***Curriculum Vitae***

**Zachary R. Stahlschmidt**

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**Education**

2005 – 2011 Arizona State University (ASU)

PhD in Biology

**Dissertation:** Intra-offspring tradeoffs of python egg-brooding behavior

Cumulative GPA: 3.8/4.0

**Advisor:** Dale DeNardo, PhD, DVM

2004 University of Illinois at Urbana-Champaign (UIUC)

BS in Animal Sciences with Honors

Concentration in Companion, Recreational, and Lab. Animal Sciences

Cumulative GPA: 3.9/4.0

**Advisor:** J. Lee Beverly, PhD

**Research experiences**

2020 – present *University of the Pacific (UOP)*, associate professor

2015 – 2020 *UOP,* assistant professor

2013 – 2015 *Georgia Southern University (GSU)*, assistant professor

2011 – 2013 *Dalhousie University*, Killam Trusts postdoctoral fellow

2007 – 2011 *ASU* and *University of Sydney’s Tropical Ecology Research Facility*, graduate research fellow

2005 – 2007 *ASU*, graduate researcher and teaching assistant

2004 *Illinois Natural History Survey,* fieldwork assistant

2002 – 2004 *UIUC,* research assistant

**Teaching and mentoring experiences**

2015 – present *University of the Pacific*, instructor

Environment: Concepts & Issues (non-majors undergraduate course)

Principles of Biology II Labs (introductory-level undergraduate course)

Principles of Biology I (introductory-level undergraduate course)

Ecology (non-introductory level undergraduate course)

Graduate Seminar (graduate course)

Science Communication (graduate course)

**Teaching and mentoring experiences (cont.)**

2013 – 2015 *Georgia Southern University*, instructor

General Biology (non-majors undergraduate course)

Principles of Biology I (introductory-level undergraduate lab course)

Comparative Animal Physiology (upper-level undergraduate course)

Comparative Vertebrate Anatomy (upper-level undergrad. lab course)

Principles of Physiology (mid-level undergraduate course)

2012 *Lafayette College*, Easton, PA, guest instructor

Physiology of Extreme Animals (upper-level undergraduate course)

2012 *Dalhousie University*, Halifax, Nova Scotia, guest instructor

Graduate Proseminar (1st year graduate course)

2012 *Dalhousie University*, Halifax, Nova Scotia, guest instructor

Animal Behaviour (mid-level undergraduate course)

2012 *Saint Mary’s University*, Halifax, Nova Scotia, guest instructor

Ecological Physiology (upper-level undergraduate course)

2005 – 2009, 2011 *Arizona State University*, founding mentor of Graduate Partners in Science Education (gpse.asu.edu)

2005 – 2007 *Arizona State University*, teaching assistant

Human Anatomy & Physiology (mid-level undergraduate course)

**Students mentored**

2022 – present Austin Hoffman, UOP, M.S. student (role: graduate supervisor)

2022 – present Prynces Perez, UOP, undergraduate student (role: research supervisor)

2022 – present Breena Choy, UOP, undergraduate student (role: research supervisor)

2022 – present William Zhao, UOP, undergraduate student (role: research supervisor)

2021 – present Daniel Bui, UOP, undergraduate student (role: research supervisor)

2021 – 2022 Jessica Chen, UOP, undergraduate student (role: research supervisor)

2021 – 2022 Jessica Avalos, UOP, M.S. student (role: graduate committee member)

2021 – 2022 Lauren Kashiwabara, UOP, M.S. student (role: graduate committee member)

2021 – present Laura Heller, UOP, M.S. student (role: graduate committee member)

2021 – present Rylie Towne, UOP, M.S. student (role: graduate committee member)

2021 Sonia Sandhu, UOP, undergraduate student (role: research supervisor)

2020 – 2021 Suheyla Yoksuloglu, UOP, undergraduate student (role: research supervisor)

2020 – 2021 Phillip Evalen, UOP, undergraduate student (role: research supervisor)

2020 – 2022 Justin Choi, UOP, undergraduate student (role: research supervisor)

2020 – 2021 Emmaleigh Barnhardt, UOP, undergraduate student (role: research supervisor)

2020 – 2022 Elizabeth Piotrowski, UOP, M.S. student (role: graduate committee member)

2020 – 2021 Karina Torres Montano, UOP, M.S. student (role: graduate committee member)

2019 – 2022 Laura Navarro, UOP, M.S. student (role: graduate committee member)

2019 – 2021 Cindy Vo, UOP, undergraduate student (role: research supervisor)

**Students mentored (cont.)**

2019 – 2020 Julia Tieu, UOP, undergraduate student (role: research supervisor)

2019 – 2020 Erinn Chang, UOP, undergraduate student (role: research supervisor)

2019 – 2020 Allegra Rocha, UOP, undergraduate student (role: research supervisor)

2019 – present Lauren Harter, UOP, M.S. student (role: graduate supervisor)

2019 – present Jacob Whitlock, UOP, undergraduate student (role: research supervisor) and M.S. student (role: graduate supervisor)

2019 – 2020 Paul Chun, UOP, undergraduate student (role: research supervisor)

