

Matthew Lovern

Associate Dean, Graduate College
Associate Professor, Biology
Oklahoma State University
Stillwater, OK 74078 USA

Over 20 years of experience in higher education with emphasis on graduate education • Proven record in research, teaching, and service in the biological and health-related sciences • Broad leadership and shared governance experience at departmental, college, and university levels • A demonstrated commitment to mentoring students and faculty • A genuine passion for creating opportunities for success for all with whom I work

Education

2000 **Ph.D.**, Biology, Virginia Tech, Blacksburg, VA USA.
1993 **B.S.**, Biology, Duke University, Durham, NC USA.

Academic Appointments and Experience

2009-present **Associate Professor**, Department of Biology (formerly Integrative Biology), Oklahoma State University (OSU).
2003-09 **Assistant Professor**, Department of Integrative Biology (formerly Zoology), OSU.
2000-03 **NIH NRSA Postdoctoral Fellow**, Neuroscience Program, Michigan State University. Conducted research on the endocrine regulation of sex differentiation in neurobiology and behavior in green anole lizards. Dr. Juli Wade, mentor.
1994-2000 **Graduate Teaching Assistant**, Department of Biology, Virginia Tech.
1993-94 **Research Assistant**, Department of Zoology, Duke University.

Administrative Appointments and Leadership Experience

2022-present **Associate Dean**, Graduate College, OSU.

- This is a 100% appointment – working with the Graduate College Dean, one other Associate Dean, one Assistant Dean, and twelve college staff members – overseeing approximately 6,300 graduate and professional students across eight colleges and three campuses, with a portfolio that has included:
 - Admissions. I communicate with applicants, program coordinators, and related staff on matters including requests for information, application fee waivers, program recommendations, and/or financing graduate degrees. I assist with decisions on applicant transcripts, degree certifications, exceptions to English language testing requirements for international students, and other matters routinely handled by our admissions officers. I also coordinate extensively with other Colleges and administrators on campus (e.g., Associate Deans for Research and Graduate Studies,

- Graduate Council) to communicate, revise, and update admissions policy as needed.
- Recruitment and communications. I help to oversee recruitment and communications functions including McNair and City Year Fellows eligibility, website updates, “Monday Memo” communications to all faculty, staff, and students, and recruiting opportunities through on- and off-campus events.
 - Professional development (in collaboration with the Assistant Dean). I help with programming for our “360° Critical Skills for Career Success” Program which provides comprehensive professional development for graduate and professional students across six skill areas (“competencies”): communication, instruction, research, management, leadership, and wellness.
 - Advising the Graduate and Professional Student Government Association (GPSGA). We facilitate graduate student awards, serve as a unified voice for graduate and professional students on our OSU campuses, and recognize outstanding student, mentor, and program accomplishments in our annual awards ceremony.
 - Student affairs/students of concern. I serve as the Graduate College representative on OSU’s Care Team and on Behavioral Consultation Team for students, faculty, and staff who are experiencing mental health, physical health, and/or financial health concerns or other crises. We use the NABITA risk rubric and follow their best practices in our structure and function. Especially in cases with graduate/professional students, I support case management, including working with Deans and Department Heads/Program Coordinators as necessary.
 - Instruction Council and Graduate Council. I have served as the Graduate College representative on our OSU Instruction Council and the liaison to OSU Graduate Council for new or modified graduate courses and Graduate Certificate, MS, and PhD Programs.

2021 **Interim Associate Dean, Graduate College, OSU.**

- Served in this role Oct-Dec 2021 to overlap with the outgoing Associate Dean and familiarize myself with the duties and responsibilities of the position.

2019-22 **Chair, Faculty Committee, OSU Faculty Council.**

- During my second appointment in this role (see below for first appointment), we worked with Faculty Council officers, members, and OSU leadership (Provost and other Vice Presidents as appropriate) on issues including:
 - Updates to policy on cumulative review of post-tenure faculty;
 - Updates to policy on annual appraisal and development of faculty;
 - Non-tenure track faculty representation;
 - Employee travel; and
 - At the Provost’s request, reviewing contested reappointment, promotion, and tenure (RPT) cases.

- 2019-21,
7/25-present **Chair**, OSU Institutional Animal Care and Use Committee (IACUC).
- Committee consists of myself, OSU attending veterinarian and staff, full-time IACUC manager, and ~ 15 committee members who are scientists, non-scientists, members of the public, and faculty representing disciplines submitting protocols from across the University.
 - Meet generally monthly (~ 9-10 meetings/year) to review protocols, personnel, policy, and compliance changes/updates as needed.
 - Participate in rolling protocol reviews in between meetings.
 - Hold monthly executive meetings with Vice President for Research Office representative to help set agendas and discuss any related pertinent issues.
 - Conduct on-site inspections of OSU animal facilities on campus and across Oklahoma twice per year.
 - Resumed role in July 2025 at request of the Vice President for Research.
- 2017-18 **Interim Department Head**, Department of Integrative Biology, OSU.
- Served in this position for 18 months with activities including:
 - Overseeing a department of 24 faculty, 65 graduate students (M.S. and Ph.D.), 6 staff, and 1,000 undergraduates in biology and biology-related majors;
 - Conducting annual performance reviews for all faculty and staff;
 - Assigning teaching duties and working closely with academic advisors and college staff to maintain/expand course offerings;
 - Overseeing three hires and six RPT portfolio evaluations for faculty;
 - Facilitating faculty research success through effective mentoring and access to resources necessary for competitive external funding;
 - Actively working with OSU Foundation to maintain alumni communication and develop donor connections;
 - Fostering a culture of shared governance, transparency in decision-making, and celebration of student, staff, and faculty successes.
- 2012-17 **Graduate Program Coordinator**, Department of Integrative Biology, OSU.
- Oversaw application review and admissions.
 - Oversaw nominations, selection for graduate student awards.
 - Handled conflict/grievance issues between graduate students and faculty.
 - Developed significant revisions to departmental graduate program policy and the graduate handbook including annual review of graduate students.
 - Served as chair of the departmental Graduate Committee and worked with committee members in completing the tasks above.
- 2012-14 **Chair**, Faculty Committee, OSU Faculty Council.
- During my first appointment in this role, we worked closely with Faculty Council officers, members, and OSU leadership (Provost and other Vice Presidents as appropriate) on issues including revising the RPT policy at the University level and at the Provost's request, reviewing contested RPT cases.

Certifications

- 2023 Certified Facilitator for Faculty Mentor Training, Center for the Improvement of Mentored Experiences in Research (CIMER), University of Wisconsin-Madison.
- 2022 Mental Health First Aid (MHFA) USA. Completion of this course taught by trained facilitators enables participants to recognize and respond to mental health and substance use challenges.

