Dr. Jenny Q. Ouyang

Curriculum vitae

University of Nevada, Reno
1664 N Virginia St
Reno, NV 89557

jouyang@unr.edu
http://www.jennyouyang.com
+1 (775) 784-6089

EDUCATION

2012	Ph.D. in Ecology and Evolutionary Biology (Princeton University) Adviser: Michaela Hau Title: What makes an individual successful? Individual variation in hormones, behavior, and fitness
2009	M.A. in Ecology and Evolutionary Biology (Princeton University) GPA: 4.0
2007	B.S. in Biology (University of California, Irvine) Thesis advisers: Nancy Burley and George L. Hunt, Jr. (Honors in Major, GPA: 3.93, *Magna Cum Laude*) B.A. in French (University of California, Irvine) (Honors in Major, GPA: 3.93, *Magna Cum Laude*)
2005	Coursework at Shoals Marine Laboratory (Cornell University)

APPOINTMENTS

2025-present	Director, Ecology, Evolution, and Conservation Biology graduate program
2022-present	Associate professor, University of Nevada, Reno
2016-2022	Assistant professor, University of Nevada, Reno
2013-2015	National Science Foundation Postdoctoral Fellow, Netherlands Institute of Ecology (Funding: NSF DBI-1306025 to JQO) Collaborators: Kamiel Spoelstra and Marcel Visser
2012-2013	Postdoctoral Associate, Virginia Tech (Funding: NSF IOS-1145625 to FB, MH, & ITM) Collaborators: Frances Bonier, Mark Haussmann, and Ignacio Moore

PUBLICATIONS

https://orcid.org/0000-0002-5111-5145; h-index: 27; citations: 2908

[55] **Ouyang, J.Q.** & Lendvai, Á.Z. 2026. Hormonal plasticity to food restriction is heritable in the house sparrow, *Passer domesticus*. *Journal of Animal Ecology.*

[54] Alaasam, V., Cantarero, A., Beccardi, M., Corregidor-Castro, A., Fuertes-Recuero, M., Schiavinato, M., Zampa, L., Grapputo, A., Griggio, M., **Ouyang, J. Q**., Pilastro, A. & Baldan, D. 2025. Mate desertion affects offspring survival, development and physiology in a songbird with multiple parental strategies. *Functional Ecology.*

Media: UNR, Univ of Ecuador, Univ of Padova, *OkDario*, *TechnoExplora, SiNC*

[53] Hui, C. K., Zhang, Y. & **Ouyang, J.** 2025. Birds of a feather flock together: social context exacerbates the effects of light pollution on circadian disruption. *Proceedings of the Royal Society B: Biological Sciences* 292: 20250724.

[52] Coker, D., Poveda, E. & **Ouyang, J. Q.** 2025. From clock genes to fitness: Molecular and behavioral rhythms, parental behavior, and reproductive success across a light pollution gradient. *Environmental Pollution* 380: 126539.

[51] Alaasam, V.J., Behnke, T.L., Grant, A.R., **Ouyang, J.Q.** 2024. Glucocorticoids and land cover: a largescale comparative approach to assess a physiological biomarker for avian conservation. *Philosophical Transactions of the Royal Society B* 379 (1898), 20220508.

[50] Taff, C.C., Baldan, D., Mentesana, L., **Ouyang, J.Q**., Vitousek, M.N., Hau, M. 2024 Endocrine flexibility can facilitate or constrain the ability to cope with global change*. Philosophical Transactions of the Royal Society B* 379 (1898), 20220502.

[49] Alaasam, V.J., Hui, C., Lomas, J., Ferguson, Zhang, Y., Yim, W.C., **Ouyang, J.Q.** 2024. What happens when the lights are left on? Transcriptomic and phenotypic habituation to light pollution. *Iscience* 27 (2).

[48] Spurgin, L.G. **et al**. 2024. The great tit HapMap project: A continental-scale analysis of genomic variation in a songbird. *Molecular Ecology Resources* 24, e13969.

[47] Sonnenberg, B.R., Branch, C.L., Pitera, A.M., Benedict, L.M., Heinen, V.K., **Ouyang, J.Q.** & Pravosudov, V.V. 2024. Feather growth rate and hormone deposition vary with elevation but not reproductive costs in resident Mountain Chickadees. *Ornithology*, 141 ukae011.

[46] Provinciato, I.C.C., **Ouyang, J.Q.** & Cruz-Neto, A.P. 2024. Hematological parameters vary with life history stage in the pale-breasted thrush Turdus leucomelas. *Journal of Avian Biology* e03242.

[45] Hui, C.K., Chen N.‡, Chakraborty A.‡, Alaasam V. J., Pieraut S., **Ouyang J.Q.** 2023. Dim artificial light at night alters immediate early gene expression throughout the avian brain. *Frontiers in Neuroscience*, 17.

[44] von Holdt, B.M., Kartzinel, R.Y., van Oers, K., Verhoeven, K.J.F., **Ouyang, J.Q.** 2023. Changes in the rearing environment cause reorganization of molecular networks associated with DNA methylation. *The Journal of animal ecology.*

[43] Heppner, J.J., Krause, J.S., **Ouyang, J.Q.** 2023. Urbanization and maternal hormone transfer: Endocrine and morphological phenotypes across ontogenetic stages. *General and Comparative Endocrinology*, 114166.