2019 Christine Le, UOP, undergraduate student (role: research supervisor)

2018 – 2019 Jared Deyarmin, UOP, M.S. student (role: graduate committee member)

2018 – 2020 Leanne Tran, UOP, M.S. student (role: graduate committee member)

2018 – 2019 Aelish Guinn, UOP, M.S. student (role: graduate committee member)

2018 – 2019 Laura Pujade Busqueta, UOP, M.S. student (role: grad. comm. member)

2018 – 2022 Alyssa Bonfoey, UOP, undergraduate student (role: research supervisor) and M.S. student (role: graduate supervisor)

2018 – 2019 Ngoc Ha, UOP, undergraduate student (role: research supervisor)

2018 Louis Kim, UOP, undergraduate student (role: research supervisor)

2018 Jacquelyn Louie, UOP, undergraduate student (role: research supervisor)

2017 – 2020 Sugjit Singh, UOP, M.S. student (role: graduate supervisor)

2017 – 2019 Andy Byeon, UOP, undergraduate student (role: research supervisor)

2017 – 2019 David Luc, UOP, undergraduate student (role: research supervisor)

2017 – 2019 Garrett Masuda, UOP, undergraduate student (role: research supervisor)

2017 Kayla Pham, UOP, undergraduate student (role: research supervisor)

2017 Jihee Yoon, UOP, undergraduate student (role: research supervisor)

2017 – 2018 Erin Thompson, UOP, M.S. student (role: graduate committee member)

2017 – 2018 Christina Koh, UOP, undergraduate student (role: research supervisor)

2016 – 2017 Kiran Grewal, UOP, M.S. student (role: graduate committee member)

2016 – 2018 Molly McCormley, UOP, M.S. student (role: graduate committee member)

2016 – 2018 Nicholas Meckfessel, UOP, undergraduate student (role: research supervisor)

2016 – 2017 Iris Chu, UOP, undergraduate student (role: research supervisor)

2016 – 2107 Stephanie Ha, UOP, undergraduate student (role: research supervisor)

2016 – 2017 Grace Cho, UOP, undergraduate student (role: research supervisor)

2016 – 2018 Narin Jeong, UOP, undergraduate student (role: research supervisor)

2016 – 2018 Jordan Glass, UOP, M.S. student (role: graduate supervisor)

2016 Leo Choti, UOP, undergraduate student (role: research supervisor)

2015 – 2016 Amy Ahn, UOP, undergraduate student (role: research supervisor)

2015 – 2019 Dustin Johnson, UOP, undergraduate / graduate student (role: research supervisor)

2015 – 2017 Katherine Nguyen, UOP, undergraduate student (role: research supervisor)

2015 – 2017 Carolyn Pak, UOP, undergraduate student (role: research supervisor)

2015 – 2016 Janice Park, UOP, undergraduate student (role: research supervisor)

2015 – 2016 Amy Ramiya, UOP, undergraduate student (role: research supervisor)

2015 – 2017 Cassidi Rush, UOP, M.S. student (role: graduate committee member)

2015 Lauren Neel, GSU, M.S. student (role: graduate committee member)

2015 Hayley Bryan, GSU, undergraduate student (role: research supervisor)

2014 – 2016 George Todd, GSU, M.S. student (role: graduate supervisor)

2014 – 2015 Amanda Burns, GSU, M.S. student (role: graduate committee member)

2013 – 2015 Matthew Carey, GSU, M.S. student (role: graduate committee member)

**Students mentored (cont.)**

2013 – 2015 Lindsey Holcomb, GSU, undergraduate student (role: research supervisor)

2013 – 2015 Alicia Jodrey, GSU, undergraduate student (role: research supervisor)

2013 – 2015 Rachel Luoma, GSU, Honor’s student (role: research supervisor)

2012 – 2013 Mary Elizabeth O’Leary, Dalhousie University (role: research mentor)

2012 – 2013 Michael D’Angelo, Dalhousie University (role: research mentor)

2012 Robbin McKee, Dalhousie University, Guided Study student (role: research mentor)

2011 – 2012 Jillian Baker, Dalhousie University, Honour’s student (role: research mentor)

2010 Adriana Manrique, ASU, National Hispanic Scholar (role: research mentor)

2006 Christopher Garcia, ASU, NSF Minority Access to Research Careers student (role: research mentor)

**Book chapter**

2011 **Stahlschmidt, Z.R.** and DeNardo, D.F. Parental care in snakes.In *Reproductive Biology and Phylogeny of Snakes.* Aldridge, R.D. and Sever, D.M. (eds). Science Publishers Inc., Enfield, NH. pp. 673-702.

**Publications**

2022 **Stahlschmidt, Z.R.**, Chun, P. (student author), Luc, D. (student author), Masuda, G. (student author), Rocha, A. (student author), and Sandhu, S. (student author). Reproduction of a field cricket under high-intensity artificial light at night and a simulated heat wave. *Behavioral Ecology and Sociobiology*. 76, 109.

2022 **Stahlschmidt, Z.R.**, Whitlock, J. (student author), Vo, C. (student author), Evalen, P. (student author), and Bui, D. (student author). Pesticides in a warmer world: Effects of glyphosate and warming across insect life stages. *Environmental Pollution.* 307, 119508.