Teaching Experience at OSU

Course	Title	Students	Students per Semester	Number of Times Taught	Last Taught	Most Recent Student Evaluations
BIOL 4215/5215	Mammalian Physiology	Undergraduate, Graduate	30	3	Spring 2022	Instructor: 5.0/5.0 Course: 5.0/5.0
BIOL 5010	Seminar: Stress – Current, Historical Perspectives	Graduate	4	1	Fall 2021	N/A; N<5
BIOL 5010	Seminar: Extreme Physiology	Graduate	4	1	Fall 2020	N/A; N< 5
BIOL 3890	Honors Seminar in Physiology	Undergraduate	12	5	Spring 2020	Instructor: 4.8/5.0 Course: 3.7/4.0
BIOL 3204	Physiology	Undergraduate	275	30	Spring 2019	Instructor: 4.8/5.0 Course: 3.7/4.0
BIOL 5010	Seminar: Diversity & Inclusion in STEM Fields	Graduate	9	1	Fall 2017	Instructor: 4.8/5.0 Course: 3.8/4.0
BIOL 4293/5293	Behavioral Neuro-endocrinology	Undergraduate, Graduate	35	2	Fall 2009	Instructor: 3.9/4.0 Course: 3.8/4.0
BIOL 5010	Seminar: Why Evolution is True	Graduate	8	1	Fall 2008	Instructor: 3.6/4.0 Course 3.9/4.0
BIOL 4283/5283	Endocrinology	Undergraduate, Graduate	35	2	Spring 2007	Instructor: 3.9/4.0 Course: 3.8/4.0
BIOL 5010	Seminar: Creationism's Trojan Horse	Graduate	12	1	Fall 2004	Instructor: 3.8/4.0 Course: 3.6/4.0

Honors and Awards

- 2017-18 Academic Leadership Academy, OSU.
 2012 Regents Distinguished Teaching Award, OSU.
 2008 Junior Faculty Award for Scholarly Excellence, Arts & Sciences (CAS), OSU.
 2008 Outstanding Professor Award, CAS Student Council, OSU.
 2007 Margaret S. Ewing Outstanding Mentor Award, Department of Zoology, OSU.
 2001 Dissertation Research Award, Sigma Xi, Virginia Tech Chapter.
 1998 Honorable Mention, Best Student Paper, Virginia Academy of Science.
 1997 Honorable Mention, Best Student Paper, Virginia Academy of Science.
 1992-93 Dean's List with Distinction, Duke University.

University Service

- 2024 Member, International Students and Scholars Director Search Committee.
 2023-24 Member, Graduate College Dean Search Committee.
 2023-24 Co-chair, Strategic Initiative Working Group on Recruiting and Serving Students from Underrepresented Populations, part of the OSU Strategy, Academic Affairs.
 2020-21 Chair, Ad Hoc Committee for Reviewing Search and Interview Processes, Integrative Biology, OSU.
 2020 Member (1) and Chair (1), Research Conduct Investigation Committees, Office of the Vice President for Research, OSU.
 2020 Chair, Dispute Resolution Committee, OSU.
 2019-22 Chair, Faculty Committee, OSU Faculty Council.
 2019-22 Representative of the College of Arts and Sciences, OSU Faculty Council.
 2019-21 Member, OSU Termination Hearing Board.
 2019-21 Reviewer, Wentz Research Scholars Program, OSU.
 2019 Reviewer, Niblack Research Scholars Program, OSU.
 2019-20 Chair, Physiologist Search Committee, Integrative Biology, OSU.
 2017-21 Member, OSU IACUC.
 2017-20 Equity Advocate, CAS OSU.
 2014-17 General Faculty Member, Faculty Committee, OSU Faculty Council.
 2013-14 Faculty Advisor, ARC (graduate student LGBTQ+ organization).
 2012-14 Co-organizer, "Science Café OSU," sponsored by Sigma Xi, OSU Libraries, and the Office of the Vice-President for Research and Technology Transfer.
 2012-14 Chair, Faculty Committee, OSU Faculty Council.
 2012-13 President, OSU Chapter of Sigma Xi.
 2011-14 Representative of the College of Arts & Sciences, OSU Faculty Council.
 2011-12 Member, Faculty Committee, OSU Faculty Council.
 2011-12 Vice President, OSU Chapter of Sigma Xi.
 2011 Faculty Panelist, Camp Cowboy, OSU (two camps total).
 2009-11 Member, Graduate Committee, Department of Zoology, OSU.
 2009-22 Member, Goldwater Scholarship Committee, OSU.
 2009-11 Member, Membership Committee, OSU Chapter of Sigma Xi.
 2009 Faculty Panelist, Camp Cowboy, OSU (three camps total).
 2008-10 Faculty Advisor, College Student Interest Group in Neurology, OSU.

- 2008 Faculty Panelist, Camp Cowboy, OSU (three camps total).
 2008 Reviewer for Summer Research Support program, A&S, OSU.
 2007-14 Faculty Advisor, Oklahoma State Secular Organization, OSU.
 2007-10 Faculty Advisor, Zoology Graduate Student Society, OSU.
 2007-08 Faculty Associate, Kamm, Peterson-Friend Apartments, OSU.
 2007-28 Chair, Zoology Search Committee for four tenure-track faculty, OSU.
 2007-08 Member, Reappointment, Promotion, and Tenure Committee, CAS, OSU.
 2007 Faculty Panelist, Camp Cowboy, OSU (two camps total).
 2006-07 Member, Zoology Search Committee for one open-rank and three tenure-track faculty, OSU.
 2006-07 Member, Zoology Search Committee for Department Head, OSU.
 2005-07 Environmental Health and Safety Liaison, Department of Zoology, OSU.
 2005-19 Member, Pre-health Advisory Committee, CAS, OSU.
 2004-10 Member, Technology Committee, Department of Zoology, OSU.
 2004-08 Webmaster, Department of Zoology, OSU.
 2004-07 Member, Undergraduate Committee, Department of Zoology, OSU.
 2003-06 Member, Seminar Committee, Department of Zoology, OSU.
 2001-02 Coordinator, Brain & Behavior Group seminars, Michigan State University.
 1996 President, Biology Graduate Student Association (BGSA) of Virginia Tech.
 1995 Chair, BGSA Seminar Committee, Virginia Tech.

Service to the Profession

- 2023-Present Associate Editor, *Frontiers in Ethology* (Applied Ethology and Sentience).
 2022-Present Community Editor, *Frontiers in Ethology* (Foraging and Antipredator Behavior).
 2014-17 Member, Student Support Committee, Society for Integrative and Comparative Biology (SICB).
 2013 Served as outside examiner for Ph.D. dissertation from University of Tasmania.
 2011 Panelist, Fall Proposal Review Panel, NSF (IOS – Animal Behavior).
 2009 Panelist, Spring Proposal Review Panel, NSF (IOS – Animal Behavior).
 2008 Co-organized (with R.M. Bowden, Illinois State University) symposium for the SICB annual meeting in San Antonio, TX, entitled, “Consequences of Maternally-Derived Yolk Hormones for Offspring: Current Status, Challenges, and Opportunities”.
 2000-Present I have served as a reviewer for 46 journals (number of reviews in parentheses) – *American Midland Naturalist* (1), *The American Naturalist* (2); *Amphibia-Reptilia* (1), *Anatomical Record* (3) *Animal Behaviour* (15), *Behavioral Ecology* (2), *Behavioral Ecology and Sociobiology* (8), *Behavioural Processes* (2), *Biological Journal of the Linnean Society* (3), *Biology Letters* (5), *Brain*, *Behavior and Evolution* (1), *Canadian Journal of Zoology* (1), *Caribbean Journal of Science* (2), *Comparative Biochemistry and Physiology Part A* (4), *Copeia/Ichthyology & Herpetology* (9), *Current Zoology* (1), *Environmental Toxicology and Chemistry* (3), *Ethology* (5), *Ecotoxicology* (1), *Frontiers in Endocrinology* (2), *Frontiers in Ethology* (1), *Functional Ecology* (6), *General and Comparative Endocrinology* (29), *Herpetologica* (2), *Herpetological Conservation and Biology* (2), *The Herpetological Journal* (1), *Hormones and*

Behavior (10), *Integrative & Comparative Biology* (1), *Journal of the American Association for Laboratory Animal Science* (1), *Journal of Applied Animal Welfare Science* (3), *Journal of Biosciences India* (1), *Journal of Experimental Zoology A: Ecological Genetics and Physiology* (8); *Journal of Herpetology* (11), *Journal of Neuroendocrinology* (1), *Journal of Zoology* (1), *Nature Scientific Reports* (1), *Naturwissenschaften* (2), *Oecologia* (2), *Physiological and Biochemical Zoology* (6), *Physiology & Behavior* (5), *PLoS One* (2), *Proceedings of the Royal Society B: Biological Sciences* (5), *Range Ecology and Management* (1), *Royal Society Open Science* (2), *Science of the Total Environment* (2), *Southeastern Naturalist* (1), and *Zoological Science* (2).