[42] Sonnenberg, B.R., Heinen, V.K., Pitera, A.M., Benedict, L.M., Branch, C.L., Bridge, E.S., **Ouyang, J.Q**., Pravosudov, V.V. 2022. Natural variation in developmental condition has limited effect on spatial cognition in a wild food-caching bird. *Proceedings of the Royal Society B* 289, 20221169.

[41] Behnke, T., Street, P., Davies, S., **Ouyang, J.Q.**, Sedinger, J.S. 2022. Non-native grazers affect physiological and demographic responses of greater sage-grouse. *Ecology and Evolution* 12 e9325.

[40] White JH, Heppner JJ, **Ouyang JQ.** 2022. Increased lead and glucocorticoid concentrations reduce reproductive success in house sparrows along an urban gradient. *Ecological Applications* e2688.

Media: *Ecological Society of America, Wildlife Society, Swedish Radio*

[39] Baldan, D., Negash, M.‡, **Ouyang, J.Q.** 2021. Are individuals consistent? Endocrine reaction norms under different ecological challenges. *Journal of Experimental Biology* 224 (12).

[38] Alaasam, V.J., Xiu L., Zhang Y., Niu Y., Ferguson B., Pieraut S., **Ouyang J.Q.** 2021. Effects of dim artificial light at night on locomotor activity, cardiovascular physiology, and circadian clock genes in a diurnal songbird. *Environmental Pollution,* 282.

Media: *BBC, Scientific American*

[37] Alaasam, V.J., & **Ouyang, J.Q.** 2021. The power of large-scale community science in addressing anthropogenic change. *Global Change Biology,* 27(17). *invited dispatch

[36] Heppner, J. J., & **Ouyang, J. Q.** 2021. Incubation behavior differences in urban and rural house wrens, *Troglodytes aedon*. *Frontiers in Ecology and Evolution*, 9(89).

[35] **Ouyang, J. Q.,** Macaballug, P. ‡, Chen, H.‡, Hodach, K‡., Tang, S. ‡, & Francis, J. S. 2021. Infrared thermography is an effective, noninvasive measure of HPA activation. *Stress*, 1-6.

Fall 2021: Maternity leave

[34] Grant, A. R., Baldan, D., Kimball, M. G., Malisch, J. L., & **Ouyang, J. Q.** 2020. Across time and space: Hormonal variation across temporal and spatial scales in relation to nesting success. *General and Comparative Endocrinology*, 292, 113462.

[33] Baldan, D., & **Ouyang, J. Q.** 2020. Urban resources limit pair coordination over offspring provisioning. *Scientific Reports*, 10(1), 15888.

[32] Vagasi, C., Tóth, Z., Pénzes, J., Pap, P. L., **Ouyang, J. Q.,** & Lendvai, Á. Z. 2020. The Relationship between Hormones, Glucose and Oxidative Damage is Condition- and Stress-dependent in a Free-living Passerine Bird. *Physiological and Biochemical Zoology*.

[31] Zhou, Y., Chen, A., **Ouyang, J. Q.,** Liu, Y., Zheng, A., Yang, Z., Lu, C. 2020. Comparing community birdwatching and professional bird monitoring with implications for avian diversity research: a case study of Suzhou, China. *Avian Research*, 11(1), 19.

[30] Injaian, A. S., Francis, C. D., **Ouyang, J.Q.,** Dominoni, D. M., Donald, J. W.*, Fuxjager, M*. Goymann, W.*, Hau, M.*, Husak, J.F.*, Johnson, M.A.*, Kircher, B.K.*. Knapp, R.*, Martin, L.B.*, Vitousek, M.N. 2020. Baseline and stress-induced corticosterone levels across birds and reptiles do not reflect urbanization levels. *Conservation Physiology*, 8. *Authors in alphabetical order

[29] **Ouyang J.Q.,** Baldan, D., Munguia, C.‡, & Davies, S. 2019. Genetic inheritance and environment determine endocrine plasticity to urban living. *Proceedings of the Royal Society B: Biological Sciences*, 286, 1908.

***Media*:** *Discovery News, Science News*

Fall 2019: Maternity leave

[28] **Ouyang, J.Q.,** Isakkson, C., Schmidt, C., Hutton, P., Bonier, F., Dominoni, D. 2018. A new framework for urban ecology: An integration of ultimate and proximate responses to anthropogenic change. *Integrative and Comparative Biology* 58, 915-928.

[27] Toth, Z., **Ouyang, J.Q.,** Lendvai, A. 2018. Exploring the mechanistic link between corticosterone and insulin-like growth factor-1 in a wild passerine bird. *PeerJ* 6, e5936.

[26] Alaasam, V.J., Duncan, R., Casagrande, S., Davies, S., Sidher, A., Seymoure, B., Shen, Y., Zhang, Y. & **Ouyang, J.Q.** 2018. Light at night disrupts nocturnal rest and elevates glucocorticoids at cool color temperatures. *Journal of Experimental Zoology Part A: Ecological and Integrative Physiology* 0.

[25] Jong, M., Lamers Koosje, P., Eugster, M., **Ouyang, J.Q**., Da Silva, A., Mateman, A.C., Grunsven Roy, H.A., Visser Marcel, E. & Spoelstra, K. 2018. Effects of experimental light at night on extra-pair paternity in a songbird. *Journal of Experimental Zoology Part A: Ecological and Integrative Physiology* 0.

[24] **Ouyang, J.Q.,** Davies, S. & Dominoni, D. 2018. Hormonally mediated effects of artificial light at night on behavior and fitness: linking endocrine mechanisms with function. *The Journal of Experimental Biology* 221.