2022 **Stahlschmidt, Z.R.** Flight capacity drives circadian patterns of metabolic rate and alters resource dynamics. *Journal of Experimental Zoology A*. 337, 666-674.

2022 Padda, S.S. (student author) and **Stahlschmidt, Z.R.** Evaluating the effects of water and food limitation on the life history of an insect using a multiple-stressor framework. *Oecologia*. 198, 519-530.

2022 **Stahlschmidt, Z.R.** and Vo, C.\* Spatial bet-hedging, thermal tradeoffs, and glyphosate: Crickets integrate multivariate information during oviposition. Animal Behaviour. 185, 105-112.

2021 **Stahlschmidt, Z.R.**and Chang, E. (student author). Body condition indices are better surrogates for lean mass and water content than for body fat content in an insect. *Journal of Zoology*. 315, 131-137.

**Publications (cont.)**

2021 Padda, S.S. (student author), Glass, J.G. (student author), and **Stahlschmidt, Z.R.** When it's hot and dry: Life-history strategy influences the effects of heat wave and water limitation. *Journal of Experimental Biology*. 224, jeb236398.

*\*\* Finalist for Outstanding Paper of 2021 at Journal of Experimental Biology \*\**

2020 **Stahlschmidt, Z.R.** and Glass, J.R. (student author). Life history and immune challenge influence metabolic plasticity to food availability and acclimation temperature. *Physiological and Biochemical Zoology*. 93, 271-281.

2020 Brusch, G.A., Mills, A.M., Walman, R.M., Masuda, G. (student author), Byeon, A. (student author), DeNardo, D.F., and **Stahlschmidt, Z.R.** Dehydration enhances cellular and humoral immunity in a mesic snake community. *Journal of Experimental Zoology A*. 333, 306-315. ***\*\* Featured on cover \*\****

2020 Johnson, D. (student author) and **Stahlschmidt, Z.R.** City limits: Heat tolerance is influenced by body size and hydration state in an urban ant community. *Ecology and Evolution*. 10, 4944-4955.

2020 **Stahlschmidt, Z.R.**, Chu, I. (student author), and Koh, C. (student author). When do looks matter? Effects of mate quality and environmental variability on lifetime reproduction. *Behavioral Ecology and Sociobiology*. 74, 11.

2020 **Stahlschmidt, Z.R.**, Jeong, N. (student author), Johnson, D. (student author), and Meckfessel, N. (student author). From phenoloxidase to fecundity: Food availability does not influence the costs of oxidative challenge in a wing-dimorphic cricket. *Journal of Comparative Physiology B.*190, 17-26.

2019 Todd, G.J. (student author), and **Stahlschmidt, Z.R.** Effects of Habitat Features and Season on Vertebrate Communities in Southern Georgia, U.S.A. *Biodiversity*. 20, 78-87.

2019 Glass, J.R. (student author), and **Stahlschmidt, Z.R.** Should I stay or should I go? Complex environments influence the developmental plasticity of flight capacity and flight-related trade-offs. *Biological Journal of the Linnean Society*. 128, 56-69.

2019 Nguyen, K. (student author), and **Stahlschmidt, Z.R.** When to fight? Disentangling temperature and circadian effects on aggression and agonistic contests. *Animal Behaviour*. 148, 1-8

2018 **Stahlschmidt, Z.R.**, and Johnson D (student author). Moving targets: determinants of nutritional preferences and habitat use in an urban ant community. *Urban Ecosystems*. 21, 1151-1158.

2018 **Stahlschmidt, Z.R.**, Walman, R.M., and Mills, A.M. Red imported fire ants (*Solenopsis invicta*) and seasonality influence community refuge use*. Biological Invasions*. 10, 2849-2859.

2017 **Stahlschmidt, Z.R.**, French, S.S., Ahn, A. (student author), Webb, A. (student author), and Butler, M.W. Simulated heat waves have diverse effects on immune function and oxidative physiology. *Physiological and Biochemical Zoology.* 90, 434-444.

**Publications (cont.)**

2016 Butler, M.W., Lutz, T.J. (student author), Fokidis, H.B., and **Stahlschmidt, Z.R.** Eating increases oxidative damage in a reptile. *Journal of Experimental Biology*. 219, 1969-1973.

2016 Luoma, R.L. (student author), Butler, M.W., and **Stahlschmidt, Z.R.** Plasticity of immunity in response to eating. *Journal of Experimental Biology*. 219, 1965-1968.

2016 Todd, G.J. (student author), Jodrey, A.D. (student author), and **Stahlschmidt, Z.R.** Immune activation influences the trade-off between thermoregulation and predator avoidance. *Animal Behaviour*. 118, 27-32.

2016 **Stahlschmidt, Z.R.**, Holcomb, L.(student author), and Luoma, R. (student author). Context-dependent effects of complex environments on behavioural plasticity. *Behavioral Ecology*. 27, 237-244.

2015 **Stahlschmidt, Z.R.**, Acker, M. (student author), Kovalko, I. (student author), and Adamo S.A. The double-edged sword of immune defence and damage control: Do food availability and immune challenge alter the balance? *Functional Ecology*. 29, 1445-1452.