1998-Present I have provided external reviews for grant proposals to the California State Faculty Support Program (1), University of Central Oklahoma Faculty Grant Program (2), National Geographic Society (2), Texas Academy of Science (1), Animal Behavior Society Student Research Grants (6), National Institutes of Health (1), and National Science Foundation (8).

External Grants and Fellowships

- 2021 P.C. Lovern (PI/Director), *E. Lutter (Co-PI), *M. Lovern (Co-PI). National Institutes of Health, "Graduate Research Training Initiative for Student Enhancement (G-RISE) at Oklahoma State University," 5T32 GM140953-03, \$1,892,260, 1 May 2021 – 30 April 2026. (This national T32 program, including our grant, was terminated early in April 2025 by new leadership at HHS.)
*E. Lutter, M. Lovern joined grant in 2022 after original Co-PI B. Smith left OSU.
- 2017 R.A. Van Den Bussche (PI), M. Lovern (Co-PI), D. Thompson (Co-PI). Oklahoma Department of Wildlife Conservation State Wildlife Grant, "The influence of behavior, physiology, and genomics on the reproductive success of alligator snapping turtles," \$52,483, 1 June 2017 – 31 May 2018.
- 2017 D. Thompson (PI), R.A. Van Den Bussche (Co-PI), M. Lovern (Co-PI), D.B. Ligon (Co-PI). OKC Zoo Conservation Action Now grant, "Influence of behavior, physiology, and genomics on the reproductive success of alligator snapping turtles," \$1,200.
- 2014 D. Thompson (PI), D.B. Ligon (Co-PI), R.A. Van Den Bussche (Co-PI), M. Lovern (Co-PI). Delta Foundation, "Influence of social interactions on reproductive success and population genetics of the alligator snapping turtle," \$27,500.
- 2013 S.F. Fox (PI), J.L. Grindstaff (Co-PI), M. Lovern (Co-PI) R.A. Van Den Bussche (Co-PI). National Science Foundation, "The adaptive significance of juvenile coloration," IOS-1257881, \$557,000, 1 August 2013 – 31 July 2017.
- 2010 J.F. Husak (PI) and M. Lovern (Co-PI). National Geographic Society, "Testosterone and adaptive radiation in Caribbean *Anolis* lizards," 8859-10, \$23,200, 1 Jan. – 31 Dec. 2011 (no-cost extension to 31 Dec. 2012).
- 2010 S. Kennison (PI), J. Byrd-Craven (Co-PI), and K. Curtis, T. Curtis, C. Giddens, J. Grindstaff, M. Lovern, A. Ophir, E. Ross, D. Thomas (Senior Personnel). National Science Foundation, "REU Site: Biological basis of human and animal behavior," SES-1063091, \$340,000, 1 March 2011 – 28 February 2014.

- 2007 L. Smith (PI), M. Lovern (Co-PI), S. McMurry (Co-PI). U.S. Fish and Wildlife Service, "Effects of disturbance on CORT levels in birds," \$50,000, 1 September 2007 – 31 August 2009. Extended to 31 August 2010 with additional \$20,000, bringing grant total to \$70,000.
- 2007 R.M. Bowden (PI), and M. Lovern (Co-PI). National Science Foundation, funding for 2008 Society for Integrative and Comparative Biology Symposium entitled, "Consequences of maternally derived yolk hormones for offspring phenotype: current status, challenges, and opportunities," IOS-0737608, \$10,520, 1 September 2007 – 31 August 2008.
- 2007 M. Lovern (PI). National Science Foundation, "Maternal steroid effects on offspring phenotype," IOS-0641434, \$320,000, 15 March 2007 – 28 February 2010. No-cost extension granted to 31 December 2010.
- 2005 M. Lovern (PI). Animal Welfare Enhancement Award, Johns Hopkins Center for Alternatives to Animal Testing, "Development and validation of a fecal steroid assay to non-invasively measure hormone levels," AWE-2005-56, \$6,000, 1 year.
- 2000 M. Lovern (PI). National Research Service Award, National Institutes of Health, "Endocrine regulation of sexually dimorphic development," HD08661, \$107,544, 3 years.
- 1998 M. Lovern (PI). Theodore Roosevelt Memorial Fund Grant, American Museum of Natural History, "The transition from wintering to territorial status in the lizard, *Anolis carolinensis*: A test of the polygyny threshold model," \$800.
- 1996 M. Lovern (PI). Grant-in-Aid of Research, Sigma Xi, "The role of social interaction in the ontogeny of display behavior in *Anolis carolinensis*," \$475.

Internal Grants and Fellowships

- 2016 M. Minghetti and M. Lovern. "Replacement osmometer for the Physiology Laboratory," CAS Student Technology Fee Program, \$8,895.
- 2013 J. Shaw, J. Grindstaff, and M. Lovern. "iWorx to enhance the Physiology curriculum," CAS Student Technology Fee Program, \$39,440.
- 2010 J.L. Grindstaff, M. Lovern, J. Byrd-Craven, and S. Kennison. "Spit and learn: hormones, physiology, and behavior," CAS Student Technology Fee Program, \$32,937.
- 2005 M. Lovern. OSU CAS Summer Research Award, \$5,500.
- 1999 M. Lovern. Graduate Research Development Grant (GRDG), Virginia Tech, "Natural testosterone levels, and behavioral and morphological effects of elevated testosterone levels, during the ontogeny of male and female *Anolis carolinensis*," \$1,000.
- 1998 M. Lovern. GRDG, Virginia Tech, "The transition from winter dormancy to breeding season territoriality in the lizard, *Anolis carolinensis*: A test of the polygyny threshold and neutral choice models," \$1,000.
- 1997 M. Lovern. GRDG, Virginia Tech, "The role of social experience in the ontogeny of social behavior in *Anolis carolinensis*," \$500.
- 1996 M. Lovern. GRDG, Virginia Tech, "The relationship among structure, function, and ontogeny of display behavior for male and female *Anolis carolinensis*: A laboratory study," \$500.

- 1995 M. Lovern. GRDG, Virginia Tech, "Communication and social role ontogeny in a sexually dimorphic lizard: A field study," \$1,000.
1994-97 M. Lovern. Cunningham Doctoral Fellowship, Virginia Tech, \$7,500.

Student Mentoring

Successfully Defended Graduate Student Advisees (12 total: 6 M.S.; 6 Ph.D.)

- Thompson, Denise (Ph.D., 2023), Dissertation title: "Reproductive cycles, activity patterns, and distribution of the Alligator Snapping Turtle (*Macrochelys temminckii*)."
- Brooke Equinox (Hoover) (Ph.D., 2022), Dissertation title: "Sex steroid hormones, architects of behavior and development."
- Elizabeth Dawkins (M.S., 2019), Thesis title: "The dear enemy effect in male brown anoles (*Anolis sagrei*)."
- Jodie Wiggins (Ph.D., 2018, Co-advised with Stanley Fox), Dissertation title: "Precocial sexual selection in *Crotaphytus Collaris*."
- Jessica Magaña (Ph.D., 2017), Dissertation title: "The effect of social experience on behavior, stress hormone, and reproduction in native and invasive *Anolis* lizards."
- Chelsea Baker (M.S., 2015), Thesis title: "Utilizing *Anolis carolinensis* and *A. porcatius* to investigate behavioral and physiological variations between native and invasive species."
- David Haines (M.S., 2013), Thesis title: "The influence of hormones and nutrition on communication signal development in green anoles (*Anolis carolinensis*)."
- Angie Reisch (M.S., 2011), Thesis title: "Antipredatory behavior in two anoline lizards."
- Amber Adams (M.S., 2009), Thesis title: "The effects of breeding density, year, and laboratory vs. field environments on plasma and yolk steroids in green anole lizards (*Anolis carolinensis*)."
- Matthew D. Stone (Ph.D., 2009), Dissertation title: "Effects of season, sex, and age on the calcium physiology and bone dynamics of turtles."
- Day B. Ligon (Ph.D., 2007), Dissertation title: "Effects of incubation temperature on physiological performance of turtles."
- Corina L. Wack (M.S., 2006), Thesis title: "Sex, age, and season effects on plasma steroids in free-ranging Texas horned lizards (*Phrynosoma cornutum*)."

