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Ph.D. in Biology, May 2005

B.A. in Biology with Honors, May 2000

July 2007 present
Assistant Professor of Biology

September 2005 June 2007
Advisor: Dr. Alexa Bely
Postdoctoral Researcher: Asexual and Regenerative Development in Oligochaetes.

September 2000 May 2005
Advisor: Dr. John Finnerty
Dissertation project: Comparable Deployment of Regulatory Genes across
Nematostella vectensis Developmental Trajectories

September 2000 May 2005
Position: Teaching Fellow
Courses: BI107, BI108, BI109 (Honors): Introductory Biology

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- Harmon,* S. and Burton, P. 2010. Three modes of development, one genome: Understanding the relationship among Embryogenesis, Regeneration, and Asexual Reproduction. Indiana State University. April 8th, 2010.
- Burton, P. Induction of oral fates in *Nematostella vectensis*. Indiana University-Purdue University Indianapolis. October 16th, 2009.
- Harmon,* S, Stefanik, D, and Burton, P. 2010. How many mouths are too many? Induction of oral fates in the cnidarian *Nematostella vectensis*. Society for Integrative and Comparative Biology
- Burton, P, Vick,* M, and Finnerty, J. 2009. Novel developmental mechanisms among embryogenesis, asexual fission, and regeneration in *Nematostella vectensis*. European Society for Evolutionary Biology.
- Harmon,* S, Vick,* M, Tritle,* B, and Burton, P. 2009. Cell Death and Division during Regeneration in the Sea Anemone *Nematostella*. Society for Integrative and Comparative Biology.
- Burton, P and Bely, A. 2006. The evolution of regeneration and asexual development; a comparative study in naidine annelids. Integrating Evolution, Development and Genomics. University of California at Berkeley.
- Burton, P, Pang, K, Krone, C, Martindale, M and Finnerty, J. 2006. The Evolution of Mesoderm Insights from Outgroups. Society for Integrative and Comparative Biology. In *Symposium: Movers and Shakers; The Evolution and Development of Mesoderm*.
- Burton, P, Finnerty, J and Bely, A. 2006. A New Approach to EvoDevo; Intraspecific Developmental Biology. Williams College Molecular Biology Reunion.
- Burton, P, Pang, K, Krone, C, Martindale, M and Finnerty, J. 2004. *Nematostella*: A Model Outgroup for Bilaterian Evolution. Society for Developmental Biology.
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- Burton, P, Ryan, J, Pang, K, Eggen, M, Martindale, M, and Finnerty, J. 2003. Changes in gene expression during Embryogenesis, Regeneration, and Asexual Reproduction. Society for Developmental Biology.
- Burton, P, Pang, K, Eggen, M, Martindale, M, and Finnerty, J. 2003. Hox Gene Expression Suggests a Role in Patterning Two Axes in *Nematostella*. Society for Molecular Biology and Evolution.

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Burton, P, Mazza, M, Kwong, G, Martindale, M, and Finnerty, J. 2002. Early evolution of homeobox genes: Phylogenetic analysis of homeobox sequences from Protostomes, Deuterostomes and Cnidarians. Northeast Regional Meeting of the Society for Developmental Biology. Marine Biological Laboratory, Woods Hole, MA.

* Wabash Student

- Investigating the cellular and molecular mechanisms across embryogenesis, regeneration, and asexual reproduction in the cnidarian *Nematostella vectensis*. National Institute of Health, Enhancing Developmental Biology Research at Undergraduate Institutions. May, 2010. \$355,188. *Not funded*.
- Sigma Xi Grants in Aid of Research, 2003. *Funded*

- Faculty Development, Wabash College, 2011 for attendance of Developmental Biology Teaching Workshop, Darling Marine Center, University of Maine, June 2011.
- Faculty Development, Wabash College, 2010 for attendance at The Council on Undergraduate Research Proposal Writing Institute, July 2010.
- , N M N among Embryogenesis, Asexual Fission, and Regeneration in *Nematostella vectensis*
- Belmarich Award, 2005 for the Most Outstanding Doctoral Work in the Biological Sciences, Boston University
- Poster Competition, 3rd Place. 2003. Regional Meeting of the Society for Dev. Biol.
- Emerging Collector Award. 2003. Blackmon Book Collection Contest, Boston University. *for a collection of* first edition books on the Theory of Evolution.
- Swain Award for outstanding performance on the Qualifying Examination, 2002.
- Boston University Teaching Fellowships 2000-2005

- Society of Integrative and Comparative Biology
- Society for Developmental Biology
- Sigma Xi