2015 **Stahlschmidt, Z.R.**, Jodrey, A.(student author), and Luoma, R. (student author) Consequences of complex environments: Temperature and energy intake interact to influence growth and metabolism. *Comparative Biochemistry and Physiology A.* 187, 1-7.

2015 Dupoue, A., Michaud, B., **Stahlschmidt, Z.R.**, and Lourdais, O. Physiological state influences evaporative water loss and microclimate preference in the snake *Vipera aspis*. *Physiology & Behavior*. 144, 82-89.

2015 **Stahlschmidt, Z.R.** and Adamo S.A. Food-limited mothers favor offspring quality over offspring number: a principal components approach. *Functional Ecology*. 29, 88-95.

2014 **Stahlschmidt, Z.R.**, O’Leary, M.E. (student author), and Adamo, S.A. Food limitation leads to risky decision-making and to tradeoffs with oviposition. *Behavioral Ecology*. 25, 23-27.

2013 **Stahlschmidt, Z.R**. and Adamo, S.A. Warm and cozy: Temperature and predation risk interactively affect oviposition-site selection. *Animal Behaviour*. 86, 553-558.

2013 **Stahlschmidt, Z.R.** and Adamo, S.A. Context dependency and generality of fever in insects. *Naturwissenschaften*. 100, 691-696.

2013 **Stahlschmidt, Z.R.**, Lourdais, O., Lorioux, S., Butler, M.W., Davis, J.R., Karin, S., Voituron, Y., and DeNardo, D.F. Morphological and physiological changes during reproduction and their relationships to reproductive performance in a capital breeder. *Physiological and Biochemical Zoology.* 86, 398-409.

2013 Butler, M.W. (co-lead author), **Stahlschmidt, Z.R. (co-lead author)**, Ardia, D., Davies, S., Davis, J.R., Guillette, L.J., Johnson, N., McCormick, S.D., McGraw, K., and DeNardo, D.F. Thermal sensitivity of immune function: Evidence against a generalist-specialist tradeoff among endothermic and ectothermic vertebrates. *The American Naturalist*. 181, 761-774.

**Publications (cont.)**

2013 **Stahlschmidt, Z.R.,** Rollinson, N., Acker, M. (student author), and Adamo, S.A. Are all eggs created equal? Diet and the fitness tradeoff between reproduction and immunity. *Functional Ecology*. 27, 800-806.

2012 DeNardo, D.F., Lourdais, O., and **Stahlschmidt, Z.R.** Are females maternal manipulators, selfish mothers, or both? Insight from pythons. Herpetologica. 68, 299-307.

2012 **Stahlschmidt, Z.R.**, Shine, R., and DeNardo, D.F. The consequences of alternative parental care tactics in free-ranging pythons (*Liasis fuscus*) in tropical Australia. Functional Ecology. 26, 812-821.

2012 **Stahlschmidt, Z.R.**, Shine, R., and DeNardo, D.F. Temporal and spatial complexity of maternal thermoregulation in tropical pythons. *Physiological and Biochemical Zoology.* 85, 219-230.

2011 **Stahlschmidt, Z.R.** Taxonomic chauvinism revisited: Insight from parental care research. *PLoS ONE*. 6, e24192.

2011 **Stahlschmidt, Z.R.**, Brashears, J.B., and DeNardo D.F. The use of ultrasonography to assess reproductive investment and output in pythons. Biological Journal of the Linnean Society. 103, 772-779.

2011 **Stahlschmidt, Z.R.**, Kruse-Peebles, M., DeNardo, D.F., Holland, N., and Kotler, B. Tolerance mechanisms in North American deserts: Biological and societal approaches to climate change. *Journal of Arid Environments.* 75, 681-687.

2011 **Stahlschmidt, Z.R.**, Brashears, J.B., and DeNardo D.F. The role of temperature and humidity in python nest-site selection. Animal Behaviour. 81, 1077-1081.

2011 **Stahlschmidt, Z.R.**, Davis, J.R., and DeNardo, D.F. Sexual

variation in assimilation efficiency: its link to phenotype and potential role in sexual dimorphism. Journal of Comparative Physiology B. 181, 383-389.

2010 **Stahlschmidt, Z.R.**, Heulin, B., and DeNardo, D.F. The role of python eggshell permeability dynamics in a respiration- hydration tradeoff. *Physiological and Biochemical Zoology.* 83, 576-586.

2010 **Stahlschmidt, Z.R.** and DeNardo, D.F. Parental behavior in pythons is responsive to both the hydric and thermal dynamics of the nest. *Journal of Experimental Biology.* 213, 1691-1696.

2009 **Stahlschmidt, Z.R.** and DeNardo, D.F. Obligate costs of parental care to offspring: egg brooding induced hypoxia creates smaller, slower, and weaker python offspring. *Biological Journal of the Linnean Society*. 98, 414-421.

2009 **Stahlschmidt, Z.R.** and DeNardo, D.F. Effect of nest temperature on egg-brooding dynamics in Children's pythons. *Physiology & Behavior.* 98, 302-306.