Current Graduate Student Committees (2 total)

Rachel Hamrock (Ph.D.), Desi Wilson (Ph.D.)

Former Graduate Student Committees (OSU students unless otherwise noted; 32 total)

Pamela Widder (M.S., 2005), Lindsey Jones (M.S., Texas Tech University, 2007), Tim Periard (M.S., 2007), Tiffany Weston (M.S., 2007), Erin Berghammer (M.S., 2008), Kristopher Karsten (Ph.D., 2008), Elizabeth Doxon (Ph.D., 2009), Tarren Shaw (Ph.D., 2009), Nikki Smith (M.S., 2010), Dustin Taylor (M.S., 2010), Kimberly Hays (Ph.D., 2010), Jay Burtka (M.S., 2011), April Bagwill (Ph.D., 2012), David Zheng (M.S., 2012), Matt Anderson (Ph.D., 2013), Tess Dumas (M.S., 2014) Andrea Crosby (Ph.D., 2015), Anissa Delecki (Ph.D., 2015), Lance Forshee (Ph.D., 2017), Meelyn Pandit (M.S., 2017), Madeleine Naylor (Ph.D., 2017), Enrique Santoyo-Brito (Ph.D., 2017), Elizabeth Mendoza (M.S., 2018), Will Wiggins (Ph.D., 2018), Christina Anaya (Ph.D., 2019), Brenna Heaton (Ed.D., 2019), Ashley Love (Ph.D., 2019), Tabitha Gunnars

(M.S., 2020), Jimmy Lovett (Ph.D., 2020), Ray Garza (Ph.D., 2021), Shauni Windle (Ph.D., 2022). Allison Bryant (M.S., 2024), Angela Goff (Ph.D., 2024), Paige Stevens (Ph.D., 2024).

Undergraduate Researchers (54 total)

¹Kathryn Greenwood (2003-04), ²Gage Gregory (2003-06), Jimmy Pellerin (2003-05), ¹Stephanie Rollins (2003-04), ³Janel Blaylock (2004-05), Stephanie Doughty (2004-05), ²Nick Rasmussen (2004-05), ^{1,4}Shana Watkins (2004-06), Jennifer Doyle (2005), Leanne Fiore (2005-06), Audrey Myrosh (2005), ³Lindsay Pascal (2005-06), Jennifer Johnson (2006), ³Angie Reisch (2006-07), ³Cedric Fry (2007-08), ^{2,3}Chelsea Williams (2007-08), Jondrea Chesser (2008), Boe Ray (2008-09), Andrea Richardson (2009-10), Katherine Moriarty (2010), Tanner Bryan (2010-11), Clay Algeo (2011), ⁵Kathy Jones (2011), ⁵Michawn Shelton (2011-12), Grace Sorochman (2011), William Couch (2012), Jessica Joseph (2012), ⁵Carina Parikh (2012), ³Kyle Sikes (2012-13), Dang Bui (2013), Shelby Burrige (2013), Hallie McCartney (2013), Chelcie Pierce (2013), Hope Hudson (2013), Keighley Sallee (2013), Megan Yost (2013), ⁵Zoe Austin (2013-14), ³Amber Douglas (2013-14), Josh Garner (2013-14), ³Hannah Kadavy (2013-14), Ciara Rupprecht (2014), Nicole Gastineau (2014), Hannah Brownlee (2014), Lauren DuBose (2014), Austin Stutts (2014-15), ³Trevor Bickford (2015), ³Kirsten Grammer (2015-16), Alynna Wiley (2015), Annakate Grady (2015-16), Bailey Hendrickson (2016), ²Will Bruhn (2016-2017), ⁶Shelby Stavins (2016-2017), Kelsey Trast (2016-2017), ³Josh Reyes (2019), Shelbi Lamascus (2019), Dushawn Jones (2019), ³Tiffany Quiring (2019-2021), Sam Lassiter (2019-2020), Morgan Pringnitz (2019-2020), ³Carlos Barrios-Perez (2020-2021).

¹Supported by the Howard Hughes Medical Institute and Oklahoma State University (Retention of Students in the Biological Sciences Program)

²Supported by a Wentz Research Scholarship, Oklahoma State University

³Senior Honor's Thesis Research, Honors College, Oklahoma State University

⁴Supported by a Niblack Research Scholarship, Oklahoma State University

⁵Supported by OSU's NSF-REU "Biological Basis of Human and Animal Behavior"

⁶Life Sciences Freshman Research Scholar (LSFRS) Program

Other Undergraduate Research

Katie Johnson (2005-2006; served as Faculty Reader for Honors Thesis), Yuka Matsuo (2007-2008; served as co-advisor with Dr. Barbara Stoecker, Nutritional Sciences, for Honors Thesis), Erin Nally (2012-2013; served as Faculty Reader for Honors Thesis), Lauren Foley (2013-2014; served as Faculty Reader for Honors Thesis), Brandon Hubbard (2014-15; served as co-advisor with Dr. Jennifer Byrd-Craven, Psychology, for Honors Thesis), Forrest Rogers (2014-15; served as co-advisor with Dr. Jennifer Byrd-Craven, Psychology, for Honors Thesis), Nicole Clapp (2019-2020; served as Faculty Reader for Honors Thesis), Rachel Abraham (2020; served as Faculty Reader for Honors Thesis), AJ Hager (2020-2021; served as Faculty Reader for Honors Thesis).

Publications

h-index = 28

<https://scholar.google.com/citations?user=v6bMnX4AAAAJ&hl=en&oi=ao>

Book Chapters

2. **Lovern, M.** 2024. Hormones and reproductive cycles in lizards. *In* Hormones and Reproduction of Vertebrates Vol. 3, Reptiles, 2nd ed. (D.O. Norris and K.H. Lopez, eds.). Academic Press, New York, pp. 289-316.
1. **Lovern, M.** 2011. Hormones and reproductive cycles in lizards. *In* Hormones and Reproduction of Vertebrates, Vol. 3, Reptiles (D.O. Norris and K.H. Lopez, eds.). Academic Press, New York, pp. 321-353.

