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## Curriculum Vitae

# Colin Richard Morrison

### Education

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- 2008 – 2012      **University of Nevada, Reno**                      Reno, Nevada  
*Bachelor of Science* – Biology,    *Minor*: Political Science - Foreign Affairs
- 2017 – Present    **The University of Texas at Austin**                      Austin, Texas  
*PhD Student* – Department of Integrative Biology - Program in Ecology, Evolution and Behavior  
*Major Advisor*: Dr. Lawrence Gilbert

### Research Experience

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**Laboratory Technician, Department of Biology, University of Nevada, Reno**

- Chemical Ecology, Tropical Entomology & Biodiversity Laboratory. Supervisor: Dr. Lee Dyer
- N.S.F./Earthwatch/D.O.D. funded research on ecology and evolution of plant insect chemical ecology, biodiversity, and tropical entomology.
  - Curation of the laboratory research Lepidoptera and parasitoid collections.
  - March, 2011 – June, 2015.

**Laboratory Technician, Department of Biology, University of Nevada, Reno**

- Marine Ecosystems Analysis Laboratory. Supervisor: Dr. Jeffrey Baguley
- B.P./N.O.A.A. funded research on effects of Deepwater Horizon Oil Spill on benthic community of the Gulf of Mexico.
  - E.P.A. funded research on ecotoxicology of anthropogenic chemical flow into marine ecosystems.
  - Trout Unlimited funded research of benthic infauna and invasive species ecology of Lake Tahoe.
  - US Fish and Wildlife Service funded research on benthic community ecology of Gulf of Alaska.
  - January, 2011 – June, 2015.

**Guest Student, Department of Geology and Geophysics, Woods Hole Oceanographic Institution**

- Bernhard Laboratory and Edgcomb Laboratory. Advisors: Dr. Joan Bernhard, Dr. Virginia Edgcomb
- N.S.F. funded research on biodiversity of deep hypersaline anoxic brines (DHABs).
  - Science Party, R/V *Atlantis* Research Cruise AT 18-14, 11/25/11 – 12/8/2012, Piraeus, Greece to Piraeus, Greece.
  - May, 2012 – August, 2012, DHAB data analysis at Woods Hole Oceanographic Institution.

**Forestry Technician, Department of Biology, University of Nevada, Reno**

- Whittel Forest and Wildlife Area - Little Valley Field Station (UNR). Supervisor: Dr. Stephen Vander Wall
- Conservation, forestry and maintenance of Whittel Forest and Wildlife Area/Little Valley Field Station (Carson Range, NV).
  - June 2011 – June, 2015.

**Curatorial Assistant, Department of Biology, University of Nevada, Reno**

- UNR, Museum of Natural History. Supervisors: Dr. Elizabeth Leger & Dr. Chris Feldman
- Curation of museum insect collection, collections database management.
  - Exhibitory setup and publish outreach.
  - November 2013 – December, 2015.

### **Short-Term Fellow, Smithsonian Tropical Research Institute, Panama City**

Gamboa, Panama. Advisor: Dr. Donald Windsor

- Herbivore diet breadth, host plant defensive chemistry and natural enemies interactions.
- Preference and performance of the specialist herbivore: *Chelymorpha alternans*
- Sexual selective patterns amongst disparate phenotypes and genotypes of *Chelymorpha alternans*.
- June, 2015 – December, 2015

### **Predoctoral Fellow, Smithsonian Tropical Research Institute, Panama City**

Gamboa, Panama. Advisor: Dr. William Owen McMillan

- Chemical ecology of mate choice in *Heliconius* butterflies.
- *Heliconius* phenotypic evolution following CRISPR/Cas9 genome editing procedures.
- Herbivore diet breadth, host plant defensive chemistry and natural enemies interactions.
- Preference, performance, chemistry, and trophic natural enemy interactions of specialist herbivores.
- December, 2015 – November, 2016.