2008 **Stahlschmidt, Z.R.**, Hoffman, T.C.M., and DeNardo, D.F. Postural shifts during egg-brooding and their impact on egg water balance in Children’s pythons (*Antaresia childreni*). *Ethology.* 114, 1113-1121.

2008 **Stahlschmidt, Z.R.** and DeNardo, D.F. Alternating egg brooding behaviors create and modulate a hypoxic developmental micro-environment in Children’s pythons (*Antaresia childreni*). *Journal of Experimental Biology.* 211, 1535-1540.

**Popular press publication**

2012 **Stahlschmidt, Z.R.** Perfect Python Parenting. *Arizona State University Ask A Biologist*. 20 February.

(http://askabiologist.asu.edu/don’t-judge-egg-its-cover)

**Selected invited presentations**

(\* local, \*\* regional, \*\*\* national, \*\*\*\* international)

2022\*\*\* **Stahlschmidt, Z.R.** Light pollution in a warming world. Social Insect Research Group Seminar. Arizona State University, Tempe, AZ.

2016\*\* **Stahlschmidt, Z.R.** Phenotypic plasticity in insects: Integrating tradeoffs and the environment. Essig Brunch Seminar. University of California – Berkeley.

2016\*\* **Stahlschmidt, Z.R.** Integrating food into organismal biology. Department of Biology Seminar Series. California Polytechnic State University, San Luis Obispo, CA.

2014, 2015\*,\*\* **Stahlschmidt, Z.R.** Biological tradeoffs in a complex world. College of Science and Mathematics’ Common Grounds Seminar Series at GSU, Statesboro, GA, and Biology Seminar Series at the University of South Carolina, Beaufort, SC, and the University of North Florida, Jacksonville, FL.

2012\*\*\* **Stahlschmidt, Z.R.** Physiological tradeoffs and environmental variability—from pythons to crickets. Biology Department Seminar, Lafayette College, Easton, PA, and Dalhousie University, Halifax, Canada.

2010\*\*,\*\*\*\* **Stahlschmidt, Z.R.** Dynamics of python parental care. University of Sydney’s Tropical Ecology Research Facility, Northern Territory, Australia and Tucson Herpetological Society, Tucson, AZ.

2009\*\*\* **Stahlschmidt, Z.R.** and DeNardo, D.F. Parental care: Motivations and implications of python egg-brooding behavior. *Reproductive Biology of the Ophidia* symposium, Joint Meeting of Ichthyologists and Herpetologists, Portland, OR.

2007\* **Stahlschmidt, Z.R.** Python parental care and its effects on egg respiratory gas exchange and water balance. Arizona Herpetological Association, Phoenix, AZ.

**Selected contributed presentations**

(\* local, \*\* regional, \*\*\* national, \*\*\*\* international)

2022\*\*\* **Stahlschmidt, Z.R.,** Yoksuloglu, S. (student author), Choi, J. (student author), and Sandhu, S. (student author). Multigenerational plasticity in response to variation in temperature and water availability. Society for Integrative and Comparative Biology (SICB) Annual Meeting, Phoenix, AZ.

**Selected contributed presentations (cont.)**

(\* local, \*\* regional, \*\*\* national, \*\*\*\* international)

2020\*\*\* Padda, S.S. (student author), Johnson, D.J. (student author), Glass, J.R. (student author), and **Stahlschmidt, Z.R.** Alter Investment or Conserve? Assessing animal strategies to limit costs from concurrent weather extremes. SICB Annual Meeting, Austin, TX.

2019\*\*\* Johnson, D. (student author), and **Stahlschmidt Z.R.** What influences thermal maxima in urban ants? SICB Annual Meeting, Tampa, FL.

2018\*\*\* Glass, J. (student author), and **Stahlschmidt, Z.R.** Do complex environments drive the developmental plasticity of fitness-related traits and a tradeoff between flight and fecundity? SICB Annual Meeting, San Francisco, CA.

2017\*\*\* **Stahlschmidt, Z.R.,** Mills, A.M., and Walman, R.M. Dynamics influencing refuge use by vertebrate communities on the coastal plain—from seasonality to fire ants. SICB Annual Meeting, New Orleans, LA.

2016\*\*\* Butler, M.W., Lutz, T.J. (student author), Fokidis, H.B., and **Stahlschmidt, Z.R (presenting author).** Eating increases oxidative damage. SICB Annual Meeting, Portland, OR.

2015\*\*\* Holcomb, L.M. (student author) and **Stahlschmidt, Z.R.** Effects of ecdysis on temperature preference, feeding behavior, and metabolic rate. SICB Annual Meeting, West Palm Beach, FL.

2014\*\*\* **Stahlschmidt, Z.R.,** Acker, M. (student author), Kovalko, I. (student author), and Adamo, S.A. The balance between immune resistance and immune tolerance is dynamic and influenced by the environment. SICB Annual Meeting, Austin, TX.

2012\* **Stahlschmidt, Z.R.,** McKee, R. (student author), and Adamo, S.A. Food availability and the tradeoff between reproduction and immune function. Graham GoddardIn-HouseConference, Department of Psychology – Dalhousie University, Halifax, NS, Canada.

