

PERSONAL DETAILS

Address: University of Mississippi, Dept. of Biology, University, MS 38677
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EDUCATION

Ph.D., Biology

Jan 2014 - May 2020

University of Mississippi

The geographic and ecological context of the evolutionary history of subterranean termites: distributional shifts and rapid adaptation to novel environments (advisor: Ryan Garrick)

Ph.D. (voluntary withdrawal), Natural Resources

Aug 2012 - Dec 2013

Cornell University

Spatio-temporal gene-environment associations in the eastern oyster

B.A., Environmental Studies

Sep 2002 - May 2007

Yale University

Galapagos giant tortoise conservation on the island of Santa Cruz: morphological and genetic distinctiveness of a newly discovered taxon (advisor: Adalgisa Caccone)

RESEARCH/TEACHING EXPERIENCE

Graduate Teaching Assistant

Jan 2014 - May 2020

University of Mississippi, Department of Biology

Inquiry into Life Lab I: Human Biology (Spring 2014 - Spring 2015); Inquiry into Life Lab II: Diversity and the Environment (Spring 2014); Biological Sciences I Lab (Fall 2014); Genetics Lab (Fall 2015 - Summer 2019); Population Genetics Computer Lab (Spring 2018); Cell and Molecular Biology Lab (Spring 2019). **Guest lectures:** Evolution: "Genetic Drift and the Founder Effect" (30 Oct 2019); Genetics: "Population Genetics" (8 Mar 2018; 5 Mar 2019); Integrated Science: "Classical and Modern Genetics" (13 Apr 2018)

Research Assistant

Jun 2007 - Aug 2012

Yale University, Department of Ecology and Evolutionary Biology

Galapagos giant tortoise conservation research: phylogeography, speciation, hybridization; disease vector (tsetse) research: spatio-temporal patterns of genetic variation and host-parasite interactions

Research Assistant

Jun 2007 - Aug 2012

Yale University, DNA Analysis Facility on Science Hill

Training of staff/students in molecular techniques and data analysis; operation and maintenance of sequencing equipment and software

OTHER WORK EXPERIENCE

Interpreter/Translator

Jul 1999 - Aug 2002

United Nations Mission in Kosovo: Division of Public Information

Translated press releases and other written communication; interpreted at high-profile meetings, press conferences and political events. Languages: primarily Albanian, English, and Serbian; on a few occasions, German

SKILLS

Disciplines: Ecological/Evolutionary/Landscape/Population Genetics, Bioinformatics, Phylogeography, Spatial/Multivariate Statistics

Languages: fluent: Albanian, English, German, Serbian; proficient: French

Programming: high-to-low usage: R, Python, L^AT_EX, Julia, Perl, Matlab

GIS: R GIS packages, QGIS, Grass GIS, Saga GIS, ArcGIS

REVIEWS

Bulletin of Entomological Research (3); Molecular Ecology (2); Animal Microbiome (1); Ecology and Evolution (1); Infection, Genetics and Evolution (1)

PRESENTATIONS

Talks:

Invited:

LSU Museum of Natural Science Seminar Series (17 Mar 2017, Baton Rouge LA)

Conference:

North American Regional Assoc. of the Intl. Assoc. for Landscape Ecology:

Landscape Genetics Symposium (7-11 Apr 2019, Fort Collins CO)

Ecological Society of America: Statistical Ecol. Section (5-10 Aug 2018, New Orleans LA)

Entomological Society of America (4-8 Nov 2017, Denver CO)

American Society of Tropical Medicine and Hygiene (3-7 Nov 2010, Atlanta GA)

Posters: *number, if more than one

Entomological Society of America (4-8 Nov 2017, Denver CO)

Evolution (17-21 Jun 2016, Austin TX); Evolution (20-24 Jun 2014, Raleigh NC)

American Society of Tropical Medicine and Hygiene (4-8 Dec 2011, Philadelphia PA) *3

American Society of Tropical Medicine and Hygiene (3-7 Nov 2010, Atlanta GA)

American Society of Tropical Medicine and Hygiene (7-11 Dec 2008, New Orleans LA)

PUBLICATIONS

= equal contribution

28. **Chaz Hyseni**, Ryan C Garrick: The role of glacial-interglacial climate change in shaping the genetic structure of eastern subterranean termites in the southern Appalachian Mountains, USA. **Ecology and Evolution**, 2019.