## Teaching Experience

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### **Teaching Assistant** – University of Nevada, Reno

- Entomology (Biology 437), Spring 2013 & 2014
  - Professors: Dr. Lee Dyer

### **Guest Lecturer** – Smithsonian Tropical Research Institute

- Introductory Tropical Field Biology (aka Gigante Course), Fall 2015
  - Professors: Sabrina Amador & James Coronado Riviera
- Yale Tropical Biology Course, Entomology Section, Spring 2016
  - Professor: Eliza Comita

### **Teaching Assistant** – University of Nevada, Las Vegas

- Aikido (PEX 115), Fall 2016 & Spring 2017
  - Professor: Don Bannai

### **Teaching Assistant** – The University of Texas at Austin

- Introduction to Cell & Molecular Biology (BIO 311C), Fall 2017
  - Professor: Dr. Jennifer Frtitz
- Freshman Research Initiative - Biodiversity (BIO 206L/NSC 109), Spring 2018
  - Professor: Dr. Susan Cameron Devitt

### **Course Facilitator** – The University of Texas at Austin

- Fundamentals of Ecology (BIO 390E), Fall 2018
  - Co-facilitated this course with Nicholas Ivers & Whitney Behr under supervision of Dr. Tim Keitt

## Talks

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**Smithsonian Tropical Research Institute** – Behavioral Discussion Group October 5<sup>th</sup>, 2015

**Smithsonian Tropical Research Institute** – Fellows Symposium February 19<sup>th</sup>, 2016

**UT Ecolunch Seminar Series** – November 2<sup>nd</sup>, 2017

**Entomological Society of America** – 10 Minute Paper Graduate Student Competition November 6<sup>th</sup>, 2017

**UT Integrative Biology** – Graduate Research Symposium April 7<sup>th</sup>, 2018

**UT Ecolunch Seminar Series** – October 31<sup>st</sup>, 2018

**UT Science Under the Stars Public Lecture Series** – “Chemistry is the Language of Life” November 8<sup>th</sup>, 2018

**Entomological Society of America** – 10 Minute Paper Graduate Student Competition November 11<sup>th</sup>, 2018

## Peer Review and Professional Service

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**Annals of the Entomological Society** (2014 – present)

**National Geographic Society** (2016 – present)

**Environmental Entomology** (2018 – present)

**Symposium Moderator, Annual Fellows Symposium** – Smithsonian Tropical Research Institute (February 2016)

**Symposium Moderator, 10 TMP Pollinator Health** – Entomology Joint Annual Meeting (November 2018)

## Fellowship, Scholarships and Awards Received

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- Eagle Scout Award**, Boy Scouts of America, Las Vegas, NV USA  
- 2008
- Millennium Scholar**, University of Nevada, Reno, NV USA  
- 2008 to 2012 (\$7680)
- Pack Pride Scholarship**, University of Nevada, Reno, NV, USA  
- 2008 to 2010 (\$3,000)
- STRI Short-Term Fellowship**, Smithsonian Tropical Research Institute, Panama City, Panama  
- June 2015 – November 2015 (\$4800)
- STRI Pre-doctoral Fellowship**, Smithsonian Tropical Research Institute, Panama City, Panama  
- December 2015 – November 2017 (\$22,000)
- Linda Escobar Award**, UT Austin, Austin, TX, USA  
- February 2017 (\$1500)
- Texas Ecolab Research Grant**, Braun & Gresham Associates, Dripping Springs, TX, USA  
- Spring 2018 – Fall 2018 (\$11,000)  
- Spring 2019 – Fall 2019 (\$8,975)
- NSF Graduate Research Fellowship Program**, National Science Foundation  
- Spring 2018 (Honorable Mention)
- UT Summer Research Fellowship**, The University of Texas at Austin, Austin, TX, USA  
- Summer 2018 (\$6600)
- UT Departmental Recruitment Fellowship**, The University of Texas at Austin, Austin, TX, USA  
- Fall 2018 – Summer 2019 (\$27,000)
- NSF LSAMP – REU Mentor Program**, National Science Foundation - Organization for Tropical Studies, Costa Rica  
- Summer 2019 (travel to Costa Rica, La Selva BS room/board paid)
- Jean Andrews Intern Summer Fellowship** – The University of Texas at Austin, Austin, TX, USA  
- Summer 2020 (\$6600)

## Public Service and Outreach

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- Earthwatch Institute** – “Climate Change and Caterpillars”: Ecuador, Arizona USA, California USA, Florida, USA, Costa Rica; supervising citizen scientist involvement in research projects, data and collection in field and laboratory settings.
- Boy Scouts of America** – Eagle Scouts: numerous public service projects and community progress events.
- STEM Night**, Veterans Elementary School – K-12 science outreach events.
- Boys and Girls Club** - College of Science outreach events.
- UNR, Museum of Natural History** – community science/natural history outreach events.
- Make a Wish Foundation –Smithsonian Tropical Research Institute** sponsored experiential learning for those children with debilitating ailments that intend to embark upon careers as entomologists.
- Gamboia Discovery School** – Why are insects ubiquitous and important?
- CHISPA - Smithsonian Tropical Research Institute** sponsored experiential learning for at-risk children from Panama.
- UT Science Under the Stars** – Public outreach series established to expose local Austinites to ongoing graduate research.