2012\*\*\* **Stahlschmidt, Z.R.**, Shine, R., and DeNardo, D.F. The consequences of alternative parental care tactics in free ranging pythons (*Liasis fuscus*) in tropical Australia. SICB Annual Meeting, Charleston, SC.

2012\*\*\* **Stahlschmidt, Z.R.** (co-lead author), Butler, M.W. (co-lead author), Ardia, D.R., Davis, J.R., Davies, S., Guillette, L.J., Johnson, N., McCormick, S.D., McGraw, K.J., and DeNardo, D.F. Thermal performance of innate immunity in vertebrates. SICB Annual Meeting, Charleston, SC.

2011\*\*\* **Stahlschmidt, Z.R.**, Lourdais, O., Lorioux, S., Butler, M., and DeNardo, D.F. Intrinsic costs underlying parental investment: Insight from a capital breeder. SICB Annual Meeting, Salt Lake City, UT.

2011\*\*\* **Stahlschmidt, Z.R.**, Brashears, J., and DeNardo, D.F. The role of temperature and humidity in python nest-site selection. SICB Annual Meeting, Salt Lake City, UT.

2010\*\*\* **Stahlschmidt, Z.R.** and DeNardo, D.F. Parental behavior in pythons is responsive to both the hydric and thermal dynamics of the nest. SICB Annual Meeting, Seattle, WA.

2010\*,\*\*\* **Stahlschmidt, Z.R.**, Heulin, B., and DeNardo, D.F. The dynamics of python eggshell permeability. SICB Annual Meeting, Seattle, WA and Graduates in Earth, Life, and Social Sciences (GELSS) Symposium at ASU, Tempe, AZ.

**Selected contributed presentations (cont.)**

(\* local, \*\* regional, \*\*\* national, \*\*\*\* international)

2009\*,\*\*\* **Stahlschmidt, Z.R.** and DeNardo, D.F. Obligate costs of parental care to offspring: Egg-brooding induced hypoxia creates smaller, slower, and weaker python offspring. SICB Annual Meeting, Boston, MA and GELSS Symposium at ASU, Tempe, AZ.

2009\*,\*\*\* **Stahlschmidt, Z.R.** and DeNardo, D.F. Effect of nest temperature on egg-brooding behavior, metabolism, and clutch-nest thermal relations in Children's pythons (*Antaresia childreni*). SICB Annual Meeting, Boston, MA and GELSS Symposium at ASU, Tempe, AZ.

2008\*,\*\*\* **Stahlschmidt, Z.R.**, Brashears, J.B., and DeNardo, D.F. Do Children’s python (*Antaresia childreni*) eggshells mediate a trade-off between embryonic water balance and metabolic gas exchange? SICB Annual Meeting. San Antonio, TX and GELSS Symposium at ASU, Tempe, AZ.

2008\*,\*\*\* **Stahlschmidt, Z.R.** and DeNardo, D.F. Implications of python egg brooding behavior on clutch gaseous micro-environment and metabolic rate. SICB Annual Meeting. San Antonio, TX and GELSS Symposium at ASU, Tempe, AZ.

2007\*,\*\*\* **Stahlschmidt, Z.R.**, Hoffman, T.C.M., and DeNardo, D.F. Implications of dynamic python brooding behavior on real-time embryonic gas exchange and water loss. SICB Annual Meeting, Phoenix, AZ and GELSS Symposium at ASU. Tempe, AZ.

2004\* **Stahlschmidt, Z.R.** Effect of unilateral injections of Orexin A on GABA and glutamate levels in the lateral hypothalamus. 5th Annual James Scholars Conference, Urbana, IL.

**Awards and funding**

2021 College Research Fund at UOP for proposal titled “Ecological light pollution and selection: An evolutionary experiment” ($1,540)

2020 Eberhardt Research Fellowship at UOP for proposal titled “Does a common pesticide influence the effects of temperature on embryos?” ($3500)

2020 Classroom2Careers award at UOP to fund “Lunch with a Scientist” series for graduate students ($500)

2017 Award for Research Experiences for Undergraduates Supplement from the National Science Foundation (NSF) ($4000)

2016 Pacific Fund at UOP for proposal titled “Backyard ANTology: Using citizen science to open an ecological black box in California’s Central Valley” (co-PI: Dustin Johnson, UOP undergraduate; $3875)

2016 Scholarly and Artistic Activities Grant at UOP ($3200) for proposal titled “Integrated physiological health: Linking stress, antioxidant defenses, immune function, and parasite burden in free-ranging colubrid snakes”

2015 Nominee for Outstanding Advocate for First-Year Students at GSU

2015 Award from the Division of Integrative Organismal Systems at the NSF (Principal Investigator: $398,304 total)

2014 Faculty Development Committee at GSU Travel Award ($900)

2011 Killam Trusts Postdoctoral Fellowship (2 years, CAD $92,000 total)

**Awards and funding (cont.)**

2011 Graduate and Professional Student Association (GPSA) at ASU JumpStart Research Grant ($500)

2010 Nominee for College of Liberal Arts and Sciences at ASU Outstanding Graduate Award

2010 Graduate College at ASU Dissertation Fellowship ($8500)

2010 American Philosophical Society’s Lewis and Clark Fund ($3000)

2010 School of Life Sciences (SoLS) at ASU Dissertation Completion Award ($6000)

2010 ‘Best Poster’ at ASU’s annual Graduates in Earth, Life, and Social Sciences Symposium, Tempe, AZ ($100)

