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#### **APPOINTMENTS**

**Assistant Professor:** California Polytechnic State University, San Luis Obispo, 2005 - present

#### **PROFESSIONAL EXPERIENCE**

**Postdoctoral Researcher:** Proteomics (Dr. Dietmar Kültz), University of California, Davis, 2003 – 2005

**Postdoctoral Researcher:** Biochemical Adaptation (Dr. George Somero), Hopkins Marine Station, Stanford University, 1999 –2003

#### **EDUCATION**

**Ph.D.:** Oregon State University, Corvallis, Zoology, 1999 (Dr. George Somero)

**MS, BS:** University of Konstanz, Germany, Biology, 1995 (Dr. Meinhard Simon)

#### **AWARDS AND HONORS**

Scholander Award Finalist (American Physiological Society, 2002)

Dr. Earl H. Myers and Ethel M. Myers Grant for Oceanographic and Marine Biology, 1997

Scholar of the Studienstiftung des deutschen Volkes – German Academic National Foundation (given to the top 0.3% of the students in Germany), 1989-1994

#### **PUBLICATIONS**

Harley, CDG, AR Hughes, K Hultgren, BG Miner, CJB Sorte, CS Thornber, LF Rodirgues, L Tomanek and S Williams (2006): The impacts of climate change in coastal marine systems. *Ecology Letters* 9, 228-241.

Tomanek, L. (2005): Two-dimensional gel analysis of the heat-shock response in marine snails (genus *Tegula*): interspecific variation in protein expression and acclimation ability. *Journal of Experimental Biology* 208, 3133 - 3143.

Tomanek, L., and E. Sanford (2003). Heat-shock protein 70 (Hsp70) as a biochemical stress indicator: an experimental field test in two congeneric intertidal gastropods (genus *Tegula*). *Biological Bulletin* 205, 276 - 284.

Tomanek, L., and B. Helmuth (2002). Physiological ecology of rocky intertidal organisms: a synergy of concepts. *Integrative and Comparative Biology* 42, 771-775.

Tomanek, L. (2002). The heat-shock response: its variation, regulation and ecological importance in intertidal gastropods (genus *Tegula*). *Integrative and Comparative Biology* 42, 797-807.

Tomanek, L., and G. N. Somero (2002). Interspecific and acclimation-induced variation in levels of heat-shock protein 70 (hsp70) and 90 (hsp90) and heat-shock transcription factor-1 (HSF-1) in congeneric marine snails (genus *Tegula*): implications for regulation of hsp gene expression. *Journal of Experimental Biology* 205, 677-685.

Tomanek, L., and G. N. Somero (2000). Time course and magnitude of synthesis of heat-shock proteins in congeneric marine snails (genus *Tegula*) from different tidal heights. *Physiological and Biochemical Zoology* 73, 249 – 256.

Tomanek, L., and G. N. Somero (1999). Evolutionary and acclimation-induced variation in the heat-shock responses of congeneric marine snail species (genus *Tegula*) from different thermal habitats: implications for limits of thermotolerance and biogeography. *Journal of Experimental Biology* 202, 2925 - 2936.

## **TEACHING EXPERIENCE**

**Assistant Professor:** Introduction to organismal form and function, Winter 2006

Graduate seminar on "Darwin's dangerous idea", Fall 2005

**Lecturer:** Applied biology for designers and artists, California College of the Arts, San Francisco, 2004/05

**Co-instructor:** Marine environmental physiology, Stanford University, 2001, 2003

**Teaching assistant:**

Marine invertebrates, Oregon State University, 1995

Human anatomy and physiology, Oregon State University, 1995

Systematic zoology, University of Konstanz, 1994

**Invited teaching lectures:**

Half a dozen lectures on issues from "Science and society", and "Biological effects of global climate change" to "Biology and industrial design: what adaptations and ecosystems can teach us" given to grade-school, high-school and mechanical engineering students at Stanford University as well as corporate engineers.

**Student laboratory advisor:**

Advising and teaching of almost two dozen graduate, undergraduate and high-school students undertaking independent research projects for the duration of one quarter to a year, University of California, 2003-2004 and Stanford University, 1996 – 2003.

## **REVIEWER**

### **Journals**

American Journal of Physiology

Biological Journal of the Linnean Society

Biological Bulletin

Comparative Physiology and Biochemistry

Ecology Letters

Journal of Experimental Biology

Journal of Experimental Marine Biology and Ecology

Journal of Comparative Biology

Journal of Thermal Biology

Marine Biology

Pesticide Biochemistry and Physiology

Physiological and Biochemical Zoology

Proceedings of the National Academy of Sciences of the U.S.A.

### **Textbooks**

Berg, Tymoczko and Stryer: Biochemistry (6th edition)

## **POPULAR CONTRIBUTIONS TO PROFESSIONAL JOURNALS**

Five contributions (since 2004) to the "Outside" section of the *Journal of Experimental Biology*.

## **SYMPOSIA ORGANIZED**

"Physiological ecology of rocky intertidal organisms: from molecules to ecosystems", 2002 annual meeting of the Society for Integrative and Comparative Biology, Anaheim, California, 2002 (with Dr. Brian Helmuth); supported by NSF grant 0131317.

"Temperature-dependent biogeography of aquatic ectotherms: from genes to the effects of climate change", 2004 annual meeting of the German Zoological Society, Rostock (with Dr. Hans-Otto Pörtner).

#### **COLLABORATIONS WITH INDUSTRY AND NON-PROFIT ORGANIZATIONS**

***Biomimicry Guild:*** A product development project for a Fortune500 company with the goal to mimic nature's design solutions, 2004.

***BioRad:*** Collaboration with a biotechnology company, a leader in electrophoresis and proteomics technologies, 2005/2006.