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### Education

- Ph.D. in Biology, University of Washington, May 2009  
Dissertation Title: "*When Predaceous Foes Meet Their Match: Predator-Induced Defenses in Marine Planktonic Larvae*". Advisor: Richard R. Strathmann
- B.A. in Anthropology (biological emphasis) with Highest Honors, University of California, Santa Barbara, 1999

### Peer-reviewed Publications

1. McDonald, K. A. and **D. Vaughn**. (*in press*) An abrupt change in food environment induces cloning in *Dendraster excentricus* plutei. *The Biological Bulletin*
2. **Vaughn, D.** (2009) Predator-induced larval cloning in *Dendraster excentricus*: Might Mothers Matter? *The Biological Bulletin* 217:103-114
3. **Vaughn, D.** and Strathmann, R. R. (2008) Predators induce cloning in echinoderm larvae. *Science* 319:1503 (14 March 2008)
4. **Vaughn, D.** (2007) Predator-induced morphological defenses in marine zooplankton: A larval case study. *Ecology* 88:1030-1039

### Manuscripts in Review

5. **Vaughn, D.** (n.d.) Why run and hide when you can divide? Evidence for cloning and reduced size as an adaptive inducible defense

### Manuscripts in Prep

6. **D. Vaughn** and J. D. Allen. (n.d.) The peril of the plankton. Invited for publication in *Integrative and Comparative Biology*

### Research grants

- 2006-2009
- National Science Foundation, OCE-0623102. "*Predator-induced morphological defenses of marine zooplankton*" co-written with R. R. Strathmann, granted to R. R. Strathmann, \$243,279.
- 2008
- Achievement Rewards for College Scientists (ARCS) Foundation Fellowship, Seattle Chapter. \$3,000 (06/08)
  - Patricia L. Dudley Endowed Fellowship, Friday Harbor Laboratories. \$500 (06/08)
- 2007
- Graduate Student Research Fellowship, Friday Harbor Laboratories. \$3,000 (06/07)
- 2006
- Lerner-Grey Fund for Marine Research Award. "*Reviving Garstang's Ballad: Integrating Molecular and Cellular Approaches to Understand How the Gastropod Got its Twist*" \$1,625 (04/06)
  - Stephen and Ruth Wainwright Endowed Fellowship, Friday Harbor Laboratories. \$2,500 (06/06)
  - Achievement Rewards for College Scientists (ARCS) Foundation Fellowship, Seattle Chapter. \$1,500 (06/06)

### Other grants

- Travel Grant, Annual Meeting of the Society for Integrative and Comparative Biology (National Science Foundation, IOB 0450894) (01 / 05)

### Honors & Awards

2009

- Distinguished Doctoral Dissertation Award (sole recipient), Department of Biology, University of Washington

2008

- Runner-up for Best Student Poster Award. Division of Invertebrate Zoology. Annual Meeting of the Society of Integrative and Comparative Biology (SICB). San Antonio, Texas

2007

- Adrian M. Wenner Strong Inference Award for Best Student Paper. Division of Invertebrate Zoology. 2007 Annual Meeting of the Society of Integrative and Comparative Biology (SICB). Phoenix, Arizona

2003 & 2004

- Honorable Mention, Graduate Research Fellowship, National Science Foundation.
- Graduate School Top Scholar Award, University of Washington, Seattle

1999

- Academic Excellence Award in Anthropology, University of California, Santa Barbara, 1999 (sole recipient)

### Other Recognition

2008

- Research featured in the *New York Times* (March 13, 2008), the *Seattle Times* (March 14, 2008), *Scientific American* (May 2008), *Natural History Magazine* (May 2008), *Cosmopolitan Magazine* (June 2008) and by numerous online news sources (March-April 2008)

- Research featured in *Ecological Developmental Biology*. Scott F. Gilbert and David Epel (authors). Sinauer Associates, 1<sup>st</sup> edition

2007

- Research featured in the Friday Harbor Laboratories Newsletter, *Intertidal Tidings*. Vol 12