Peer-reviewed Publications

50. Thompson, D.M., Ligon, D.B., Edmond, B.S., Spangler, S.J., Fillmore, B.M., Graves, K.G., **Lovern, M.** 2023. Reproductive cycles of alligator snapping turtles (*Macrochelys temminckii*). *General and Comparative Endocrinology* 341:114310.
49. Hanover, A.M., Husak, J.F., and **Lovern, M.** 2019. Corticosterone in lizard egg yolk is reduced by maternal diet restriction but unaltered by maternal exercise. *Physiological and Biochemical Zoology* 92:573-578.
48. Wang, A.Z., Husak, J.F., and **Lovern, M.** 2019. Leptin ameliorates the immunity, but not reproduction, trade-off with endurance in lizards. *Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology* 189:261-269.
47. Hall, J.M., Buckelew, A., **Lovern, M.**, Secor, S.M., and Warner, D.A. 2018. Seasonal shifts in reproduction depend on prey availability for an income breeder. *Physiological and Biochemical Zoology* 91:1129-1147.
46. Miles, M.C., Vitousek, M.N., Husak, J.F., Johnson, M.A., Martin, L.B., Taff, C.C., Zimmer, C., **Lovern, M.**, and Fuxjager, M.J. 2018. Standing variation and the capacity for change: are endocrine phenotypes more variable than other traits? *Integrative and Comparative Biology* 58:751-762.
45. Husak, J.F., Roy, J.C., **Lovern, M.** 2017. Exercise training reveals trade-offs between endurance performance and immune function, but does not influence growth, in juvenile lizards. *Journal of Experimental Biology* 220:1497-1502.
44. Love, A.C., **Lovern, M.**, DuRant, S.E. 2017. Captivity influences immune responses, stress endocrinology, and organ size in house sparrows (*Passer domesticus*). *General and Comparative Endocrinology* 252:18-26.
43. Bagwill, A.L., **Lovern, M.**, Worthington, T.A., Smith, L.M., and McMurry, S.T. 2016. Effects of water loss on New Mexico Spadefoot Toad (*Spea multiplicata*) development, spleen cellularity, and corticosterone levels. *Journal of Experimental Zoology* 325A:548-561.
42. Burtka, J.L., **Lovern, M.**, and Grindstaff, J.L. 2016. Baseline hormonal levels are linked to reproductive success but not parental care behaviors. 2016. *General and Comparative Endocrinology* 229:92-99.
41. Delaney, D.M., **Lovern, M.**, and Warner, D.A. 2016. Does reduced perch availability affect reproduction in the brown anole? An experimental test in the laboratory. *Journal of Herpetology* 50:227-232.
40. Husak, J.F., Ferguson, H.A., and **Lovern, M.** 2016. Trade-offs among locomotor performance, reproduction, and immunity in lizards. *Functional Ecology* 30:1665-1674.
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- subventricular zone in the developing cortex. *Journal of Comparative Neurology* 524:433-447.
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 37. Baird, T.A., **Lovern, M.**, and Shine, R. 2014. Heightened aggression and winning contests increase corticosterone but decrease testosterone in male Australian water dragons. *Hormones and Behavior* 66:393-400.
 36. Cox, R.M., **Lovern, M.**, and Calsbeek, R. 2014. Experimentally decoupling reproductive investment from energy storage to test the functional basis of a life-history trade-off. *Journal of Animal Ecology* 83:888-898.
 35. Peragine, D.E., Simpson, J.A., Mooney, S.J., **Lovern, M.**, and Holmes, M.M. 2014. Social regulation of adult neurogenesis in a eusocial mammal. *Neuroscience* 268:10-20.
 34. Husak, J.F., and **Lovern, M.** 2014. Variation in steroid hormone levels among Caribbean *Anolis* lizards: endocrine system convergence? *Hormones and Behavior* 65:408-415.
 33. Taylor, D.P., Vradenburg, J.N., Smith, L.M., **Lovern, M.**, and McMurry, S.T. 2014. Effects of anthropogenic and environmental stress on the corticosterone levels of wintering northern pintails (*Anas acuta*). *Canadian Journal of Zoology* 92:185-193.
 32. Warner, D.A., and **Lovern, M.** 2014. The maternal environment affects offspring viability via an indirect effect of yolk investment on offspring size. *Physiological and Biochemical Zoology* 87:276-287.
 31. Zhou, S., Holmes, M.M., Forger, N.G., Goldman, B.D., **Lovern, M.**, Caraty, A., Kalló, I., Faulkes, C.G., and Coen, C.W. 2013. Socially regulated reproductive development: analysis of GnRH-1 and kisspeptin neuronal systems in cooperatively breeding naked mole-rats (*Heterocephalus glaber*). *Journal of Comparative Neurology* 521:3003-3029.
 30. Warner, D.A., Kelly, C.D., and **Lovern, M.** 2013. Experience affects mating behavior, but does not impact parental reproductive allocation in a lizard. *Behavioral Ecology and Sociobiology* 67:973-983.
 29. Wack, C.L., DuRant, S.E., Hopkins, W.A., **Lovern, M.**, Feldhoff, R.C., and Woodley, S.K. 2012. Elevated plasma corticosterone increases metabolic rate in a terrestrial salamander. *Comparative Biochemistry and Physiology A* 161:153-158.
 28. Niel, L., Alves, P.A., Pinzon, N., Holmes, M.M., **Lovern, M.**, and Monks, D.A. 2012. Maintenance of the spinal nucleus of the bulbocavernosus neuromuscular system is not influenced by physiological levels of glucocorticoids. *Developmental Neurobiology* 72:1114-1121.
 27. Ligon, D.B., Peterson, C., and **Lovern, M.** 2012. Acute and persistent effects of pre- and post-hatching thermal environments on growth and metabolism in the red-eared slider turtle, *Trachemys scripta elegans*. *Journal of Experimental Zoology* 317:227-235.
 26. McMurry, S.T., Jones, L.E., Smith, P.N., Cobb, G.P., Anderson, T.A., **Lovern, M.**, Cox, S., and Pan, X. 2012. Accumulation and effects of octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) exposure in the green anole (*Anolis carolinensis*). *Ecotoxicology* 21:304-314.
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23. Wack, C.L., **Lovern, M.**, and Woodley, S.K. 2010. Transdermal delivery of corticosterone in terrestrial amphibians. *General and Comparative Endocrinology* 169:269-275.
22. Stone, M.D., Arjmandi, B., and **Lovern, M.** 2010. Dual-energy X-ray absorptiometry (DXA) as a non-invasive tool for the prediction of bone density and body composition of turtles. *Herpetological Review* 41:36-42.
21. Ligon, D.B., and **Lovern, M.** 2009. Temperature effects during early life stages of the alligator snapping turtle (*Macrochelys temminckii*). *Chelonian Conservation and Biology* 8:74-83.
20. Ligon, D.B., Bidwell, J.R., and **Lovern, M.** 2009. Incubation temperature effects on hatchling growth and metabolic rate in the African spurred tortoise, *Geochelone sulcata*. *Canadian Journal of Zoology* 87:64-72.
19. Warner, D.A., **Lovern, M.**, and Shine, R. 2008. Maternal influences on offspring phenotypes and sex ratios in a multi-clutching lizard with environmental sex determination. *Biological Journal of the Linnean Society* 95:256-266.
18. **Lovern, M.**, and Adams, A.L. 2008. The effects of diet on plasma and yolk steroids in lizards (*Anolis carolinensis*). *Integrative and Comparative Biology* 48:428-436.
17. Wack, C.L., Fox, S.F., Hellgren, E.C., and **Lovern, M.** 2008. Effects of sex, age, and season on plasma steroids in free-ranging Texas horned lizards (*Phrynosoma cornutum*). *General and Comparative Endocrinology* 155:589-596.
16. Warner, D.A., **Lovern, M.**, and Shine, R. 2007. Maternal nutrition affects reproductive output and sex allocation in a lizard with environmental sex determination. *Proceedings of the Royal Society of London B: Biological Sciences* 274:883-890.
15. Chang, J.L., Doughty, S., Wade, J., and **Lovern, M.** 2006. Sexual dimorphism in the second-to-fourth digit length ratio in green anoles, *Anolis carolinensis* (Squamata: Polychrotidae) from the southeastern United States. *Canadian Journal of Zoology* 84:1489-1494.
14. Husak, J.F., Fox, S.F., **Lovern, M.**, and Van Den Bussche, R.A. 2006. Faster lizards sire more offspring: sexual selection on whole-animal performance. *Evolution* 60:2122-2130.
13. **Lovern, M.**, Holmes, M.M., Fuller, C.O., and Wade, J. 2004. Effects of testosterone on the development of neuromuscular systems and their target tissues involved in courtship and copulation in green anoles (*Anolis carolinensis*). *Hormones and Behavior* 45:295-305.
12. **Lovern, M.**, Holmes, M.M., and Wade, J. 2004. The green anole, *Anolis carolinensis*: A reptilian model for laboratory studies of reproductive morphology and behavior. *Journal of the Institute for Laboratory Animal Research* 45:54-64.
11. **Lovern, M.**, and Wade, J. 2003. Sex steroids in green anoles (*Anolis carolinensis*): uncoupled maternal plasma and yolk follicle concentrations, potential embryonic steroidogenesis, and evolutionary implications. *General and Comparative Endocrinology* 134:109-115.
10. **Lovern, M.**, and Jenssen, T.A. 2003. Form emergence and fixation of headbobbing displays in the lizard, *Anolis carolinensis*: A reptilian model of signal ontogeny. *Journal of Comparative Psychology* 117:133-141.
9. **Lovern, M.**, and Wade, J. 2003. Yolk testosterone varies with sex in eggs of the lizard, *Anolis carolinensis*. *Journal of Experimental Zoology* 295A:206-210.

