

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 (*Crassostrea virginica*)

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)

WORK 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:** 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

REFERENCES

Ryan Garrick *University of Mississippi*

Associate Professor: Department of Biology

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Rebecca Symula *University of Mississippi*

Instructional Associate Professor: Department of Biology

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Adalgisa Caccone *Yale University*

Lecturer and Senior Research Scientist:

Ecol. and Evol. Biol., Epidemiology, Forestry and Env'tl. Studies

Director:

DNA Analysis Facility on Science Hill

YIBS Center for Genetic Analysis of Biodiversity

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Jeffrey Powell *Yale University*

Professor: Ecol. and Evol. Biol., Epidemiology, Forestry and Env'tl. Studies

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Serap Aksoy *Yale University*

Professor: Epidemiology

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Email: serap.aksoy@yale.edu

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 (1ST/2ND/3RD AUTHOR)

= equal contribution

18. **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.
17. **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.
16. 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.
15. 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.
14. 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.
13. 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.

12. 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.
11. 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.
10. 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.
9. 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
8. 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.
7. **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.
6. **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.
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.
3. Ylenia Chiari=, **Chaz Hyseni**=, Tom H Fritts, Scott Glaberman, Cruz Marquez, James P Gibbs, Julien Claude, Adalgisa Caccone: *Morphometrics parallel genetics in a newly discovered and endangered taxon of Galapagos tortoise*. **PLoS ONE**, 2009.
2. Patricia L R Brennan, **Chaz Hyseni**: *Development of microsatellite markers for parentage analysis in the great tinamou (Tinamus major)*. **Molecular Ecology Resources**, 2008.
1. Michael A Russello, **Chaz Hyseni**, James P Gibbs, S Cruz, Cruz Marquez, Washington Tapia, P Velensky, Jeffrey R Powell, Adalgisa Caccone: *Lineage identification of Galapagos tortoises in captivity worldwide*. **Animal Conservation**, 2007.

PUBLICATIONS (OTHERS)

10. 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.
9. 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.
8. Ryan C Garrick, John D Banusiewicz, Stephanie Burgess, **Chaz Hyseni**, Rebecca E Symula: *Extending phylogeography to account for lineage fusion*. **Journal of Biogeography**, 2019.
7. 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.
6. 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.
5. 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.
4. 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.
3. 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.
2. 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.
1. 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.