### Presentations

2009

- "Sand Dolly: The adaptive significance of predator-induced cloning and size reduction in *Dendraster plutei*". Meeting of the Society for Integrative and Comparative Biology (SICB). Boston, Massachusetts

2008

- "Predator-induced cloning and size reduction in *Dendraster excentricus plutei*". Friday Harbor Laboratories Seminar Series, San Juan Island, Washington
- "Attack on the Clones: Predator-induced cloning in echinoderm larvae". Meeting of the Society for Integrative and Comparative Biology (SICB). San Antonio, Texas

2007

- "Predator-Induced Morphological Defenses in Marine Zooplankton: A Larval Case Study". Meeting of the Society for Integrative and Comparative Biology (SICB). Phoenix, Arizona
- "Impacts of food concentration and larval stage on incidence of cloning in *Dendraster excentricus plutei*" (K. A. McDonald and D. Vaughn, presented by K. A. McDonald).

Meeting of the Society for Integrative and Comparative Biology (SICB). Phoenix, Arizona

2005

- *“The Ballad of the Veliger Revisited: Alterations in Larval Shell Morphology in Response to Planktonic Predators”*. Meeting of the Society for Integrative and Comparative Biology (SICB). San Diego, California

2002

- *“Cytoskeletal Contributions to Healing in Acetabularia acetabulum”*. Friday Harbor Laboratories Research Apprenticeship Scientific Symposium, Friday Harbor, Washington

### **Invited Seminars/Talks**

2008

- Friday Harbor Laboratories Seminar Series, San Juan Island, Washington

2007

- Eco Lunch Seminar Series, Purdue University, West Lafayette, Indiana
- Friday Harbor Laboratories Seminar Series, San Juan Island, Washington
- Larval Biology (graduate course), University of Washington, Friday Harbor Laboratories

2006

- Larval Biology (graduate course), University of Washington, Friday Harbor Laboratories

2002 & 2003

- Guest Lecture on Hominid Evolution, Principles of Evolution (undergraduate course) University of Washington, Tacoma

### **Research and Related Experience**

- Predator-induced responses in marine planktonic larvae (thesis research).
- Integrating developmental approaches to understand how the gastropod got its twist.
- The evolution of coloniality. Laboratory Rotation with Dr. Billie Swalla. University of Washington
- Research Apprentice, Cell Biology of Morphogenesis and Development, University of Washington, Friday Harbor Laboratories

### **Teaching Experience**

- Graduate Teaching Assistant, Larval Biology (graduate course), University of Washington, Friday Harbor Laboratories. Instructors: Dr. Richard R. Strathmann and Richard Emlet
- Graduate Teaching Assistant, Invertebrate Paleontology, University of Washington, Seattle. Instructor: Dr. Peter D. Ward
- Graduate Teaching Assistant, Marine Invertebrate Zoology, University of Washington, Friday Harbor Laboratories. Instructors: Drs. Bruno Pernet and Elizabeth Balser
- Mentor to local High School Student, Dr. H. D. (Toby) Bradshaw’s Laboratory, University of Washington, Seattle

### **Teaching Interests**

- Ecology
- Evolution
- Marine Ecology
- Larval Ecology
- Marine Invertebrate Zoology
- Ecology of Development (*Eco-Devo*)
- Graduate Professional Development

## Professional Activities and Service

2007-present

- Ad Hoc Reviewer for *Aquatic Ecology*, *The Biological Bulletin*, *Hydrobiologia*, *Journal of Shellfish Research*

2005-2009

- K-12 Marine Biology Expert Day. Friday Harbor Middle School. San Juan Island, Washington
- Friday Harbor Laboratories "Open House". San Juan Island, Washington
- Friday Harbor Laboratories Annual Donor "Beach Walk". San Juan Island, Washington

## Professional Affiliations

American Association for the Advancement of Science (AAAS)  
Ecological Society of America (ESA)  
Society for Integrative and Comparative Biology (SICB)

## References

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Phone: 206.221.6594

*\*Additional references available upon request*