

**J. REBECCA JACOBS, Ph.D.**

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**SUMMARY**

- Broadly trained biologist.
- Diverse teaching experience including co-development of new course.
- Effective written and oral communicator.
- Extensive experience in literature searches, evaluation of primary literature, concept synthesis and hypothesis construction and testing.
- Well-organized, flexible and able to work well independently and with others.

**EDUCATION**

University of California, Santa Cruz	Ecology and Evolution	Ph.D. 2003
University of California, Santa Cruz	Ecology and Evolution	M.S. 2000
University of Delaware	Microbiology and Ecology	1994-1996
University of Delaware	Biology and Philosophy	B.A. 1990-94

**APPOINTMENTS**

Winter 2007	Lecturer, UCSC Ocean Sciences: The Oceans
Fall 2006	Instructor, Foothill College: General Biology
Summer 2006	Lecturer, UCSC Summer Session: The Oceans
Summer 2006	Instructor, Foothill College: Anatomy & Physiology
Spring 2006	Instructor, Foothill College: Evolution, Systematics and Ecology; Anatomy & Physiology
Winter 2006	Lecturer, UCSC Ocean Sciences: The Oceans
Fall 2005	Instructor, Foothill College: General Biology; Anatomy & Physiology
Fall 2005	Instructor, West Valley College: Introductory Biology
Spring 2005	Instructor, Foothill College: Form & Function in Plants and Animals
Winter 2005	Lecturer, UCSC Ocean Sciences: The Oceans
2003 - 2005	Course Assistant, UCSC Ocean Sciences: Life in the Sea, The Oceans; Course Assistant, UCSC Biology: Behavioral Ecology, Animal Physiology, Ecology and Evolution, Marine Botany
1996 - 2002	Teaching Assistant, UCSC Biology: Accelerated Ecology and Evolution; Accelerated Physiology and Development; Cellular & Molecular Biology; Ecology; Invertebrate Zoology; Tropical Coastal Ecosystems; Physiology and Development; Molecular Laboratory Techniques; Microbiology Laboratory; Molecular Evolution; Female Physiology. Outstanding T.A. Nomination (2000)
1994 - 1996	Teaching Assistant, University of Delaware: Microbiology Laboratory; Introductory Biology
1994	Research Assistant, University of Delaware, Department of Biology, David W. Smith, Professor of Biology. Stress evaluation of <i>Thiobacillus intermedius</i> in response to varying salinity.

### RESEARCH INTERESTS AND EXPERIENCE

- 1996 - 2003 Alternative thinking about the past, present, and future of coral-algal symbioses, University of California, Santa Cruz, Donald C. Potts, Professor of Biology, Faculty advisor. Dissertation research. Included fieldwork at UC Berkeley Gump Research Station in Moorea, French Polynesia.
- 2000 - 2003 Evolution and paleoecology of corals and algal symbiosis, University of California, Santa Cruz, Donald C. Potts, Professor of Biology, Faculty advisor.
- 2000 Research cruise to Rose Atoll, American Samoa, U.S. Fish and Wildlife Service, James Maragos, sponsor.
- 1999 Field sampling of zooxanthellae and culture attempts, Pauley Fellowship, Hawaii Institute of Marine Biology, Robert Kinzie, Professor of Biology, Advisor.
- 1994 - 1996 Cell volume fluctuation as a measure of pH stress in *Thiobacillus intermedius*, University of Delaware, Department of Biology, David W. Smith, Professor of Biology, Faculty advisor.

### ADDITIONAL TEACHING EXPERIENCE

Stanley H. Kaplan Educational Centers in Santa Cruz, San Jose, and Palo Alto  
1997-2000: Instructor for SAT, GRE, GMAT, and MCAT classes; private tutor for writing and biology.

Guest lectures:

University of California, Santa Cruz

2000-2003: Invertebrate-Algal Symbioses, Coral-Algal Symbiosis, Coral Bleaching, Coral Reefs, Seagrass Biology, Mangrove Biology, Physical Processes in Mangroves, Marine Diseases, Social Implications of Coastal Development

Cabrillo Community College

2002: Mangroves and Coral Reefs

City College of San Francisco

2000: Marine Invertebrates and the Intertidal Zone

### PUBLICATIONS

- Buddemeier, R.W., Baker, A.C., Fautin, D.G., and Jacobs, J.R. (2004). The adaptive hypothesis of bleaching. *In: Coral Health and Disease*. Rosenberg, E. (ed). Springer-Verlag, New York, pp. 427-444.
- Potts, D.C., Jacobs, J.R. (2003). Evolution of reef-building Scleractinia in turbid environments: a paleoecological hypothesis. *Proc. 9<sup>th</sup> Intl. Coral Reef Congr.* 249-254.
- Jacobs, J.R. (2000). Testing the Adaptive Bleaching Hypothesis: The mechanism and consequences of zooxanthella exchange. *9<sup>th</sup> Intl. Coral Reef Symposium*, Bali, Indonesia. (Abstract)

Potts, D.C. and Jacobs, J.R. (2000). Evolution of reef-building Scleractinia in turbid environments: A paleoecological hypothesis. *9<sup>th</sup> Intl. Coral Reef Symposium*, Bali, Indonesia. (Abstract)

Jacobs, J.R., Cochran, S.A. (1998). Hyperspectral tools for early detection, rapid assessment and economical monitoring of anthropogenic inputs to estuarine ecosystems. *Monterey Bay National Marine Sanctuary Symposium: Sanctuary Currents: Human Influences on the Coastal Ocean*; Santa Cruz, CA, March, 1998; (Poster).