[23] Davies, S, Haddad, N.‡, **Ouyang, JQ.** 2017. Stressful city sounds: glucocorticoid responses to experimental traffic noise are environmentally-dependent. *Biology letters.*
***Media*:** NPR, KUNR News, *Science News*

[22] **Ouyang JQ,** de Jong M, van Grunsven RHA, Matson KD, Haussmann MF, Meerlo P, Visser ME, Spoelstra K. 2017. What type of rigorous experiments are needed to investigate the impact of artificial light at night on individuals and populations? *Global Change Biology.*

[21] **Ouyang JQ,** de Jong M, van Grunsven RHA, Matson KD, Haussmann MF, Meerlo P, Visser ME, Spoelstra K. 2017. Restless roosts: Light pollution affects behavior, sleep, and physiology in a free-living songbird. *Global Change Biology.*

***Media*:** *Frontiers in Ecology and Evolution Press* interview, front page of magazine

[20] Welbers AAMH, van Dis NE, Kolvoort AM, **Ouyang JQ,** Visser ME, Spoelstra K, Dominoni DM. 2017. Artificial Light at Night Reduces Daily Energy Expenditure in Breeding Great Tits (Parus major). *Frontiers in Ecology and Evolution* 5(55).

[19] de Jong, M., **Ouyang, J.Q**., van Grunsven, R.H.A., Visser, M.E., Spoelstra, K. 2016. Do wild great tits avoid exposure to light at night? *PLoS ONE* 11(6): e0157357.

[18] Dakin R., **Ouyang J.Q.**, Lendvai Á.Z., Haussmann M.F., Moore I.T., Bonier F. 2016. Weather matters: begging calls are temperature- and size-dependent signals of offspring state. *Behaviour* 153(8):871-896.

[17] **Ouyang, J.Q.*,** Lendvai, Á.Z.*, Moore I.T., Bonier F., Haussmann, M.H. 2016. Do hormones, telomere lengths, and oxidative stress form an integrated phenotype? A case study in free-living tree swallows. *Integrative and Comparative Biology.* 56(2):138-145.

*authors contributed equally, shared first-authorship

[16] Hau, M., Casagrande, S., **Ouyang, J.Q.,** Baugh, A.T. 2016. Glucocorticoid-mediated phenotypes in vertebrates: multilevel variation and evolution. *Advances in the Study of Behavior* 48: 41-115.

[15] de Jong M., Jeninga L., **Ouyang J.Q**., van Oers K., Spoelstra K., Visser M.E. 2016. Dose-dependent responses of avian daily rhythms to artificial light at night. *Physiology & Behavior* 155: 172-179.

[14] Dakin, R., Lendvai, A.Z., **Ouyang, J.Q.,** Moore, I.T., Bonier, F. 2016. Plumage colour is associated with partner parental care in mutually ornamented tree swallows. *Animal Behaviour* 111: 111-118.

[13] **Ouyang, J.Q,*** Lendvai, Á.Z.*, Dakin, R., Domalik, A.D.‡, Fasanello, V.J.‡, Vassallo, B.G.‡, Haussmann, M.F., Moore, I.T., & Bonier, F. 2015. Weathering the storm: parental effort and stress hormones predict brood survival. *BMC Evolutionary Biology* 15: 219

*authors contributed equally, shared first-authorship

[12] **Ouyang, J.Q.,** de Jong, M., Hau, M., Visser, M.E., van Grunsven, R.H.A. & Spoelstra, K. 2015. Stressful colours: corticosterone concentrations in a free-living songbird vary with the spectral composition of experimental illumination. *Biology Letters* 11

***Media**: The Guardian*

Key teaching text at the University of Liverpool

[11] Lendvai, Á.Z., Akçay, Ç., **Ouyang, J.Q.,** Dakin, R., St. John, P.S., Stanback, M., Moore, I.T., and Bonier, F. 2015. Analysis of the optimal duration of behavioral observations on an automated continuous monitoring system in tree swallows (*Tachycineta bicolor*): is one hour good enough? *PLoS One*, 9, e110564

[10] de Jong, M., **Ouyang, J.Q.,** Silva, A. van Grunsven, R.H.A., Kempenaers, B., Visser, M.E., & Spoelstra, K. 2015. Nocturnal illumination of habitat: altered life-history decisions and effects on fitness in wild birds. *Philosophical Transactions of the Royal Society B: Biological Sciences* 370.

[9] **Ouyang, J.Q.,** van Oers, K., Quetting, M., & Hau, M. 2014. Becoming more like your mate: hormonal similarity reduces divorce rates in a wild songbird. *Animal Behavior* 98, 87-93.

***Media:** Discovery News, BBC, IFLoveScience article*

[8] Lendvai, A.Z.* **Ouyang, J.Q.*,** Schoenle, L.A., Fasanello, V.J.‡, Haussmann, M.F., Moore, I.T., & Bonier, F. 2014. Experimental food restriction reveals individual differences in corticosterone reaction norms with no oxidative costs. *PLoS One* 9, e110564.

*authors contributed equally, shared first-authorship

[7] **Ouyang, J.Q.,** Sharp, P., Quetting, M. & Hau, M. 2013. Endocrine phenotype, reproductive success and survival in the great tit, *Parus major*. *Journal of Evolutionary Biology* 26: 1988-98.

