

Curriculum Vitae

Jamie Susan Foster

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Academic Training

University of Hawaii, Honolulu	Ph.D.	Zoology	1996-2000
University of Southern California	M.S.	Biological Sciences	1993-1996
University of Massachusetts, Amherst	B.S.	Zoology	1988-1992

Professional Experience

Nov 2005 - Assistant Professor, Department of Microbiology and Cell Science
University of Florida, Space Life Science Laboratory, Kennedy Space Center
2004 - 2005 Postdoctoral Researcher, NASA Ames Research Center, Moffett Field, CA
2003 (fall) - Visiting Scholar, Purdue University, West Lafayette, IN
2004 (fall)
2001- 2003 Postdoctoral Researcher, National Institute of Dental and Craniofacial Research,
National Institutes of Health, Bethesda, MD
1997 - 2000 Research Assistant, Pacific Biomedical Research Center, University of Hawaii
1996 - 1997 Research Assistant, Pacific Biomedical Research Center, University of Hawaii
1994 - 1996 Animal Care Technician, Department of Biological Sciences, USC

Teaching Experience

2007 - University of Florida, Microbiology and Cell Science
Teaches Astrobiology course for undergraduate students using
traditional and distance learning technology
2004 NASA High School Apprenticeship Research Program (SHARP),
2003 Science Fair Mentor, Rockville Middle School, Rockville MD
2001 National Institute Dental Craniofacial Research Student Lectuer, Bethesda, MD
1993 - 1994 Teaching Assistant, Department of Biological Sciences, USC
1992 Teaching Assistant, Department of Zoology, UMASS Amherst

Peer-Reviewed Publications

Foster, J.S., and Drew, J.C. (2008) Astrobiology undergraduate education: Putting the primer to the test. *Astrobiology* In press
Donachie, S., **J. Foster**, and M. Brown (2007) Culture clash: Challenging the dogma of microbial diversity. *ISME Journal* 1: 97-102
Foster, J.S., A.K. Singh, L.J. Rothschild and L.A. Sherman (2007) Growth-phase dependent differential gene expression in *Synechocystis* sp. strain PCC 6803 and regulation by a group 2 sigma factor. *Archives of Microbiology* 187(4):265-79
Foster, J.S. and P.E. Kolenbrander (2004) Development of a multi-species oral bacterial

community in a saliva-conditioned flowcell. *Applied and Environmental Microbiology* 70(7): 4340-8.

- Foster J.S.**, P.C. Pan, and P.E. Kolenbrander (2004) Effects of antimicrobial agents on oral biofilms in a saliva-coated flowcell. *Biofilms* 1:3-10.
- Foster, J.S.**, R.J. Palmer Jr., and P.E. Kolenbrander (2003) The human oral cavity as a model for the study of genome-genome interactions. *Biological Bulletin*. 204:200-204.
- Kolenbrander, P.E., R.F. Lerud, D.S. Blehert, P.G. Eglund, **J.S. Foster**, and R.J. Palmer, Jr. (2003) The role of coaggregation in oral biofilm formation. In: *Biofilms in Medicine, Industry and Environmental Biotechnology*. Eds. P. Lens, A.P. Moran, T. Mahony, P. Stoodley, V. O'Flaherty. IWA Publishing, London. pp. 32-46.
- Kolenbrander, P. E., R.A. Anderson, D.S. Blehert, P.G. Eglund, **J.S. Foster**, and R.J. Palmer Jr. (2002) Communication among oral bacteria. *Microbiology and Molecular Biology Reviews*. 66:486-505.
- Foster, J.S.**, S. von Boletsky, and M.J. McFall-Ngai (2002) A comparison of light organ development between *Euprymna scolopes* Berry and *Sepiolo robusta* Naef (cephalopod:sepiolidae). *Bulletin of Marine Science*. 70:141-153.
- Foster, J.S.**, M.A. Apicella, and M.J. McFall-Ngai (2000) *Vibrio fischeri* lipopolysaccharide Induces developmental apoptosis but not complete morphogenesis of the *Euprymna scolopes* light organ. *Developmental Biology*. 226:242-254.
- Visick, K.L., **J.S. Foster**, J.A. Doino, M.J., McFall-Ngai, and E.G. Ruby (2000) *Vibrio fischer lux* genes play an important role in colonization and development of the host light organ. *Journal of Bacteriology*. 182:4578-4586.
- Foster, J.S.** and M.J. McFall-Ngai (1998) Induction of apoptosis by cooperative bacteria in the morphogenesis of host epithelial tissues. *Development Genes and Evolution* .208:295-303
- Wharton Jr., R.A., S.A. Spaulding and **J.S. Foster** (1994) Paleolimnology of Taylor Valley, Antarctica. *Antarctic Journal of the United States*. 29:234-239

