

## JESSICA E. HEALY

### A. PROFESSIONAL PREPARATION

Central College	Pella, IA	Biology	B.A., 2005
Colorado State University	Fort Collins, CO	Zoology	Ph.D., 2010
University of Arizona College of Medicine	Phoenix, AZ	Endocrinology	Jan. 2011-Aug. 2012

### B. APPOINTMENTS

2012-Present Assistant Professor Department of Biology Austin College Sherman, TX

### C. SELECT PRODUCTS

#### Most closely related (Abstracts presented at conferences)

- Healy, J.E.**, \*Brem, E., \*Hoffman, A., \*Groover, I, \*Krueger, S., Florant, G.L., 2016. High fat diet affects energy balance in prehibernatory golden-mantled ground squirrels. In: 15<sup>th</sup> International Hibernation Symposium, Las Vegas, NV August 2016 (Talk)
- \*Krueger, S., \*Gaddis, A., \*Groover, I., **Healy, J.E.**, 2016. Effects of a high fat diet on physiological parameters in prehibernatory golden-mantled ground squirrels. In: Central Ecology & Evolution Conference, Norman, OK April 2016 (Talk)
- \*Williamson, L., \*Gaddis, A., **Healy, J.E.**, 2016. Ghrelin & estradiol as indicators of energy levels in ground squirrels that hibernate. In: Austin College Student Scholarship Conference, Sherman, TX March 2016 (Poster)
- \*Groover, I., \*Krueger, S., \*Gaddis, A., **Healy, J.E.**, 2016. Effects of a high fat diet on physiological parameters in prehibernatory golden-mantled ground squirrels. In: Austin College Student Scholarship Conference, Sherman, TX March 2016 (Poster)
- \*Keene, P., \*Privitera, G., **Healy, J.E.**, 2015. Energy balance in ground squirrels that hibernate. In: Austin College Student Scholarship Conference, Sherman, TX March 2015 (Poster)

#### Other (Publications)

- Healy, J.E.**, Florant, G.L., **2012**. Ghrelin, leptin, and fatty acids in free-living *Callospermophilus lateralis* (Golden-mantled ground squirrels). In: Ruf T, Bieber C, Arnold W, Millesi E (eds). *Living in a seasonal world: thermoregulatory and metabolic adaptations*. Springer, Heidelberg, 519-529.
- Healy, J.E.**, \*Burdett, K.A., Buck, C.L., Florant, G.L., **2012**. Sex differences in torpor patterns during natural hibernation in golden-mantled ground squirrels (*Callospermophilus lateralis*). *J. Mamm.* 93 (3) 751-758.
- Healy, J.E.**, \*Gearhart, C.N., \*Bateman, J.L., Handa, R.J., Florant, G.L., **2011**. AMPK and ACC change with fasting and physiological condition in euthermic and hibernating golden-mantled ground squirrels (*Callospermophilus lateralis*). *Comp. Biochem. Physiol. A Mol. Integr. Physiol.* 159 (3) 322-331.
- Healy, J.E.**, \*Bateman, J.L., \*Ostrom, C.E., Florant, G.L., **2011**. Peripheral ghrelin stimulates feeding behavior and positive energy balance in a sciurid hibernator. *Horm. Behav.* 59 (4): 512-519.
- Healy, J.E.**, \*Ostrom, C.E., Wilkerson, G.K., Florant, G.L., **2010**. Plasma ghrelin concentrations change with physiological state in a sciurid hibernator (*Spermophilus lateralis*). *Gen. Comp. Endocrinol.* 166 (2): 372-378.

\* Indicates undergraduate co-author

#### **D. SYNERGISTIC ACTIVITIES**

-Actively involved in integrating undergraduate research activities with Biology Department curriculum (Fall 2013-present). Physiological Ecology course (~14 students/semester), taught Fall 2013, 2015, & 2016, utilized captive ground squirrels to design and conduct a feeding experiment with physiological measurements. Extreme Physiology course (~15 students/semester), taught Spring 2014, 2015, & 2016, utilized ground squirrel tissues from previous course as well as cell culture to conduct novel research on energy balance under extreme conditions. The results from these experiments will be submitted for publication in January 2017 with undergraduate co-authors.

-Participant in Austin College's STAR Leadership program for training student scientists in the context of classes (2015-present). Activities include team-building theory and exercises, and designing, conducting, presenting the results of, and reflecting on team research projects. STAR activities are integrated into one or more of my classes each semester.

-Member of research team administering NSF S-STEM grant (2017-2022) intended to increase recruitment and retention of non-health sciences STEM majors at Austin College ('ACCESS'). Program provides need-based scholarships and enhanced guidance to a cohort of undergraduates intending to major in a STEM field. Programming includes exposure to career exploration & preparation opportunities, as well as various workshops tailored to the career stage of each cohort of ACCESS students. Students are chosen based on academic performance, financial need, and groups traditionally underrepresented in STEM fields.

-Mentored 17 Austin College undergraduate students in directed and independent research projects associated with my research program from 2013-current. Students have presented the results of these experiments as posters and talks at the Austin College Student Scholarship Conference, at Austin College Biology Department seminars, and at Sciences Summer Research Program seminars at AC. I have also taken AC students to regional and national conferences to present their findings (including the American Society of Mammalogists annual meeting and the Central Ecology & Evolution Conference). Several of these students are also co-authors on two manuscripts describing the results of these experiments in preparation for submission in January 2017.

-Acted as co-mentor at Colorado State University for NIDDK STEP-UP program for underrepresented persons (2005-2008). Advisor's lab hosted 1-2 underrepresented undergraduate students each summer through this program. Mentored students in lab all 4 years, and acted as co-mentor for CSU program in summer 2008, attending and judging student research posters at national STEP-UP Research Symposium in Hawaii.