



## JESSICA MARTIN

Oregon Health & Science University

### Degrees:

B.S. in Biochemistry and Molecular Biology, Washington State University

### Scholar Donors:

Jean and Rich Josephson, Shelley and Joe Voboril, and Jamie and Mike Anderson

### About the Scholar:

Jessica's research is focused on the human pathogen *Leishmania*, which causes leishmaniasis, a disease that is fatal if left untreated. Her work focuses on understanding how *Leishmania* deals with and adapts to the stresses it normally encounters in its lifecycle. These stresses include nutrient scarcity, and changes in pH or temperature. This project aims to identify proteins and metabolic pathways required for parasite survival, with the goal of using these proteins as targets for drug development. Jessica enjoys hiking, running, and tennis.

### Benefits to Society:

Over 12 million people in 88 countries are affected by leishmaniasis, and more than 50,000 people die per year. Due to changes in climate and an increase in globalization, Leishmaniasis is becoming more relevant in the US. With resistance developing to drugs that are currently used, Jessica's research aims to identify novel pathways against which to develop new therapeutic treatments.

### Awards and Honors:

OHSU Program in Molecular and Cellular Biology (PMCB) NIH T32 Training Grant  
OHSU Molecular Microbiology and Immunology (MMI) NIH T32 Training Grant  
NSF GFRP Honorable Mention  
N.L. Tartar Fellowship

### Publications and Posters:

Poster and presentation (2013 Kinetoplast Molecular and Cellular Biology Meeting, Woods Hole, MA) Martin, Jessica L.; Yates, Phillip; Cassera, Maria Belen; Boitz, Jan; Fulwiler, Audrey; Ullman, Buddy; Carter, Nicola. A, **A Role for Adenine Nucleotides in the Sensing Mechanism to Purine Starvation in *Leishmania donovani*.**