8. **Lovern, M.**, and Passek, K.M. 2002. Sequential alternation of offspring sex from successive eggs by female green anoles, *Anolis carolinensis*. *Canadian Journal of Zoology* 80:77-82.
7. **Lovern, M.**, and Wade, J. 2001. Maternal plasma and egg yolk testosterone concentrations during embryonic development in green anoles (*Anolis carolinensis*). *General and Comparative Endocrinology* 124:226-235.
6. **Lovern, M.**, and Jenssen, T.A. 2001. The effects of context, sex, and body size on staged social interactions in juvenile male and female green anoles (*Anolis carolinensis*). *Behaviour* 138:1117-1135.
5. Jenssen, T.A., **Lovern, M.** and Congdon, J.D. 2001. Field-testing the protandry-based mating system for the lizard, *Anolis carolinensis*: Does the model organism have the right model? *Behavioral Ecology and Sociobiology* 50:162-172.
4. **Lovern, M.**, McNabb, F.M.A., and Jenssen, T.A. 2001. Developmental effects of testosterone on behavior in male and female green anoles (*Anolis carolinensis*). *Hormones and Behavior* 39:131-143.
3. **Lovern, M.** 2000. Behavioral ontogeny in free-ranging juvenile male and female green anoles, *Anolis carolinensis*, in relation to sexual selection. *Journal of Herpetology* 34:274-281.
2. Jenssen, T.A., Orrell, K.S., and **Lovern, M.** 2000. Sexual dimorphisms in aggressive signal structure and use by a polygynous lizard, *Anolis carolinensis*. *Copeia* 2000:140-149.
1. **Lovern, M.**, Jenssen, T.A., Orrell, K.S., and Tuchak, T. 1999. Comparisons of temporal display structure across contexts and populations in male *Anolis carolinensis*: Signal stability or lability? *Herpetologica* 55:222-234.

Other Publications

2. Ligon, D.B., and **Lovern, M.** 2004. Meyer publication worse than just bad science (Correspondence to Nature). *Nature* 432:949.
1. Jenssen, T.A., **Lovern, M.**, Orrell, K.S., and Passek, K.M. 1999. *Anolis carolinensis* unplugged: Investigations into the behavioral ecology of the green anole. In: J.B. Losos and M. Leal (eds.), *Anolis Newsletter V*, pp. 44-54.

Invited Seminars

12. Lovern, M. Why are invaders successful? An ongoing case study with native and introduced lizards. Department of Integrative Biology, Oklahoma State University, November 2014.
11. Lovern, M. Maternal effects on offspring traits: what can egg-laying lizards tell us? Department of Biology, Trinity University, San Antonio, TX, November 2010.
10. Lovern, M. Maternal effects on offspring traits: what can egg-laying lizards tell us? Department of Biological Sciences, Southern Illinois University – Edwardsville, March 2010.
9. Lovern, M. Maternal effects on offspring traits: what can egg-laying lizards tell us? Department of Natural Sciences, Northeastern State University, April 2009.
8. Lovern, M. Maternal effects via yolk steroids: exploring the environment-mother-offspring link in green anole lizards. Department of Biological Sciences, Duquesne University, April 2008.
7. Lovern, M. Maternal effects via yolk steroids: exploring the environment-mother-offspring link. Department of Biological Sciences, University of Tulsa, November 2007.

6. Lovern, M. Maternal yolk steroids and offspring phenotype in lizards. Department of Zoology, University of Oklahoma, Norman, January 2007.
5. Lovern, M. Sex differences in green anoles: Adult behavior, juvenile development, and steroidal effects. Department of Zoology, Oklahoma State University, Stillwater, February 2003.
4. Lovern, M. Sex differences in green anoles: Adult behavior, juvenile development, and steroidal effects. Department of Biology, Marshall University, Huntington, WV, February 2003.
3. Lovern, M. Sex differences in green anoles: Adult behavior, juvenile development, and steroidal effects. Department of Biological Sciences, Towson University, Towson, MD, February 2003.
2. Lovern, M. The ontogeny of behavioral sex differences in green anole lizards: Does testosterone matter? Program in Ecology and Evolutionary Biology, University of Illinois, March 2001.
1. Lovern, M. Sex differences in behavior and androgen profiles during ontogeny in green anoles. Department of Psychology, Michigan State University, September 1999.

Presentations at Regional, National, and International Meetings

77. Walton, J.G., and **Lovern, M.** Winners don't keep winning, but alter signal use in secondary fights in brown anoles (*Anolis sagrei*). Society for Integrative and Comparative Biology Annual Meeting, Seattle, WA, January 2024.
76. Agan, J.W., **Lovern, M.**, Grindstaff, J.L., and Fox, S.F. Use of hatchling orange bars in male-male interactions of *Crotaphytus collaris*. Joint Meeting of Ichthyologists and Herpetologists. Snowbird Ski Resort, UT. July 2019.
75. Agan, J.W., **Lovern, M.**, Grindstaff, J.L., and Fox, S.F. The role of hatchling orange bars in male-male interactions of the collared lizard, *Crotaphytus collaris*. Southwestern Association of Naturalists Annual Meeting, Chihuahua, Mexico, April 2019.
74. Agan, J.W., **Lovern, M.**, Grindstaff, J.L., and Fox, S.F. How collared lizard, *Crotaphytus collaris*, hatchling orange bars affect male-male interactions. Society for Integrative and Comparative Biology Annual Meeting, Tampa, FL, January 2019.
73. Agan, J.W., **Lovern, M.**, Grindstaff, J.L., and Fox, S.F. How orange bars in juvenile male collared lizards, *Crotaphytus collaris*, may affect their fitness. Southwestern Association of Naturalists Annual Meeting, San Marcos, Texas, April 2018.
72. Agan, J.W., **Lovern, M.**, Grindstaff, J.L., and Fox, S.F. How orange bars in juvenile male collared lizards, *Crotaphytus collaris*, may affect their fitness. Society for Integrative and Comparative Biology Annual Meeting, San Francisco, CA, January 2018.
71. Cook, E., **Lovern, M.**, and Leal, M. Investigating the potential for testosterone to mediate territorial aggression in female *Anolis* lizards. Society for Integrative and Comparative Biology Annual Meeting, San Francisco, CA, January 2018.
70. Agan, J.W., **Lovern, M.**, Grindstaff, J.L., and Fox, S.F. Actions speak louder than words: *Crotaphytus collaris* hatchling orange bars add less of a benefit than hormones in behavioral interactions, Central Ecology and Evolution Conference, Stillwater, OK, April 2017.
69. Agan, J.W., **Lovern, M.**, Grindstaff, J.L., and Fox, S.F. Actions speak louder than words: *Crotaphytus collaris* hatchling orange bars add less of a benefit than hormones in

