

# David M. McMillan

## Personal

Born: 19 February 1979 in Santa Clara, CA USA  
 Address: Organismic and Evolutionary Biology  
 University of Massachusetts at Amherst  
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## Education

B.S. Biology, 2001, Santa Clara University, Santa Clara, CA.

Ph.D Student in Organismic and Evolutionary Biology, 2003-present, University of Massachusetts Amherst, Amherst, Ma

## Awards and Fellowships

Student Fellow Sigma Xi Research Society, UMass Chapter

White Mountain Research Station Graduate Student Fellowship (2005, 2006)

## Research Experience

Jan 1999 – March 2003: Research Assistant/Laboratory Technician, Department of Biology, Santa Clara University

**Supervised by:** Elizabeth Dahlhoff, Biology Department, Santa Clara University

- Assisted in original research of evolutionary adaptations in Sierra willow beetles to extreme temperatures in their local environment.
- Conducted research on these willow beetles during four summers at White Mountain Research Station in Bishop, CA. Research involved extensive components in the field and in the lab.
- Laboratory experiments include total protein assays, gel Electrophoresis and Western Blotting, RNA:DNA ratio determination, enzyme assay and kinetics. Also experience in protocol design and data analysis.
- Work resulted in acknowledgement in 3 peer reviewed journals including one in the Proceedings in The National Academy of Science (PNAS) as well as primary authorship in peer-reviewed journal.

August 2006 – Present: Graduate Student, University of Massachusetts at Amherst.

**Supervised by:** Duncan Irschick, Ecology and Evolutionary Biology, Tulane University

- Currently working on graduate degree by investigating the local adaptation of heat stress protein expression and their effects on locomotion in western fence lizards

## Publications

McMillan, D. M., S. L. Fearnley, N. E. Rank and E. P. Dahlhoff. (2005). Natural temperature variation affects larval survival, development, and Hsp70 expression in a leaf beetle. *Functional Ecology*, 19, 844-852.

Rank, N.E., Bruce, D.A. McMillan, D. M. and Dahlhoff, E. P. Effects of temperature on locomotory performance of two species of California willow beetles. In review for *Journal of Experimental Biology*.

## Posters and Contributed Papers

- 2001 West Coast Undergraduate Research Conference, Santa Clara University. Santa Clara, CA
- 2001 Physiological Ecology Meeting, White Mountain Research Station, Bishop, CA
- 2002 Society for Integrative and Comparative Biology Annual Meeting, Anaheim, CA
- 2002 Physiological Ecology Meeting, White Mountain Research Station, Bishop, CA
- 2002 The Power of Comparative Physiology: Evolution, Integration and Applied, San Diego, CA
- 2003 Society for the Study of Evolution Annual Meeting, Chico, CA
- 2004 Society for Integrative and Comparative Biology Annual Meeting, New Orleans, LA
- 2005 Society for Integrative and Comparative Biology Annual Meeting, San Diego, CA

## Invited Talks

2002 Tulane University, Department of Ecology and Evolutionary Biology

## Other Work Experience

Sept 1999 – June 2001

Resident Assistant, Office of Housing and Residence Life, Santa Clara University

Dec 2000 – June 2001

Emergency Medical Technician, Santa Clara University EMS Program

## References

- Dr. Elizabeth Dahlhoff, Department of Biology, Santa Clara University, [edahlhoff@scu.edu](mailto:edahlhoff@scu.edu)
- Dr. Nathan Rank, Department of Biology, Sonoma State University, [rank@sonoma.edu](mailto:rank@sonoma.edu)
- Dr. Duncan Irschick, Department of Biology, University of Massachusetts, Amherst, [irschick@bio.umass.edu](mailto:irschick@bio.umass.edu)