2008 Graduate College Conference Travel Grant at ASU ($350)

2007 – 2010 GPSA Conference Travel Grant at ASU (5 awards, $3,500 total)

2007 – 2008 SoLS Travel Grant at ASU (2 awards, $700 total)

2007 Frontiers in Life Sciences Workshop at ASU (committee member; $42,000 total budget)

2007 GPSA Student Research Grant at ASU ($1,700)

2007 – 2009, 2011 Graduate Citizen Scholar Award at ASU (4 awards, $4700)

2007 NSF Graduate Research Fellowship (3 years, $121,500 total)

2006 Animal Behavior Society student research grant ($900)

2006 Chicago Herpetological Society research grant ($500)

2006 Nominee for Teacher’s Excellence Award by GPSA at ASU

2005 University Graduate Scholar Award at ASU (3 years, $10,500 total)

2005 Recruitment Award for Ph.D. program at ASU’s SoLS ($250)

2004 American Society of Animal Science Undergraduate Scholar Award

2003 James Scholar Research Grant at UIUC ($1000)

2000 – 2004 Dean’s List at UIUC

2000 – 2004 James Scholar Honor’s Program participant at UIUC

2000 Jonathan Baldwin Turner Scholarship at UIUC

**Service and outreach**

2022 – present Director of Undergraduate Research at UOP

2022 External reviewer for a joint NSERC Alliance-Mitacs Accelerate research proposal submitted to the Natural Sciences and Engineering Research Council of Canada

2022 Chair of *Climate Change and Thermal Tolerance* session at SICB Annual Meeting (Phoenix, AZ)

2021 – present Member of Academic Council at UOP

2021 – present Member of Academic Affairs Committee on Graduate Studies at UOP

2020 *Ad hoc* reviewer for CAREER proposal to the NSF (Division of Integrative Organismal Systems)

2020 *Ad hoc* reviewer for full proposal to the German Research Foundation

2020 – present Seminar series coordinator for the Department of Biological Sciences at UOP

2019 – present Member of graduate program committee for the Department of Biological Sciences at UOP

2019 Marshal for Diploma and Hooding Ceremony for College of the Pacific at UOP

**Service and outreach (cont.)**

2018, 2022 Member of search committee for instructor position for the Department of Biological Sciences at UOP

2018 – 2019 Member of Commencement Speaker Committee at UOP

2018 – 2021 Member of College of the Pacific Council at UOP

2018 Member of Student Speaker Committee for College of the Pacific’s Commencement at UOP

2017 Panel review member for preproposals to the NSF (Division of Integrative Organismal Systems: Integrative Ecological Physiology – Animals)

2017 Co-Chair of *Biodiversity* session at SICB Annual Meeting (New Orleans, LA)

2016 – 2019 Member of College Research Committee at UOP

2016 – 2019 Founder of *Backyard ANTology*, a citizen-science outreach program focused on ants in California’s Central Valley (backyardantology.weebly.com)

2016 Co-Chair of *Digestive Physiology* session at SICB Annual Meeting (Portland, OR)

2015 Member of search committee for tenure-track position in behavior, neurobiology, and/or toxicology for the Department of Biological Sciences at UOP

2015 Member of committee tasked with revising the Environmental Studies degree program at UOP

2015 *Ad hoc* reviewer for full proposal to the NSF (Division of Integrative Organismal Systems: Integrative Ecological Physiology – Animals)

2015 Panel review member for preproposals to the NSF (Division of Integrative Organismal Systems: Integrative Ecological Physiology – Animals)

2015 Judge of student presentations at SICB Annual Meeting (West Palm Beach, FL)

2014 – 2015 Member of search committee for animal physiology position (tenure-track) in Department of Biology at GSU

2014 Judge of student presentations at Southeastern Ecology and Evolution Conference (SEEC; Statesboro, GA)

2014 Member of Open Plenary Panel Discussion of SEEC (Statesboro, GA)

2014, 2015 Interviewer for Scholars’ Day at GSU

2013, 2014 Interviewer for Southern Scholars Showcase at GSU

2013 Chair of *Stress, Immunity and Parasites* session at SICB Annual Meeting (San Francisco, CA)

2012 Chair of *Thermal Physiology* session at SICB Annual Meeting (Charleston, SC)

2011 Volunteer at live reptile and amphibian display for Brain Fair at ASU

2010 Co-creator of SoLS Graduate Student website (solsgrads.asu.edu)

2009 – 2010 SoLS graduate student body Vice-President

2009 Organizer for SoLS Frontiers in Life Sciences conference, *Dynamic deserts: Resource uncertainty in arid environments*, a 4-day conference that comprised presentations by researchers from eight U.S. states and five continents and daily workshops to facilitate productive interactions among biologists, sociologists, educators, natural resource managers, and policy makers (sols.asu.edu/dynamicdeserts)