Published Abstracts

- Foster, J.S.**, A. Singh, H. Li, L.A. Sherman, and L.J. Rothschild (2004) Gene expression changes associated with oxidative stress in the cyanobacterium *Synechocystis* sp. PCC 6803. *International Journal of Astrobiology* Supplement 1:65.
- Diaz PI, **J.S. Foster**, R.J. Palmer, Jr. and P.E. Kolenbrander (2004). Spatial and temporal characterization of early oral biofilms. *J Dent Res*. 83:A-2729
- Foster, J.S.**, P.C. Pan, and P.E. Kolenbrander (2002) Novel assay for testing the effects of antimicrobials on oral biofilms. *J of Dent Res* 81:A-363.
- Visick, K.L., **J.S. Foster**, J.A. Doino, M.J. McFall-Ngai, and E.G. Ruby (2000) Bioluminescence genes of the symbiont *Vibrio fischeri* are required for normal colonization and development of host *Euprymna scolopes* light organ. *Abst. Gen.Meet. Am. Soc. Microbiol.* 2000: 394.
- Foster, J.S.**, M.A. Apicella, and M.J. McFall-Ngai (1999) Evidence for multiple signals in the bacteria-induced morphogenesis of the *Euprymna scolopes* light organ. *Developmental Biology* 210:237.
- Foster, J.S.** (1998) Bacteria-induced morphogenesis of the *Euprymna scolopes* light organ. *Pacific Science* 52:187
- Foster, J. S.**, S. von Boletsky, and M.J. McFall-Ngai (1996) Comparison of light organ morphologies between two sepiolid squid: *Euprymna scolopes* and *Sepiolo*

robusta. *American Zoologist* 36:262.

Published Images

- Donachie, S.P., B.W. Christenson, D.D. Kunkel, A. Malahoff, M. Alam (2002) Microbial community in acidic hydrothermal waters of volcanically active White Island, New Zealand. *Extremophiles* 6:419-425.
- Dusheck, J. (2002) It's the ecology stupid! *Nature* 418:578-579.
- Greenwell-Wild, T., N. Vázquez, D. Sim, M. Schito, D. Chatterjee, J.M. Orenstein, and S.M. Wahl (2002) *Mycobacterium avium* infection and modulation of human macrophage gene expression. *Journal of Immunology* 169:6286-6297.
- Visick, K.L, and M.J. McFall-Ngai (2000) An exclusive contract: specificity in the *Vibrio fischeri-Euprymna scolopes* partnership. *Journal of Bacteriology* 182:1779-1787
- Ruby, E.G. and M.J. McFall-Ngai (1999) Oxygen-utilizing reactions and symbiotic colonization of the squid light organ by *Vibrio fischeri*. *Trends in Microbiology* 7:385-424

Presentations

- Astrobiology Science Conference – 2008
- Cyanobacterial Molecular Workshop - 2007
- American Society for Microbiology-General Meeting - 2006
- Astrobiology Science Conference - 2006
- Midwestern Photosynthesis Meeting – 2004
- Astrobiology Science Conference – 2004
- American Society for Microbiology General Meeting - 2003
- International Association of Dental Research General Meeting, 2002
- Biological Regulatory Mechanisms Gordon Conference - 2000
- American Society of Microbiology General Meeting - 2000
- Microbial Diversity, ASM - 1999
- Society of Developmental Biology - 1999
- Tester Symposium, University of Hawaii - 1999
- Tester Symposium, University of Hawaii - 1998
- International Congress on Symbiosis, 1997
- Tester Symposium, University of Hawaii - 1997
- Society of Integrative and Comparative Biology, 1996
- Symbiosis 96! - 1996
- American Society of Zoologists, 1995
- Keystone Symposia on Apoptosis, 1995
- West Coast Regional Developmental Biology, 1995

Research Funding Awards

- CALS Distance Learning Education Mini-Grant, 2008
- Florida Space Grant Consortium, 2007 - 2009
- National Research Service Award, National Institutes of Health, 2003 - 2005
- American Society of Microbiology Student Travel Award, 1999, 2000
- Educational Improvement Funds, University of Hawaii, 1999
- Achievement Rewards for College Scientists Scholarship - Zoology, 1998
- Constance Endicott Hartt Fellowship, 1997

Edmondson Grants-in-Aid Research Award, 1997
Graduate Student Organization Travel Fund Award, 1997
Society of Integrative and Comparative Biology Grants-in-Aid Fellowship, 1996
NASA Planetary Biology Internship, 1994

Honors and Awards

NIDCR Equal Employment Opportunity Special Achievement Award, 2001
Michael Weekly Award - Tester Symposium, 1998
Association for Woman in Science - Tester Symposium Award, 1997
University of Southern California Outstanding Teaching Award
Department of Biological Sciences, USC, 1994