, Huk AC, & Pillow JW (2015). Bayesian inference for latent stepping and ramping
models of spike train data. Chapter in *Advanced State Space Methods for Neural and
Clinical Data*, ed. Zhe Chen, Cambridge University Press.

Latimer KW, Chichilnisky EJ, Rieke F, & Pillow JW (2014). Inferring synaptic conductances
from spike trains under a biophysically inspired point process model. *Advances in Neural
Information Processing Systems*, 27:954-962.

Park I, Archer E, **Latimer KW**, & Pillow JW (2013). Universal models for binary spike patterns
using centered Dirichlet processes. *Advances in Neural Information Processing Systems*,
26: 2463-2471.

Scholl B, **Latimer KW**, & Priebe NJ (2012). A retinal source of spatial contrast gain control.
Journal of Neuroscience, 32(29):9824-30.

CONFERENCE PRESENTATIONS:

- Latimer KW**, Yates JL, Huk AC, & Pillow JW (2015). Deciphering the neural representation of perceptual decisions with latent variable models. Poster, Computational and Systems Neuroscience (COSYNE) annual meeting.
- Latimer KW**, Chichilnisky EJ, Rieke F, & Pillow JW (2014). Inferring synaptic conductances from spike trains with a point process encoding model. Poster, Computational and Systems Neuroscience (COSYNE) annual meeting.
- Park I, Archer E, **Latimer KW**, & Pillow JW (2014). Scalable nonparametric models for binary spike patterns. Poster, Computational and Systems Neuroscience (COSYNE) annual meeting.
- Latimer KW**, Yates JL, Meister MLR, Huk AC, Pillow JW (2013). Understanding perceptual decision-making in area LIP with latent variable models. Poster, University of Texas, Conference on Learning and Memory.
- Latimer KW**, Yates JL, Meister, MLR, Huk AC, Pillow, JW (2012). Analyzing perceptual decision-making in area LIP with hidden Markov models. Poster, Society for Neuroscience annual meeting.
- Latimer KW**, Yates JL, Pillow, JW (2011). Modeling perceptual decisions in the parietal lobe with hidden Markov Models. Poster, University of Texas annual Neuroscience Symposium.
- Mingus B, Kriete T, Herd S, Wyatte D, **Latimer K**, & O'Reilly R (2011). Generalization of Figure-Ground Segmentation from Monocular to Binocular Vision in an Embodied Biological Brain Model. In Schmidhuber, J., Thorisson, K.R., Looks, M. (Eds.). *Artificial General Intelligence*. 351-356.