2008 – 2009 Graduate student representative for SoLS Graduate Programs Committee

**Service and outreach (cont.)**

2008 Coordinator for “Current Topics in Life Sciences”, a course-accredited SoLS graduate student seminar series at ASU

2007 – 2010 Graduate student representative for the Division of Animal Behavior within SICB

2007 Judge for Arizona Junior Science and Humanities Symposium

2006 – 2009 Volunteer at live reptile display for ASU’s Homecoming

2006, 2011 Physiology representative for SoLS graduate program at ASU

2006 Judge for Central Arizona Regional Science and Engineering Fair

2006 – 2011 Correspondent for community outreach, internet-based ‘Ask-a-Biologist’ program at ASU (askabiologist.asu.edu)

2005 – 2009, 2011 Founding mentor in Graduate Partners in Science Education program at ASU, a mentoring-based science outreach program developed by fellow SoLS graduate students and designed to connect life science graduate students with minority and underprivileged middle-school students in nearby Phoenix public schools (gpse.asu.edu)

2005, 2009, 2010 Grant reviewer for Graduate and Professional Students Association at ASU

2002 – 2004 Member of Phi Kappa Phi, National Honor Society

**Referee for peer review**

*The American Naturalist*

*Amphibian & Reptile Conservation*

*Animal Behaviour*

*Behavioral Ecology and Sociobiology*

*Biological Journal of the Linnean Society*

*Canadian Journal of Zoology*

*Comparative Biochemistry and Physiology A*

*Current Research in Insect Science*

*Ecology and Evolution*

*Ecology Letters*

*Ecosphere*

*Ecotoxicology*

*Forest Science*

*Functional Ecology*

*General and Comparative Endocrinology*

*Global Ecology and Conservation*

*Herpetologica*

*Herpetological Journal*

*Herpetological Review*

*Insect Science*

*Integrative & Comparative Biology*

*Journal of Animal Ecology*

*Journal of Comparative Physiology B*

*Journal of Evolutionary Biology*

*Journal of Experimental Biology*

*Journal of Experimental Zoology A*

*Journal of Herpetology*

*Journal of Thermal Biology*

**Referee for peer review (cont.)**

*Myrmecological News*

*Oikos*

*Physiological and Biochemical Zoology*

*Physiology & Behavior*

*PLoS ONE*

*Proceedings of the Royal Society B – Biological Sciences*

*Scientific Reports*

**Press features**

2017 The lab’s citizen science program (*Backyard ANTology*) was one of several local citizen science projects featured by the *Lodi News-Sentinel* (http://www.lodinews.com/lodi\_living/article\_c973e522-aafe-11e7-a5bf-675dacc4fa31.html)

2017 “ANTology”, an article featuring *Backyard ANTology* was featured by the UOP “Newsroom” (http://www.pacific.edu/About-Pacific/Newsroom/2017/January-2017/Backyard-ANTology.html).

2016 *Backyard ANTology* was featured on the UOP homepage (www.pacific.edu). October and November 2016.

2016 *Science Daily*, *Phys.org*, the SICB, and *Discovery News* each highlighted collaborative research examining eating-induced oxidative damage that I presented at the 2016 SICB Annual Meeting in Portland, OR.

2015 College of the Pacific at UOP. Biology professor to study trait tradeoffs in crickets: How do hot, hungry crickets make decisions? Article highlighting the research of the lab’s NSF Award. 30 October.

(http://www.pacific.edu/About-Pacific/Newsroom/2015/October-2015/Biology-professor-to-study-trait-tradeoffs-in-crickets.html)

2014 Harvey, A. *Complexity and Corn Snakes*. Short (5 min.) ‘Faculty spotlight’ video highlighting work on corn snakes in the lab. Courtesy of GSU’s Department of Biology. 12 August.

(https://www.youtube.com/watch?v=v9FyWuAsZIo)

2011 Elliot, N. Where Are They Now: Featuring Zach Stahlschmidt, Studying Snakes in Australia. *The Gilman Star* feature on research of Z.R. Stahlschmidt. 3 February.

2011 Nicodemo, A. Researchers take deeper look at parental care among snakes. *ASU News – Science & Tech* feature on the research of Z.R. Stahlschmidt and J. Brashears. 24 January. (http://asunews.asu.edu/20110120\_pythons)

2010 *Sonoran Herpetologist* (May issue) feature of presentation by Z.R. Stahlschmidt to Tucson Herpetological Society.

2010 British Broadcasting Corporation’s “*Big Picture*” in Science & Environment featuring a photograph highlighting Stahlschmidt and DeNardo (2010) article.

2010 Knight, K. Python mums hug eggs to prevent dehydration. *Inside JEB* feature on Stahlschmidt and DeNardo (2010) article. *Journal of Experimental Biology*. 213, iii.

2009 Photograph featuring Stahlschmidt & DeNardo (2009) article on cover. *Physiology and Behavior*. 98.

2008 Phillips, K. Python mums suffocate eggs. *Inside JEB* feature on Stahlschmidt and DeNardo (2008) article. *Journal of Experimental Biology*. 211, i.