[6] **Ouyang, J.Q.,** Muturi, M.‡, Quetting, M. & Hau, M. 2013. Small increases in corticosterone before the breeding season increase parental investment but not fitness in a wild passerine bird. *Hormones and Behavior* 63: 776-781.

[5] **Ouyang, J.Q**., Quetting, M., Hau, M. 2012. Corticosterone and brood abandonment in a passerine bird. *Animal Behaviour:* 84, 261-268.

Media: *Discovery News*

[4] **Ouyang, J.Q.,** Hau, M., Bonier, F. 2011. Within seasons and among years: when are corticosterone levels repeatable? *Hormones and behavior:* 60, 559-564.

[3] **Ouyang, J. Q.,** Sharp, P. J., Dawson, A., Quetting, M., Hau, M. 2011. Hormone levels predict individual differences in reproductive success in a passerine bird. *Proceedings of the Royal Society B: Biological Sciences* 278: 2537-2545.

Media: *Science Daily, Cell News, e! Science News, The Daily Princetonian*

[2] Cordoba-Cordoba, S., **Ouyang, J.Q.**, Hauck, S. J. Nesting preferences and population estimates of a new Black Noddy (*Anous minutus*) breeding colony on One Tree Island, Great Barrier Reef., *Marine Ornithology* 38: 79–84.

Book Chapters

[1] **Ouyang, J.Q.,** 2018. Endocrine control of reproduction in birds, In *Encyclopedia of Reproduction*. M. Skinner and P. Swanson eds. Elsevier.

Other

Ouyang, J. Q. 2026. Michaela Hau. *Integrative and Comparative Biology.*

Ouyang, J. Q. 2023. The Dark Side of Light. *American Scientist* 111 (3), 184-186

Ouyang, J. Q. 2005. Diets of adult and chick western gulls on Santa Barbara Island. *Journal of Undergraduate Research in the Biological Sciences* 35: 703-714.

‡Denotes undergraduate collaborator

		RESEARCH GRANTS AND FELLOWSHIPS
2023	$160,000	US Fulbright Scholar award – Host country: Colombia "Effects of urbanization on physiology and population genomics in a hotspot of avian biodiversity" **(PI)**
2022-2027	$1,172,332	NSF IOS-2141693: CAREER: From clock genes to phenotype: organismal response to artificial light at night **(PI)**
2019-2022	$431,567	NIH R15ES030548 Circadian disruption and consequences of light pollution (**PI**) Co-PI: Yong Zhang
2017-2019	$160,430	NSF OIA-1738594 Mechanisms underlying transgenerational inheritance of the stress phenotype (**PI**)
2017-2019	$420,000	NIH P20 GM103650 Neurosensory function in response to artificial light at night (**Project leader**, PI: Mike Webster)
2014	€150,000	Hungarian Scientific Research Fund OTKA Fountain of youth: insulin regulatory mechanisms (**Co-PI**; PI: Ádám Lendvai)
2013	$151,416	National Science Foundation Postdoctoral Research Fellowship in Biology (DBI-1306025)
2007-2012	$90,000	National Science Foundation Graduate Research Fellowship Program (DGE-0646086)
2011	$1,200	Frank M. Chapman Memorial Grant
2011	$1,000	Society for Integrative and Comparative Biology Grant-in-Aid of Research
2009	$2,000	Princeton University Summer Research Grant
2008	$1,000	Sigma Xi Grant-in-Aid of Research
2007	$68,000	Princeton First Year Graduate Fellowship
2003-2007	$36,000	Universities of California, Regent's Scholar
2006	$14,000	Barry M. Goldwater Fellowship

TEACHING QUALIFICATIONS AND EXPERIENCE

Courses taught:

Instructor, University of Nevada, Reno (BIO 316 Comparative Animal Physiology)
Instructor, University of Nevada, Reno (BIO 414 Endocrinology)
Instructor, University of Nevada, Reno (BIO/EECB 494/694/794 Colloquium)

Professional Training Course for early graduate students:

From 2018-current, I co-organize a seminar series called "How to Science". This series is focused on professional development for graduate students (early). We met with department graduate students (EECB, INP) biweekly to discuss topics such as time management, preparing papers, grants and manuscripts, communication with PIs, self-assessment and self-pedagogy.

Assistant Instructor, 2010, Princeton University (EEB 327, Evolution of the Immune System)
Assistant Instructor, 2008, Princeton University (EEB 211 Introductory Biology Lab)
As an assistant instructor at Princeton, I gave lectures and oversaw student projects. I designed and coordinated the discussion sessions and guided final student papers, including instruction on statistical analysis.
Teaching Assistant, 2005, UC Irvine (E106 Evolutionary Processes)
As a teaching assistant at UC Irvine, I led discussion sessions and tutored students.

Invited guest lectures:

Fall 2013	Virginia Tech (Animal Physiology) – eight weeks
Spring 2012	Princeton University (Comparative Physiology) – two lectures

Qualifications:

Completed "Teaching Transcript" Pedagogy Program, McGraw Center, Princeton University (2007-2012)
Attended teaching orientation & pedagogy programs, served as teaching assistant & received feedback, developed teaching statement & course syllabus

Teaching/mentoring awards:

2026	Regents' Academic Advising Award (Graduate)
2025	UNR College of Science Zaliapin Mentorship Award
2024	Mentor to Senior Scholar College of Science DidiAlice Coker
2022	Stephen Jenkins Mentorship Award (voted by the graduate students from the Ecology, Evolution, and Conservation Biology program)
2018	Nominated, Paul and Judy Bible University Teaching Excellence Award
2017, 2019	Awarded Westfall Scholar Mentor award from University of Nevada, Reno I was a mentor for Westfall awardees, Jeanette Liou and Edgar Lopez
2008	Teaching Service Award (K-12 education), Princeton University
2007	Language Teaching Award, UC Irvine

STUDENT AND POSTDOC MENTORING

Since arrival at UNR in 2016, I have supervised 54 undergraduate students (15 with honors theses, 8 with co-authored publications). Currently, I supervise 4 graduate students and 9 undergraduates.

