

## BIOGRAPHICAL SKETCH

### Benjamin J. Liebeskind

Postdoctoral Researcher, Center for Systems and Synthetic Biology - University of Texas at Austin  
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## PROFESSIONAL PREPARATION

Ph.D., Evolution, Ecology, and Behavior - University of Texas (2009-2014)

Supervising Professors: Harold Zakon and David Hillis.

B.A., Liberal Arts - St. John's College, Santa Fe (2003-2008)

## APPOINTMENTS

Teaching Assistant, 2009 (F), 2010 (F&Sp), 2011 (F&Sp&Sum), 2012 (F&Sp), 2013 (Sp).

Classes assisted: Vertebrate Neurobiology, Neurobiology Lab, Ecology, Introductory Biology.

Research Assistant, 2010 (Sp&Sum), 2012 (Sum), 2013 (Sum) – present.

Teaching Assistant, Workshop on Molecular Evolution, Marine Biological Laboratory, Woods Hole MA  
(Sum 2013, Sum 2014)

## AWARDS

Outstanding Dissertation Award, University of Texas College of Natural Sciences 2014.

Runner-up, Hamilton Award, Evolution 2014.

Nominated, Hamilton Award, Evolution 2013.

## SUPPORT

NIH NRSA Post-Doctoral Training Grant 2015

IB DDIG-like grant (University of Texas), Fall 2011.

IB startup fellowship (University of Texas), Spring 2010.

## PRESENTATIONS

### Posters:

Evolution 2010, Portland OR.

BEACON Congress 2013, Michigan State University.

### Talks:

Choanoflagellate Workshop 2011, Berkeley CA.

Brain Behavior and Evolution 2013, University of Texas at Austin.

Evolution 2013, Snowbird UT.

SICB 2014, Austin TX.

Evolution 2014, Raleigh NC.

## PUBLICATIONS

Liebeskind, Hillis, Zakon. "Convergence of ion channel genome content in early animal evolution."  
*PNAS in press.*

Ghezzi\*, Liebeskind\*, Thompson, Atkinson, Zakon. "Ancient association between cation leak channels and Mid1 proteins is conserved in fungi and animals." *Frontiers in Molecular Neuroscience* 2014; vol. 7 num. 00015

Liebeskind, Hillis, Zakon. "Independent acquisition of sodium selectivity in bacterial and animal sodium channels." *Current Biology* 2013; vol. 23 issue 21, R948-R949.

Liebeskind, Hillis, Zakon. "Phylogeny Unites Animal Sodium Leak Channels with Fungal Calcium Channels in an Ancient, Voltage-Insensitive Clade." *Molecular Biology and Evolution* 2012. 10.1093/molbev/mss182.

Liebeskind. "Evolution of sodium channels and the new view of early nervous system evolution." *Communicative & Integrative Biology* 2011; 4(6).

Liebeskind, Hillis, Zakon. "Evolution of Sodium Channels Predates the Origin of Nervous Systems in Animals." *PNAS* 2011; vol. 108 no. 22, 9154-9159.

## **SYNERGISTIC ACTIVITIES**

### **Teaching:**

Co-founded, designed and taught a biological computing working group for graduate students and post-docs at University of Texas (spring 2013):

<https://wikis.utexas.edu/display/CCBB/Introduction+to+Biological+Computing+Course>

Teaching Assistant, Software Carpentry workshop, University of Texas at Austin, January 2013.

### **Manuscript Reviews:**

*PNAS — Mol Biol Evol — PLOS One — Ecol Evo — Sci Rep — BMC Genomics*

### **Undergraduate Training:**

Trained and guided two undergraduate researchers in bioinformatics, phylogenetic methods, and molecular biology. These projects are expected to lead to publications in the near future. Both students are now in graduate school (North Carolina State University and the University of Chicago)

### **Public Outreach:**

I have presented my research on public radio (<http://www.kvrx.org/schedule/programs/337>), on blogs (<http://beacon-center.org/>), for a local homeschooling group, and at a public lecture series which I helped organize for the year 2011 – 2012 (<http://scienceunderthestars.org/about/>). This lecture series is put on by graduate students at the University of Texas at Austin and provides free lectures on current research at UT geared towards a general audience and children. I have also participated in local science outreach events not related to my research, such as Darwin Day at the Texas Natural Science Center (<http://www.utexas.edu/tmm/events/darwin/>), where I created a station for children on the phylogeny of vertebrates.