- behavioral interactions, Southwestern Association of Naturalists Annual Meeting, Lawton, OK, April 2017.
68. Wiggins, J.M., **Lovern, M.**, Grindstaff, J.L., and Fox, S.F. Conspicuous coloration in juvenile collared lizards (*Crotaphytus collaris*). Central Ecology and Evolution Conference, Stillwater, OK, April 2017.
 67. Wiggins, J.M., **Lovern, M.**, Grindstaff, J.L., and Fox, S.F. Conspicuous coloration in juvenile collared lizards (*Crotaphytus collaris*). Southwestern Association of Naturalists Annual Meeting, Lawton, OK, April 2017.
 66. Husak, J., Hanover, A., Ferguson, H., and **Lovern, M.** Maternal exercise affects egg-yolk steroids in lizards. Society for Integrative and Comparative Biology Annual Meeting, New Orleans, LA, January 2017.
 65. Love, A.C., **Lovern, M.**, DuRant, S.E. Captivity influences immune responses and stress endocrinology in house sparrows. Society for Integrative and Comparative Biology Annual Meeting, Portland, OR, January 2016.
 64. Magaña, J.L., and **Lovern, M.** Small and large lizards agree in defeat but react differently to victory. Society for Integrative and Comparative Biology Annual Meeting, Portland, OR, January 2016.
 63. Wiggins, J.M., Van Den Bussche, R.A., Grindstaff, J.L., **Lovern, M.**, and Fox, S.F. Sexual selection in juvenile collared lizards? Society for the Study of Evolution Annual Meeting, Austin, TX, June 2016.
 62. Magaña, J.L., and **Lovern, M.** Small and large lizards agree in defeat but react differently to victory. Society for the Study of Amphibians and Reptiles Annual Meeting, Lawrence, KS, August 2015.
 61. DuRant, S., Love, A., and **Lovern, M.** Does captivity influence immune responses, stress endocrinology, and organ size in House Sparrows (*Passer domesticus*)? Joint meeting of the American Ornithologists' Union and Cooper Ornithological Society, Norman, OK, July 2015.
 60. Crosby, A., **Lovern, M.**, Grindstaff, J., and Fox, S. Effects of testosterone and dihydrotestosterone on coloration and behavior of male hatchling collared lizards (*Crotaphytus collaris*). Joint meeting of Ichthyologists and Herpetologists, Chattanooga, TN, July 2014.
 59. Buckelew, A., **Lovern, M.**, and Warner, D.A. Temporal changes in food availability affect reproductive allocation in the lizard *Anolis sagrei*. Joint meeting of Ichthyologists and Herpetologists, Chattanooga, TN, July 2014.
 58. Austin, Z., Dinges, C., Abramson, C., and **Lovern, M.** Operant conditioning in *Anolis carolinensis* and *A. sagrei*: initial shaping procedures. Sigma Xi Student Research Conference, Raleigh, NC, November 2013.
 57. Stone, M., Bernhard, M., Hellgren, E., and **Lovern, M.** Relationship between environment, osmotic stress, and urinary corticosterone in a wild population of Texas tortoises (*Gopherus berlandieri*). Joint Meeting of Ichthyologists and Herpetologists, Albuquerque, NM, July 2013.
 56. Baker, C., and **Lovern, M.** Utilizing growth rates as an indicator of resource competition between *Anolis carolinensis* and *Anolis sagrei*. Oklahoma Academy of Science Annual Meeting, Edmond, OK, November 2012.

55. Haines, D., Fry, C., and **Lovern, M.** Endocrine and social effects on communication signals in adult male green anole (*Anolis carolinensis*) lizards. Animal Behavior Society Annual Meeting, Albuquerque, NM, June 2012.
54. Mooney S.J., **Lovern M.**, and Holmes M.M. Behavioural and endocrine profile of naked mole-rats following social pairing. Ontario Ecology, Ethology, and Evolution Colloquium, May 2012.
53. **Lovern, M.** Teaching evolution without apology in a human physiology course. AAAS SWARM Annual Meeting, Tulsa, OK, March 2012.
52. Husak, J. and **Lovern, M.** Variation in circulating steroid hormones among Caribbean *Anolis* ecomorphs. Society for Integrative and Comparative Biology Annual Meeting, Charleston, SC, January 2012.
51. Shelton, M., Grindstaff, J.L., and **Lovern, M.** Bacteria killing capacity differs between lab-raised and wild-caught brown anole lizards, *Anolis sagrei*. Animal Behavior Society Annual Meeting, Bloomington, IN, July 2011 (presented in conjunction with the ABS Turner Program).
50. Wack, C.L., **Lovern, M.**, and Woodley, S.K. Acute elevation of corticosterone via a dermal patch has no effect on behavior in the red-legged salamander. Society for Integrative and Comparative Biology Annual Meeting, Salt Lake City, UT, January 2011.
49. Warner, D.A. and **Lovern, M.** Maternal diet affects offspring quality via its effect on egg investment in the lizard *Anolis sagrei*. Society for Integrative and Comparative Biology Annual Meeting, Salt Lake City, UT, January 2011.
48. Wack, C.L., **Lovern, M.**, and Woodley, S.K. Acute elevation of corticosterone via a dermal patch has no effect on behavior in the red-legged salamander. Society for Integrative and Comparative Biology Annual Meeting, Salt Lake City, UT, January 2011.
47. Warner, D.A., and **Lovern, M.** Maternal diet affects offspring quality via its effect on egg investment in the lizard *Anolis sagrei*. Society for Integrative and Comparative Biology Annual Meeting, Salt Lake City, UT, January 2011.
46. Haines, D.S., Fry, C.A., and **Lovern, M.** Endocrine and social effects on communication signals in adult male green anole (*Anolis carolinensis*) lizards. Oklahoma Academy of Sciences Annual Meeting, Broken Arrow, OK, November 2010.
45. Reisch, A., Warner, D., and **Lovern, M.** Antipredatory behaviors in two anoline lizards. Oklahoma Academy of Sciences Annual Meeting, Broken Arrow, OK, November 2010.
44. Zhou, S. Holmes, M.M., Forger, N.G., Goldman, B. D., **Lovern, M.**, Caraty, A., Faulkes, C.G., and Coen, C.W. Release from socially-induced reproductive suppression in eusocial naked mole-rats (*Heterocephalus glaber*) is marked by increased kisspeptin-immunoreactive cell bodies in the hypothalamic anteroventral periventricular nucleus. Society for Neuroscience Annual Meeting, San Diego, CA, November 2010.
43. Zhou, S. Holmes, M.M., Forger, N.G., Goldman, B. D., **Lovern, M.**, Caraty, A., Faulkes, C.G., and Coen, C.W. Release from socially-induced reproductive suppression in eusocial naked mole-rats (*Heterocephalus glaber*) is marked by increased kisspeptin-immunoreactive cell bodies in the hypothalamic anteroventral periventricular nucleus. 7th International Congress of Neuroendocrinology, Rouen, France, July 2010.
42. Fry, C.A., and **Lovern, M.** The dear enemy effect and testosterone in green anole lizards. Animal Behavior Society Annual Meeting, Williamsburg, VA, July 2010.
41. Reisch, A., and **Lovern, M.** Does *Anolis carolinensis* exhibit pursuit deterrent signaling? Animal Behavior Society Annual Meeting, Williamsburg, VA, July 2010.