Current Graduate students

2025-present	Ava Ciaccia. PhD, CMB (awarded NSF GRFP)
2024-present	Katherine Smith. PhD, EECB (awarded honorable mention NSF GRFP)

2023-present	Elisset Poveda, Effects of ALAN on the microbiome. PhD, Integrative Neuroscience
2021-present	Ivan Celso Provinciato, Urbanization and timing of breeding. Dean's Merit Fellow. PhD, EECB

Past Graduate students

2020-2024	Cassandra Hui, Neurosensory and circadian disruptions due to light pollution. PhD, Integrative neuroscience (now a bioinformatics scientist for UNR Bioinformatics CORE)
2018-2024	Jennifer Heppner, Urbanization and maternal effects. PhD, EECB (awarded DRIVE and Jenkins Fellowships, now a postdoc at Washington State Univ)
2017-2022	Valentina Alaasam. Effects of artificial light at night on behavior and physiology. PhD, EECB (awarded NSF GRFP, now a NSF PRFB fellow at Univ of Washington)
2017-2019	Avery Grant. Physiological control of facultative altitudinal migration. MSc Biology. 2019 (now a bioinformaticist)

I am serving (or have served) as a committee member for the following graduate students at UNR and other universities (N=18):

- Alexa Lindaeur (Biology MSc, 2016-2018)
- Aman Kohli (Biology MSc, 2017-2019)
- Zachery Forsburg (EEB PhD, Texas State University, 2016-2020)
- Ivana Ilic (INS MSc, 2019-2021)
- Angela Pitera (EECB PhD, 2016-2022)
- Tessa Behnke (EECB PhD, 2017-2021)
- Alison Agneray (EECB PhD, 2017-2021)
- Ben Sonnenberg (EECB PhD, 2018-2023)
- Lauren Benedict (EECB PhD, 2019-2023)
- Akhila Gopal (EECB PhD, 2020-present)
- Kevin Pham (PhD, University of Auburn, 2021-2025)
- Leah Auchter (Anthropology PhD, 2020-2025)
- Abby Miller (EECB PhD, 2021-present)
- David Perez Guerra (EECB PhD, 2021-2025)
- Bethany Ponte (INS PhD, 2022-present)
- Lauren Whitenack (EECB PhD, 2022-present)
- Glenn Blessington (Clinical Psychology PhD, 2023-present)
- Ai Ana Richmond (EECB PhD, 2024-present)
- Sofia Haley (EECB PhD, 2024-present)

Prior to UNR Student Supervision

2015-2017	Annemieke Kolvoort. Insect abundance under artificial light at night. *Master's thesis, Utrecht University*
2014-2016	Sofia Scheltinga. Spatial movement of great tits under artificial light. *Master's thesis, Utrecht University*
2013-2014	Alice Domalik. Individual differences in the neophobia and corticosterone. *Undergraduate honors thesis, Queen's University*
2011-2012	Marion Muturi. Behavioral correlates of hormone manipulation. *MsC diploma thesis, University of Konstanz*

2006-2007 Clairose Retino. Begging calls and sex allocation. *Undergraduate thesis, University of California, Irvine*

Undergraduate Students

(n= 64; 61% female, 89% from underrepresented groups or 1st generation students)

Undergraduates are key members of my research team. Several have published papers from my lab and have gone onto research careers. >90% are in graduate school or professional careers. Most have received awards or scholarships to perform research in my lab.

I am an advisor for the following students at UNR:

- Simone Jacot (Undergrad lab leader, NURA, UROP, summer program in Ecuador)
- Katherine Yeh (independent study, current undergraduate lab leader)
- Riley McDaniel (PREP scholar, NURA)
- Rhys de Haan (independent study)
- Cayden Martires (independent study)
- Rianna Bunag (independent study)
- Valen Keller (honors thesis)
- Ava Jane Nelson (field assistant)

I was an advisor for the following students at UNR:

- Anna Yotsyue (independent study)
- Trixie de Manito (independent study)
- Joel McMillon (independent study)
- Demetrios Vandarkis (independent study)
- Sophie Fliegler (independent study)
- DidiAlice Coker (McNair scholar, NURA, NSF GRFP winner)
- Shawheen Bayani (NV INBRE awardee, biochem thesis)
- Ryan Phan (NV INBRE awardee, NURA, biochem thesis)
- Olivia Oldham (independent study)
- Piper Johnson (independent study)
- Grayson Deerfield (independent study)
- Karandeep Singh (independent study)
- Grace Aspden (biochem thesis)
- Nadya Chen (PREP scholar, UROP awardee, submitted a paper for her research)
- Kerstyn Countryman (independent study)
- Keenan Downs (undergraduate lab leader)
- Kaylee Sterling (NURA)
- Julia Frediani (current lab manager)
- Priya Ralhi (independent study)
- Nabeel Mir (independent study)
- Murphy Walters (independent study)
- Arumina Chakraborty (senior Honor's thesis, Mead Research Award, submitted a paper for her research)
- Jordyn Becker (senior Honor's thesis)
- Kelsey Kjer (senior Honor's thesis, Moose Award)
- Jewel Lapira (senior Honor's thesis, NURA)
- Mekail Negash (McNair Fellowship, NURA)
- Jacquelynn Tran (senior Honor's thesis, NEXUS fellow)
- Sarah Swanbeck (senior Honor's thesis)

