Curriculum Vitae

Benjamin J. Liebeskind
Postdoctoral Fellow, Center for Systems and Synthetic Biology - University of Texas at Austin
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EDUCATION

Ph.D., Evolution, Ecology, and Behavior - University of Texas at Austin (2009-2014)
Advisors: Drs. Harold Zakon and David Hillis.
B.A., Liberal Arts - St. John's College, Santa Fe (2003-2008).

APPOINTMENTS

Postdoctoral Fellow, University of Texas at Austin, Drs. R. Aldrich and E. Marcotte. 2015 - present
Teaching Assistant, Workshop on Molecular Evolution, Marine Biological Laboratory, Woods Hole MA (summer 2013, '14, and '15)
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) - 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-present
IB DDIG-like grant (University of Texas), Fall 2011.
IB startup fellowship (University of Texas), Spring 2010.

INVITED TALKS

"Ion Channels and the Tree of Life," Baylor 2015

PRESENTATIONS AT CONFERENCES

Talks:

Evolution 2016, Austin TX
Quest for Orthologs 2015, Barcelona
Evolution 2014, Raleigh NC
SICB 2014, Austin TX
Evolution 2013, Snowbird UT.
Brain Behavior and Evolution 2013, University of Texas at Austin
Choanoflagellate Workshop 2011, Berkeley CA

Posters:

BEACON Congress 2013, Michigan State University
Evolution 2010, Portland OR.

PUBLICATIONS (* Co-first authorship)

Liebeskind "What makes a sodium channel?" (2016) Journal of General Physiology; 148 (2) 89-90

Liebeskind, McWhite, Marcotte "Towards consensus gene ages" (2016) Genome Biology and Evolution; 8 (6), 1812-1823

Halling*, **Liebeskind***, Hall, Aldrich "Conserved properties of individual Ca2+-binding sites in calmodulin" (2016) PNAS; 113 (9), E1216-E1225

Liebeskind, Hillis, Zakon, Hofmann. "Complex homology and the evolution of nervous systems." (2016) Trends in Ecology and Evolution 31 (2), 127-135

McWhite*, **Liebeskind***, Marcotte. "Applications of comparative evolution to human disease genetics."
(2015) Current Opinions in Genetics and Development; vol. 35, 16-24

Liebeskind, Hillis, Zakon. "Convergence of ion channel genome content in early animal evolution." (2015) PNAS; vol 112 no. 8, E846-E851.

Moran, Barzilai, **Liebeskind**, Zakon. "Evolution of voltage-gated ion channels at the emergence of Metazoa." (2015) Journal of Experimental Biology; vol 218 issue 4, 515-525

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

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

Liebeskind, Hillis, Zakon. "Phylogeny Unites Animal Sodium Leak Channels with Fungal Calcium Channels in an Ancient, Voltage-Insensitive Clade." (2012) Molecular Biology and Evolution; 29 (12), 3613-3616

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

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

SYNERGISTIC ACTIVITIES

Teaching:

Computational Biology: I co-founded, designed and taught a biological computing working group for graduate students and post-docs at University of Texas (2013-14). The course has been continued and updated and is still offered: http://ccbb.biosci.utexas.edu/semesterlong.html. I also worked as a TA for a Software Carpentry workshop at University of Texas (2013)

Philosophy: I have maintained an interest in philosophy and the history of science from my undergraduate education and have led discussion groups for undergraduates through the Thomas

Jefferson Center for Core Texts and Ideas (http://liberalarts.utexas.edu/coretexts/Book-Club/About.php) on writers as diverse as Allen Turing and Plato.

Undergraduate Training:

As a PhD student, I trained and guided two undergraduate researchers in bioinformatics, phylogenetic methods, and molecular biology. Both students are now in graduate school (North Carolina State University and the University of Chicago). As a postdoctoral fellow, I am currently training two students in yeast genetics and synthetic biology. In my commitment to undergraduate training I have always recruited widely and from underrepresented groups.

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.