40. Niel, L., Alves, P., **Lovern, M.**, Pinzon, N., and Monks, D.A. Maintenance of the SNB neuromuscular system is not influenced by physiological levels of corticosterone. Society for Behavioral Neuroendocrinology Annual Meeting, Toronto, ON, Canada, July 2010.
39. Taylor, D., Vradenburg, J., **Lovern, M.**, McMurry, S., and Smith, L. Effects of anthropogenic and environmental stress on the corticosterone levels of wintering Northern pintails. Society of Wetland Scientists Annual Meeting, Salt Lake City, UT, June 2010.
38. Sargent, M.L., and **Lovern, M.** Short- and long-term consequences of yolk steroid exposure for green anole lizards. Society for Integrative and Comparative Biology Annual Meeting, Seattle, WA, January 2010.
37. Holmes, M.M., **Lovern, M.**, Seney, M.L., and Forger, N.G. Mechanisms underlying brain plasticity in naked mole-rats. Society for Behavioral Neuroendocrinology Annual Meeting, East Lansing, MI, June 2009.
36. Taylor, D., Vradenburg, J., Smith, L., **Lovern, M.**, and McMurry, S. Behavioral and physiological stress responses of Northern pintails (*Anas acuta*) to tourism disturbance. Society of Wetland Scientists Annual Meeting, Madison, WI, June 2009.
35. Adams, A.L., Ligon, D.B., and **Lovern, M.** Reproductive and endocrine responses to breeding density in laboratory-housed green anole lizards. Society for Integrative and Comparative Biology Annual Meeting, Boston, MA, January 2009.
34. Doxon, E.D., **Lovern, M.**, Davis, C.A., and Fuhlendorf, S.D. Fire and grazing effects on corticosterone levels of breeding female grassland sparrows in western Oklahoma. The Wildlife Society Annual Conference, Miami, FL, November 2008.
33. Adams, A.L., Ligon, D.B., and **Lovern, M.** Breeding density effects on plasma and yolk hormones in green anole lizards: a laboratory study. Society for Integrative and Comparative Biology Annual Meeting, San Antonio, TX, January 2008.
32. Ligon, D.B., Peterson, C.C., and **Lovern, M.** Acute and persistent effects of incubation and post-embryonic thermal environments on hatchling metabolic rate in the red-eared slider turtle, *Trachemys scripta*. Society for Integrative and Comparative Biology Annual Meeting, San Antonio, TX, January 2008.
31. **Lovern, M.**, and Adams, A.L. Yolk steroids in the green anole, a lizard with genotypic sex determination: exploring the environment-mother-offspring link. Society for Integrative and Comparative Biology Annual Meeting, San Antonio, TX, January 2008.
30. Stone, M.D., Arjmandi, B., and **Lovern, M.** Dual-energy x-ray absorptiometry as a non-invasive tool for the prediction of bone density and body composition of turtles. Society for Integrative and Comparative Biology Annual Meeting, San Antonio, TX, January 2008.
29. Walguarnery, J.W., and **Lovern, M.** Environmentally-induced stress modifies maternal deposition of yolk hormones in the lizard *Anolis carolinensis*. Society for Integrative and Comparative Biology Annual Meeting, San Antonio, TX, January 2008.
28. Stone, M., Arjmandi, B., and **Lovern, M.** The use of dual-energy x-ray absorptiometry to predict bone density and body composition of turtles. Kansas Herpetological Society Annual Meeting, Topeka, November 2007.
27. Chang, J.L., Doughty, S., Wade, J., and **Lovern, M.** Sex and laboratory effects in second-to-fourth digit length ratios (2D4D) in green anole lizards. Society for Integrative and Comparative Biology Annual Meeting, Phoenix, AZ, January 2007.

26. Ligon, D.B., Gregory, G., Kasmaier, R., and **Lovern, M.** Variation in desiccation tolerance among red-eared slider turtle populations. Society for Integrative and Comparative Biology Annual Meeting, Phoenix, AZ, January 2007.
25. Wack, C.L., and **Lovern, M.** Evaluation of fecal testosterone and corticosterone in green anoles before and after exposure to an acute stressor. Society for Integrative and Comparative Biology Annual Meeting, Phoenix, AZ, January 2007.
24. Fiore, L., Stone, M., and **Lovern, M.** Non-invasive seasonal monitoring of bone density in red-eared sliders using dual-energy x-ray absorptiometry. Oklahoma Academy of Sciences annual meeting, Claremore, OK, November 2006.
23. Pascal, L., Stone, M., and Lovern, M. Evaluating the effectiveness of dual-energy x-ray absorptiometry (DXA) as a predictor of bone density and body composition in turtles. Oklahoma Academy of Sciences annual meeting, Claremore, OK, November 2006.
22. Husak, J.F., and **Lovern, M.** Sexual selection on whole-animal performance: lizard locomotion and mating success. Society for Integrative and Comparative Biology Annual Meeting, Orlando, FL, January 2006.
21. Ligon, D.B., and **Lovern, M.** Maternal, sex, and incubation temperature effects on an endangered tortoise, *Geochelone sulcata*. Society for Integrative and Comparative Biology Annual Meeting, Orlando, FL, January 2006.
20. Wack, C.L., and **Lovern, M.** Sex, age, and season effects on plasma steroids in free-living Texas horned lizards. Society for Integrative and Comparative Biology Annual Meeting, Orlando, FL, January 2006.
19. Jones, L.E., Pan, X., Cobb, G.P., Anderson, T.A., **Lovern, M.**, Smith, P.N., and McMurry, S.T. Acute toxicity, accumulation, and reproductive effects of HMX exposure in green anoles. Society of Environmental Toxicology and Chemistry North American Annual Meeting, Baltimore, MD, November 2005.
18. Rasmussen, N.R., and **Lovern, M.** Improved light quality: the key to successful husbandry of captive green anoles? Oklahoma Academy of Sciences annual meeting, Oklahoma City, OK, November 2005.
17. Pellerin, J.M., and **Lovern, M.** Testosterone increases headbobbing display stereotypy in juvenile green anoles. Society for Behavioral Neuroendocrinology Annual Meeting, Austin, TX, June 2005.
16. Blaylock, J.A., and **Lovern, M.** Validation of low-dose testosterone implants for elevating plasma and yolk steroid levels in female green anoles (*Anolis carolinensis*). Oklahoma Academy of Sciences Annual Meeting, Edmond, OK, November 2004.
15. Pellerin, J.M., and **Lovern, M.** Does testosterone increase display stereotypy in juvenile green anoles (*Anolis carolinensis*)? Oklahoma Academy of Sciences Annual Meeting, Edmond, OK, November 2004.
14. **Lovern, M.** Yolk testosterone and offspring sex in the green anole, a lizard with genotypic sex determination. American Society of Ichthyologists and Herpetologists, Herpetologists' League, and the Society for the Study of Amphibians and Reptiles Joint Annual Meeting, Norman, OK, May 2004.
13. Holmes, M.M., **Lovern, M.**, Fuller, C.O., and Wade, J. Testosterone-induced developmental plasticity in the courtship and copulatory neuromuscular systems of green anoles. Society for Neuroscience annual meeting, New Orleans, LA, November 2003.

12. **Lovern, M.**, and Wade, J. Relationship among sex steroid levels in breeding female plasma, yolk, and embryonic tissue in green anole lizards. Society for Integrative and Comparative Biology annual meeting, Toronto, Ontario, Canada, January 2003.
11. **Lovern, M.**, and Wade, J. Yolk testosterone varies with sex in lizard eggs. Society for Behavioral Neuroendocrinology annual meeting, Amherst, MA, June 2002.
10. **Lovern, M.**, and Wade, J. Testosterone and embryonic development in lizards. Society for Behavioral Neuroendocrinology annual meeting, Scottsdale, AZ, June 2001.
9. **Lovern, M.**, McNabb, F.M.A., and Jenssen, T.A. Developmental effects of testosterone on behavior in male and female green anole lizards. Society for Integrative and Comparative Biology annual meeting, Chicago, IL, January 2001.
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