- Rohit Billikanti (independent study)
- Kelsie Ballas (independent study)
- XueYing Zheng (independent study)
- Veronica del Mar (independent study)
- Taylor Rose (independent study)
- JiaYi Cen (independent study)
- Ryan Fung (independent study, research assistant)
- Edgar Lopez (independent study, Westfall Scholar)
- Paul Macaballug (senior Honor's thesis, TriBeta Research Fellowship, NURA, submitted a paper for his research)
- Morgan Ferguson (senior Honor's thesis)
- Kristiana Hodach (independent study, submitted a paper for her research)
- Hao Chen (independent study, submitted a paper for his research)
- Shelly Tang (independent study, submitted a paper for her research)
- Steve Burgos (independent study)
- David Vijay (independent study)
- Kelsey Denning (independent study)
- Dante Staten (independent study)
- Parker Grossman (independent study)
- Daniel Marquez (independent study)
- Evan Standifer (independent study)
- Heather McNair (independent study)
- Alexandra Cushman (independent study)
- Brooke O'Neill (independent study)
- Kyra Moore (independent study)
- Nathan Goncalves (independent study)
- Crystal Munguia (independent study, NURA, published a paper for her research)
- Jeanette Liou (independent study, Westfall scholar)
- Nicole Haddad (senior Honor's thesis, HURA, published a paper for her research)

Senior theses completed

- Nicole Haddad (Honors thesis) "Measuring noise-induced stress in rural and urban Songbirds" May 2017
    - Published in *Biology Letters*
    - Awarded HURA
- Morgan Ferguson (Honors thesis) "The effects of exogenous ACTH on aggression in Mountain Chickadees" May 2018
- Paul Macaballug (Honors thesis) " Imaging stress: developing a non-invasive method to quantify the stress response " May 2019
    - Published in *Stress*
    - Awarded TriBeta and NURA
- Jacquelynn Tran (Honors thesis) " Food availability influencing songbird fitness in urbanized landscapes " May 2020
    - Awarded UROP
    - Awarded Henry Albert Service Award
- Jordyn Becker (Honors thesis) "Differences in parental coordination in urban and rural environments" May 2020

- Mekail Negash (McNair thesis) "Testing endocrine flexibility under different environmental stressors" May 2020
    - Awarded NURA
- Kelsey Kjer (Honors thesis) "Songbird behavior under artificial light at night" May 2020
    - Awarded Moose Award
- Jewel Lapira (Honors thesis) "Effects of acute stress on associative learning and memory in the house sparrow" May 2020
    - Awarded NURA
- Sarah Swanbeck (Honors thesis) "Measuring yolk testosterone in urban and rural house wrens" May 2020
- Arumina Chakraborty (Honors thesis) "Early-gene expression in response to light pollution." Expected May 2022
    - Awarded Mead Undergraduate Research Award
    - Awarded UROP NSF EPSCoR undergraduate research award
- Julia Frediani (Honors thesis) "Resources and parental differences due to urbanization"
- Nabeel Mir (Honors thesis) "Testosterone and maternal effects in urban house wrens."
- Ryan Phan (Biochem thesis) "Effects of ALAN and social context on melatonin"
- Shawheen Bayani (Biochem thesis) "Effects of ALAN and social context on behavior"
- Grace Aspden (Biochem thesis) "Effects of ALAN and social context on circadian genes"

Senior theses in progress

Postdoc supervision:

2023-2024	Dr. Amy Yanagitsuru, currently Adjunct Professor at Wilkes University Dr. Yanagitsuru was a postdoc in the lab interested in microbiome diversity due to urbanization.
2019-2021	Dr. Davide Baldan, currently Assistant Professor at University of Nevada, Reno Dr. Baldan was a Marie Curie seal of excellence fellow at the University of Padova, Italy. At UNR, he helped supervise one graduate student and two undergraduate theses. We have published four papers together.
2016-2018	Dr. Scott Davies, currently Assistant Professor at Quinnipiac University Dr. Davies was a key member of the lab when I first joined UNR, helping to set up the neuroendocrine labs. We have published four papers together.

I emphasize grantsmanship and scholarship in my lab. My students have been active in seeking funds for their own research, netting awards from intramural and extramural sources that total more than $1,000,000. All my current and previous graduate students have published manuscripts from their work.