27. **Chaz Hyseni**, Ryan C Garrick: Ecological drivers of species distributions and niche overlap for three subterranean termite species in the southern Appalachian Mountains, USA. **Insects**, 2019.
26. Ryan C Garrick, Dana K Reppel, Jeremy T Morgan, Stephanie Burgess, **Chaz Hyseni**, Reese J Worthington, Michael D Ulyshen: Trophic interactions among dead-wood-dependent forest arthropods in the southern Appalachian Mountains, USA. **Food Webs**, 2019.
25. Ryan C Garrick, John D Banusiewicz, Stephanie Burgess, **Chaz Hyseni**, Rebecca E Symula: Extending phylogeography to account for lineage fusion. **Journal of Biogeography**, 2019.
24. Daniela I Schneider, Norah Saarman, Maria G Onyango, **Chaz Hyseni**, Robert Opiro, Richard Echodu, Michelle O'Neill, Danielle Bloch, Aurelien Vigneron, TJ Johnson, Kirstin Dion, Brian L Weiss, Elizabeth Opiyo, Adalgisa Caccone, Serap Aksoy: Spatio-temporal distribution of Spiroplasma infections in the tsetse fly (*Glossina fuscipes fuscipes*) in northern Uganda. **PLoS Neglected Tropical Diseases**, 2019.
23. Norah P Saarman, Robert Opiro, **Chaz Hyseni**, Richard Echodu, Elizabeth A Opiyo, Kirstin Dion, Thomas Johnson, Serap Aksoy, Adalgisa Caccone: The population genomics of multiple tsetse fly (*Glossina fuscipes fuscipes*) admixture zones in Uganda. **Molecular Ecology**, 2019.
22. Norah Saarman, Mary Burak, Robert Opiro, **Chaz Hyseni**, Richard Echodu, Kirstin Dion, Elizabeth A Opiyo, Augustine W Dunn, Giuseppe Amatulli, Serap Aksoy, Adalgisa Caccone: A spatial genetics approach to inform vector control of tsetse flies (*Glossina fuscipes fuscipes*) in Northern Uganda. **Ecology and Evolution**, 2018.
21. Agapitus B Kato, **Chaz Hyseni**, Loyce M Okedi, Johnson O Ouma, Serap Aksoy, Adalgisa Caccone, Charles Masembe: Mitochondrial DNA sequence divergence and diversity of *Glossina fuscipes fuscipes* in the Lake Victoria basin of Uganda: implications for control. **Parasites and Vectors**, 2015.
20. Ryan C Garrick, Isabel A S Bonatelli, **Chaz Hyseni**, Ariadna Morales, Tara A Pelletier, Manolo F Perez, Edwin Rice, Jordan D Satler, Rebecca E Symula, Maria Tereza C Thome, Bryan C Carstens: The evolution of phylogeographic data sets. **Molecular Ecology**, 2015.
19. Ryan C Garrick, Benjamin D Collins, Rachel N Yi, Rodney J Dyer, **Chaz Hyseni**: Identification of eastern United States *Reticulitermes* termite species via PCR-RFLP, assessed using training and test data. **Insects**, 2015.
18. Ryan C Garrick, Brittney Kajdacs, Michael A Russello, Edgar Benavides, **Chaz Hyseni**, James P Gibbs, Washington Tapia, Adalgisa Caccone: Naturally rare versus newly rare: demographic inferences on two timescales inform conservation of Galapagos giant tortoises. **Ecology and Evolution**, 2015.
17. Ryan C Garrick, Edgar Benavides, Michael A Russello, **Chaz Hyseni**, Danielle L Edwards, James P Gibbs, Washington Tapia, Claudio Ciofi, Adalgisa Caccone: Lineage fusion in Galapagos giant tortoises. **Molecular Ecology**, 2014.
16. Danielle L Edwards, Edgar Benavides, Ryan C Garrick, James P Gibbs, Michael A Russello, Kirstin B Dion, **Chaz Hyseni**, Joseph P Flanagan, Washington Tapia, Adalgisa Caccone: The genetic legacy of Lonesome George survives: giant tortoises with Pinta Island ancestry identified in Galapagos. **Biological Conservation**, 2013.

