

BIOGRAPHICAL SKETCH

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NAME: **Nicole Iranon**

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: **Graduate student**

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Portland	BA		Philosophy
University of Portland	B.S		Biology

A. Personal Statement**B. Positions and Honors**

Becky Houck Award for teaching, mentoring, and service (University of Portland - 2011)

Dean's List (University of Portland 2007-2010)

Philosophical Achievement Award (University of Portland – 2011)

C. Contribution to Science (Publications)

Iranon NN, and Miller DL, 2012. Interaction between oxygen homeostasis, food availability, and hydrogen sulfide signaling, *Frontiers in Genetics* 3:257.

Iranon NN and Miller DL. Fasting and Heat Shock Regulate Proteostasis in Hypoxia. *C. elegans Aging, Metabolism, Stress, Pathogenesis and Small RNAs Meeting*, Madison WI, July 12, 2014. Poster presentation.

Iranon NN and Miller DL. Fasting and Heat Shock Regulate Proteostasis in Hypoxia. Northwest Developmental Biology Conference, Friday Harbor, WA, March 21, 2014. Poster presentation.

Iranon NN and Miller DL. AMPK regulates proteostasis in response to hypoxia and fasting. 19th International C. elegans Meeting, Los Angeles, CA, June 28, 2014. Poster presentation.

Iranon NN, and Miller DL. AMPK regulates protein homeostasis in response to hypoxia and nutrient deprivation in C. elegans. Northwest Developmental Biology Conference, Friday Harbor, WA, March 21, 2013. Poster presentation

Iranon NN. AMPK regulates protein homeostasis in response to hypoxia and fasting. Seattle Worm Meeting, Seattle, WA, January 31, 2013. Oral presentation.

D. Research Support (Grants/fellowships)

Current research:

In order to survive in changing environmental conditions, organisms must be able to successfully sense and integrate diverse environmental signals and respond appropriately. I am interested in how the energy sensor AMP-activated protein kinase (AMPK) integrates environmental cues regarding oxygen and nutrient availability to regulate protein homeostasis. We have found that specific concentrations of hypoxia can induce protein aggregation in C. elegans. Furthermore, fasting protects against this hypoxia-induced protein aggregation. AMPK is involved in both of these processes, playing opposite roles in protein homeostasis depending on the nutritional state of the animal prior to the hypoxic exposure. My work is focused on understanding how and why AMPK differentially modulates protein homeostasis in these different conditions.

Grants/fellowships:

National Science Foundation Graduate Research Fellowship