Summary

Students	**Grants**	**Scholar/fellowships**	**total**
Undergraduates	$25,500	$110,000	$135,500
Graduates	$18,084	$747,706	$765,790
Postdocs		$140,616	$140,616
			$1,041,906

PRESENTATIONS

Invited Seminars:

2025 University of Auburn, Auburn, Alabama, USA

2025 University of the Pacific, Stockton, CA, USA
2023 Pontificia Universidad Javeriana, Bogotá, Colombia
2023 Cal Poly, San Luis Obispo, CA, USA
2022 Univ of Colorado, Denver, CO, USA (declined due to pandemic)
2022 Univ of Massachusetts, Amherst, Amherst, MA, USA
2022 Cal Lutheran, Thousand Oaks, CA, USA
2021 Pennsylvania State University, University Park, PA, USA
2021 Louisiana State University, Baton Rouge, LA, USA
2020 University of California, Davis, CA (talks to two departments), USA
2019 University of California, Berkeley, Berkeley, CA, USA
2018 University of Indiana, Bloomington, IN, USA
2018 Utah State, Logan, UT (declined due to maternity leave), USA.
2018 Texas State University, San Marcos, TX (declined due to maternity leave), USA
2018 Binghamton University, NY (declined due to maternity leave), USA
2015 University of Nevada, Reno, NV, USA
2015 Hamilton College, Clinton, NY, USA
2014 Konrad Lorenz Institute of Ethology, Vienna, Austria
2014 Max Planck Institute of Ornithology, Seewiesen, Germany
2014 Australia National University, Canberra, Australia
2014 University of Debrecen, Hungary
2013 Cornell University, Ithaca, NY, USA
2013 Bucknell University, Lewisburg, PA, USA
2012 Utrecht University, Utrecht, the Netherlands
2012 International Symposium on Avian Endocrinology, Gifu, Japan
2011 Netherlands Institute of Ecology, Wageningen, the Netherlands

Selected Meeting Presentations:

2025 **Ouyang, J.Q.,** The impacts of artificial light at night on avian systems. European Ornithological Union, Bangor, U.K. (invited keynote)

2024 **Ouyang, J.Q.,** The impact of light pollution on avian behavior, genes, and fitness. *Ecological Society of America,* Long Beach, CA, USA (invited speaker)

2024 **Ouyang, J.Q.,** Evolution of endocrine traits in a changing world. *International Symposium of Avian Endocrinology,* Meerut, India (invited speaker; winner of best presentation by young investigator)

2024 **Ouyang. J.Q.,** Physiological impacts of light pollution. American Physiology Summit. Long Beach, CA, USA (invited speaker)

2018 **Ouyang, J.Q.** An integrative framework for urban ecology. *Symposium organizer. Society of Integrative and Comparative Biology,* San Francisco, CA

2017 **Ouyang, J.Q.,** Restless roosts: light pollution and effects. *Society of Integrative and Comparative Biology,* New Orleans, LA, USA

2016 **Ouyang, J.Q.,** Light pollution affects behavior and physiology. *International Society of Behavioral Ecology*. Exeter, UK.

Ouyang, J.Q., Endocrine variation as a mediator of life-history evolution: the relationship between hormones and fitness in a fluctuating environment. Invited Symposium Speaker. *Society of Integrative and Comparative Biology,* Portland, OR, USA.

2015 **Ouyang, J.Q.,** Hormonal regulation of divorce. *Society of Integrative and Comparative Biology,* Palm Beach, FL, USA

2014 **Ouyang, J.Q.,** For better or for worse: hormone similarity and pair bond dynamics. *Netherlands Society of Behavioural Biology.* Soesterberg, the Netherlands.
Ouyang, J.Q., de Jong, M., Visser, M.E., & Spoelstra, K. Movement and activity of free living Great Tits, *Parus major*, under different spectra of artificial light. *International Conference on Artificial Light at Night,* Leicester, UK.
Ouyang, J.Q., Lendvai, A.Z., Dakin, R., Domalik, A.D., Fasanello, V.J., Vassallo, B.G., Haussmann, M.F., Moore, I.T., & Bonier, F. Weathering the storm: parental effort and stress hormones predict brood survival. *Society of Integrative and Comparative Biology,* Austin, TX, USA

2013 **Ouyang, J.Q.,** Individual differences in behavior, physiology, and fitness*. International Conference on Individual Differences.* Groningen, the Netherlands.
Ouyang, J.Q., Hau, M. Stressed males abandon reproduction. *Society of Integrative and Comparative Biology.* San Francisco, USA

2012 **Ouyang, J.Q.,** Sharp, P., Quetting, M., Hau, M. Hormones as mediators of life-history trade-offs. *International Symposium on Avian Endocrinology.* Gifu, Japan

2011 **Ouyang, J.Q.,** Muturi, M., Quetting, M., Hau, M. 2011. Effects of corticosterone on reproductive decisions and parental behavior. *Society of Experimental Biology.* Glasgow, UK
Ouyang, J. Q., Sharp, P. J., Dawson, A., Quetting, M., Hau, M., Hormone levels predict individual differences in reproductive success. *Society of Integrative and Comparative Biology.* Salt Lake City, USA

2007 **Ouyang, J.Q.,** Burley, N.T., Sex recognition of young by adult zebra fiches. *Animal Behavior Society.* Burlington, USA

2005 **Ouyang, J.Q.,** Hunt, G.L. Diets of adult and chick western gulls on Santa Barbara Island. *Southern California Research Conference.* Riverside, USA

EXTERNAL AWARDS

2013	Broadening Participation Grant, Society of Integrative and Comparative Biology ($500)
2011	National Science Foundation Graduate Fellowship travel grant ($1,000)
2011	Society for Experimental Biology Travel Grant ($244)
2011	Society of Integrative and Comparative Biology Travel Award ($500)
2008	International Society for Behavioral Ecology Travel Award ($500)
2007	Joseph H. Stephens Grant for Excellence in Research ($700)
2006	University of California summer research grant for undergraduates ($1,500)
2005	Universities of California Leadership Excellence through Advanced Degrees ($5,000)
2003-2007	Robert C. Byrd Scholarship ($2,000)
2022	Stephen Jenkins Mentorship Award (voted by the graduate students from the Ecology, Evolution, and Conservation Biology program)