15. Sarah Federman, **Chaz Hyseni**, Wendy Clement, Michael P Oatham, Adalgisa Caccone: Habitat fragmentation and the genetic structure of the Amazonian palm *Mauritia flexuosa* L.f. (Arecaceae) on the island of Trinidad. **Conservation Genetics**, 2013.
14. Brittney Kajdacs, Federico Costa, **Chaz Hyseni**, Fleur Porter, Julia Brown, Gorete Rodrigues, Helena Farias, Mitermayer G Reis, James E Childs, Albert I Ko, Adalgisa Caccone: Urban population genetics of slum-dwelling rats (*Rattus norvegicus*) in Salvador, Brazil. **Molecular Ecology**, 2013.
13. Mark Sistrom, Richard Echodu, **Chaz Hyseni**, John Enyaru, Serap Aksoy, Adalgisa Caccone: Taking advantage of genomic data to develop reliable microsatellite loci in *Trypanosoma brucei*. **Molecular Ecology Resources**, 2013.
12. Richard Echodu, Mark Sistrom, **Chaz Hyseni**, John Enyaru, Loyce Okedi, Serap Aksoy, Adalgisa Caccone: Genetically distinct *Glossina fuscipes fuscipes* populations in the lake Kyoga region of Uganda and its relevance for human African trypanosomiasis. **BioMed Research International**, 2013.
11. **Chaz Hyseni**, Agapitus B Kato, Loyce M Okedi, Charles Masembe, Johnson O Ouma, Serap Aksoy, Adalgisa Caccone: The population structure of *Glossina fuscipes fuscipes* in the Lake Victoria basin in Uganda: implications for vector control. **Parasites and Vectors**, 2012.
10. Uzma Alam, **Chaz Hyseni**, Rebecca E Symula, Corey Brelsfoard, Yineng Wu, Oleg Kruglov, Jingwen Wang, Richard Echodu, Victor Alioni, Loyce M Okedi, Adalgisa Caccone, Serap Aksoy: Implications of microfauna-host interactions for trypanosome transmission dynamics in *Glossina fuscipes fuscipes* in Uganda. **Applied and Environmental Microbiology**, 2012.
9. Sarah Federman, **Chaz Hyseni**, Wendy Clement, Adalgisa Caccone: Isolation of 13 novel highly polymorphic microsatellite loci for the Amazonian Palm *Mauritia flexuosa* L.f. (Arecaceae). **Conservation Genetics Resources**, 2012.
8. Ryan C Garrick, Edgar Benavides, Michael A Russello, James P Gibbs, Nikos Poulakakis, Kirstin B Dion, **Chaz Hyseni**, Brittney Kajdacs, Lady Marquez, Sarah Bahan, Claudio Ciofi, Washington Tapia, Adalgisa Caccone: Genetic rediscovery of an 'extinct' Galapagos giant tortoise species. **Current Biology**, 2012.
7. **Chaz Hyseni**, Jon S Beadell, Zaneli Gomez Ocampo, Johnson O Ouma, Loyce M Okedi, Michael W Gaunt, Adalgisa Caccone: The *G.m. morsitans* (Diptera: Glossinidae) genome as a source of microsatellite markers for other tsetse fly (*Glossina*) species. **Molecular Ecology Resources**, 2011.
6. Richard Echodu, Jon S Beadell, Loyce M Okedi, **Chaz Hyseni**, Serap Aksoy, Adalgisa Caccone: Temporal stability of *Glossina fuscipes fuscipes* populations in Uganda. **Parasites and Vectors**, 2011.
5. Johnson O Ouma, Jon S Beadell, **Chaz Hyseni**, Loyce M Okedi, Elliot S Krafur, Serap Aksoy, Adalgisa Caccone: Genetic diversity and population structure of *Glossina pallidipes* in Uganda and western Kenya. **Parasites and Vectors**, 2011.
4. Jon S Beadell, **Chaz Hyseni**, Patrick P Abila, Rogers Azabo, John C K Enyaru, Johnson O Ouma, Yassir O Mohammed, Loyce M Okedi, Serap Aksoy, Adalgisa Caccone: Phylogeography and population structure of *Glossina fuscipes fuscipes* in Uganda: implications for control of tsetse. **PLoS Neglected Tropical Diseases**, 2010.