## Languages

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- 1st Language – **English**
- 2nd language – **Spanish**

## Publications

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- Merrill R. M., **Morrison C. R.**, Negazzi S., Crisp R., & McMillan W. O. (*in prep*). Experimental manipulation of *Heliconius* warning patterns reduces harassment of previously mated females.
- Morrison C. R.**, Aubert C., & Windsor D. M. (2019). Variation in Host Plant Usage and Diet Breadth Predict Sibling Preference and Performance in the Neotropical Tortoise Beetle *Chelymorphism alternans* (Coleoptera: Chrysomelidae: Cassidinae), *Environmental Entomology*. nvz005, <https://doi.org/10.1093/ee/nvy194>.

- Morrison C. R.** (2018). Predation of top predators: cane toad consumption of bullet ants in a Panamanian lowland wet forest. *The Journal of Tropical Ecology*. 0, 1-5, <https://doi.org/10.1017/S0266467418000342>.
- Morrison C. R., & Windsor D. M.** (2017). The life history of the neotropical Tortoise Beetles *Chelymorpha alternans* from the Republic of Panama. *Annals of the Entomological Society of America*, 111(1), 31-41. <https://doi.org/10.1093/aesa/sax075>.
- Darragh K., Vanjari S., Mann F., Gonzalez M. R., **Morrison C. R.**, Salazar C., Pardo-Diaz C., Merrill R. M., McMillan W. O., Schulz S., & Jiggins C. D. (2017). Male sex pheromone components in Heliconius butterflies released by the androconia affect female choice. *PeerJ*, e3953. <https://doi.org/10.7717/peerj.3953>.
- Glassmire A.E., Jeffrey C.S., Forister M.L., Parchman T., Nice C.C., Jahner J.P., Wilson J., Walla T., Robinson L., Smilanich A.M., **Morrison C.R.**, Simbaña W., Salgaje L.A., Dodson C., Miller J., Leonard M.D., & Dyer L.A. (2016) Intraspecific phytochemical variation drives population and community structure for specialist caterpillar. *New Phytologist*, 212: 208-219. <https://doi.org/10.1111/nph.14038>.
- *Special commentary from the editor:* Kessler A. (2016) The geographic mosaic of plant chemistry and its effects on community and population genetic diversity. *New Phytologist*, 212:8-10. <https://doi.org/10.1111/nph.14136>.
- Bernhard J.M., **Morrison C.R.**, Pape E., Beaudoin D.J., Todaro A., Pachiadaki M.G., Kormas K.A., & Edgcomb V.P. (2015) Metazoans of redoxcline sediments in Mediterranean deep-sea hypersaline anoxic basins. *BMC Biology*, 13: 105. <https://doi.org/10.1186/s12915-015-0213-6>.
- Bernhard J.M., Kormas K., Pachiadaki M.G., Rocke E., Beaudoin D.J., **Morrison C.**, Visscher P.T., Cobban A., Starczak V.R., & Edgcomb V.P. (2014) Benthic protists and fungi of Mediterranean deep hypersaline anoxic basin redoxcline sediments. *Extreme Microbiology*, 5: 605. <https://doi.org/10.3389/fmicb.2014.00605>.
- Baguley J.G., Montagna P.A., Cooksey C., Hyland J.L., Bang H.W., Kamikawa A., Bennetts P., **Morrison C.**, Saiyo G., Parsons E., Herdener M., & Ricci M. (2014) Community response of deep-sea soft-sediment metazoan meiofauna to the Deepwater Horizon blow out and oil spill. *Marine Ecological Progress Series*, 528: 127-140. <https://doi.org/10.3354/meps11290>.

## Professional Memberships

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Entomological Society of America (current)

American Society of Naturalists (current)

Lorquin Entomological Society (current)