SERVICE

Education and mentorship:

2016-present	Nest-Watchers (designed nest box and feeders for Mt. Rose Elementary for students to observe and record bird abundance; monthly talks to grades 4-6), founder and coordinator
2022-present	Collaboration with Sierra Nevada Journeys (a non-profit STEM education program) to set up STEM night station (*Light pollution and behavior)*
2011-2020	Video Tutor (development of biology teaching videos for high school biology and providing these videos to schools with no access to biology text books), Biology Team

2008-2016	Content editor and web design: Animal Behavior Society, Education Committee Content contributor and editor: Animal Behavior Society social media pages
2008-2012	Graduate Student Mentorship Program, founder and board member, Princeton University
2009-2011	Community House graduate adviser, Princeton University
2007-2009	Graduate Student Representative for Ecology and Evolutionary Biology, Princeton University

Director of Ecology, Evolutionary, and Conservation Biology Graduate Program

2025-present	Mentor, advise, and plan for 69 graduate students in the EECB program and >60 faculty Created a webcampus site for masters and PhDs to clearly delineate goals and milestones Fundraised >$20K to support program initiatives Support 14 student-run committees Organize fall and spring colloquium series

Committees

2026	Chair, Zaliapin Mentorship Award committee, College of Science
2026-present	Member, Strategic and Interdisciplinary Directions Committee
2017-present	Graduate awards committee, Ecology Evolution Conservation Biology, University of Nevada, Reno
Spring 2019	LeMay Teaching Award committee for the College of Science
Fall 2018	Search committee, Faculty position in ecology, University of Nevada, Reno
Fall 2017	Search committee, Faculty position in physiology, University of Nevada, Reno
2016, 2022	Faculty retreat organizer, University of Nevada, Reno
2016-present	Undergraduate and graduate research grants and symposium judge, 3-minute thesis judge

Review activities:

Journals: *Acta Physiologica, American Naturalist, Animal Behaviour, Animal Biology, Australian Journal of Zoology, Behavioral Ecology, Behavioral Ecology and Sociobiology, Behavioral Processes, Biology Letters, BMC Ecology, Comparative Biochemical Physiology, Conservation Physiology, Current Zoology, Current Opinions in Insect Science, Ecological Applications, Ecological Indicators, Ecology, ELife, Emu, Environmental Pollution, Environmental Research, Evolution, Evolutionary Applications, Ecotoxicology and Environmental Safety, Frontiers in Ecology and Evolution, Functional Ecology, General and Comparative Endocrinology, Global Change Biology, Hormones and Behavior, Integrative and Comparative Biology, Integrative Zoology, iScience, Journal of Animal Ecology, Journal of Avian Biology, Journal of Applied Ecology, Journal of Comparative Physiology B, Journal of Experimental Biology, Journal of Experimental Zoology, Journal of Evolutionary Biology, Journal of Neuroendocrinology, Mathematical Methods in the Applied Science, Molecular and Cellular Endocrinology, Molecular Ecology, Nature Cities, Nature Ecology and Evolution, Nature Scientific Reports, Oecologia, Ornithological Applications, Oxidative Medicine and Cellular Longevity, Philosophical Transactions of the Royal Society B, Physiological and Biochemical Zoology, Pigment Cell Melanoma Research, Proceedings of the Royal Society B, Rangeland Ecology & Management, Wilson Journal of Ornithology*

Grant agencies: Austrian Science Fund (FWF), French National Research Agency, Fulbright Association, Israel Science Foundation, National Science Centre, Poland; National Science Foundation USA; Research Grants Council of Hong Kong, US-ISRAEL BARD; NSF panels: 2023 NSF IOS IEP panelist

Editorial Boards:
2025- present: *Integrative and Comparative Biology (associate editor)*
2018- present: *Ecology and Evolution (associate editor)*

PROFESSIONAL MEMBERSHIPS

Society of Integrative and Comparative Biology (2010-present)
Animal Behavior Society (2006-present)

LANGUAGE SKILLS

English: native fluency
Mandarin Chinese: native fluency
French: business fluency
Dutch: elementary fluency
German: elementary fluency
Italian: conversational fluency

COLLABORATORS

Epigenetics and glucocorticoid responses (NSF OIA-1738594)
Bridgett von Holdt (Princeton University)
Kees van Oers (Netherlands Institute of Ecology)
Koen Verhoeven (Netherlands Institute of Ecology)
The role of glucocorticoids in mediating life history tradeoffs (NSF IOS-1145625)
Frances Bonier (Queen's University, Canada)
Mark Haussmann (Bucknell University, USA)
Ádám Lendvai (Virginia Tech, USA)
Ignacio Moore (Virginia Tech, USA)
Insulin regulation and life-history evolution (OTKA funded)
Ádám Lendvai (University of Debrecen, Hungary)
The effect of artificial light on stress physiology, neurobiology, and circadian rhythms (NIH)
Yong Zhang (University of Nevada, Reno)
Safer cities: stress physiology and reproduction in urbanized environments
Yue Hua Sun (Chinese Academy of Sciences, China)
Shu Ping Zhang (Mingzu University, China)