

TREVOR S. FRISTOE

Curriculum Vitae

POSTDOCTORAL RESEARCH ASSOCIATE
DEPARTMENT OF BIOLOGY
UNIVERSITY OF KONSTANZ
KONSTANZ, GERMANY

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PROFESSIONAL EXPERIENCE

- Oct 2018 University of Konstanz, Konstanz, Germany
Adviser: Mark van Kleunen
Postdoctoral Researcher
- 2015 - 2018 Washington University, St. Louis, Missouri
Adviser: Carlos A. Botero
Postdoctoral Researcher

EDUCATION

- 2009 - 2015 University of New Mexico, Albuquerque, New Mexico
Adviser: James H. Brown
Doctor of Philosophy in Biology, with distinction
- 2004 - 2008 University of Oregon, Eugene, Oregon
Bachelor of Science in Biology, *Cum Laude*

TEACHING AND MENTORING EXPERIENCE

- 2015 - present **Postdoc Mentor**, Washington University, St. Louis, Missouri
Involved in mentoring two undergraduate students, helping to develop project ideas and training in research methods.
- 2011 - 2015 **Graduate Student Mentor**, University of New Mexico, Albuquerque, New Mexico
Through UNM Undergraduate Opportunities Program, helped undergraduate scholar develop and carry out honors thesis research project (resulting in publication). Trained mentee in bird survey techniques at field sites in Alaska.
- 2009 - 2015 **Teaching Assistant**, University of New Mexico, Albuquerque, New Mexico
Independently taught labs of 18-25 students for the introductory classes in ecology, evolution, physiology, and genetics as well as advanced classes on the Principles of Ecology, Macroecology, and the Biology of Toxins.

PUBLICATIONS

Burger, Joseph R and **Trevor S Fristoe**. 2018. Hunter-gatherer Populations Inform Modern Ecology. *Proceedings of the National Academy of Sciences*, doi: 201721726

Fristoe, Trevor S, Andrew N Iwaniuk, and Carlos A Botero. 2017. Big brains stabilize populations and facilitate the colonization of variable climates in birds. *Nature Ecology and Evolution*, 1 (11), 1706.

Fois, Mauro, Alba Cuena-Lombraña, **Trevor S Fristoe**, Giuseppe Fenu, and Gianluigi Bacchetta. 2016. Reconsidering alternative transportation systems to reach academic conferences and to convey an example to reduce greenhouse gas emissions. *History and Philosophy of the Life Sciences*, 3 (4), 25.

Murthy, Adeline C, **Trevor S Fristoe**, and Joseph R Burger. (2016) Homogenizing effects of cities on North American winter bird diversity. *Ecosphere*, 7 (1), e01216.

Fristoe, Trevor S, Joseph R Burger, Meghan A Balk, Imran Khaliq, Christian Hof, and James H Brown. 2015. Metabolic heat production and thermal conductance are mass-independent adaptations to thermal environment in birds and mammals. *Proceedings of the National Academy of Sciences*, 112 (52), 15934-15939.

Hammond, Sean T, James H Brown, Joseph R Burger, **Trevor S Fristoe**, Norman Mercado-Silva, Jeffrey C Nekola, and Jordan G Okie, and Tatiana Paz. 2015. Food Spoilage, Storage and Transport: Implications for a Sustainable Future. *BioScience*, 65(8), 758-768.

Fristoe, Trevor S. 2014. Energy use by migrants and residents in North American breeding bird communities. *Global Ecology and Biogeography*, 24: 406–415.

Brown, James H, Joseph R Burger, William R Burnside, Michael Chang, Ana D Davidson, **Trevor S Fristoe**, Marcus J Hamilton, Sean T Hammond, Astrid Kodric-Brown, Norman Mercado-Silva, Jeffrey C Nekola, and Jordan G Okie. 2014. Macroecology meets macroeconomics: Resource scarcity and global sustainability. *Ecological Engineering*, 65: 24-32.

Nekola, Jeffrey C, James H Brown, Craig D Allen, Joseph R Burger, William R Burnside, Ana D Davidson, **Trevor S Fristoe**, Marcus J Hamilton, Sean T Hammond, Norman Mercado-Silva, and Jordan G Okie. 2013. The Malthusian-Darwinian Dynamic and the Trajectory of Civilization. *Trends in Ecology and Evolution*, 28(3), 127-130.

Burger, Joseph R, James H Brown, Craig D Allen, William R Burnside, Ana D Davidson, **Trevor S Fristoe**, Marcus J Hamilton, Norman Mercado-Silva, Jeffrey C Nekola, Jordan G Okie, and Wenyun Zuo. 2012. The Macroecology of Sustainability. *PLOS Bio* 10(6), e1001345

MANUSCRIPTS SUBMITTED AND IN FINAL PREPARATION

Fristoe, Trevor S and Carlos A Botero. Alternative ecological strategies lead to brain size bimodality in variable habitats. *Proceedings of the National Academy of Sciences*, Submitted

Fristoe, Trevor S, Bruno Vilela, James H Brown, and Carlos A Botero. Abundance tends to peak at the center of species distributions. In final preparation for submission to *Global Ecology and Biogeography*

Fristoe, Trevor S, and James H Brown. The contribution of migrants to diversity and energy use in North American winter bird communities. In final preparation for submission to *Ecography*

OTHER PUBLICATIONS AND PRESENTATIONS

Book Reviews

Sean T Hammond, James H Brown, Joseph R Burger, Michael R Chang, Tatiana P Flanagan, **Trevor S Fristoe**, Astrid Kodric-Brown, and Jordan G Okie. 2013. Bankrupting nature for the (temporary) wealth of nations. Book review in *Trends in Ecology and Evolution*, 28(10), 576-577.

Oral Presentations

Fristoe, Trevor S., Iwankiuk, A.N., and Botero, C.A. Big brains stabilize populations and facilitate the colonization of variable climates in birds. Invited talk at the Saint Louis Ecology Evolution and Conservation Retreat, St. Louis, MO (2017). Oral presentation at the Meeting of the International Biogeography Society, Tucson, AZ (2017). Oral presentation at Evolution Meeting, Austin, TX (2016).

Fristoe, Trevor S., Murthy, A.C., and Burger, J.R. Homogenizing effects of cities on North American winter bird Diversity. 2014. Oral presentation at the Meeting of the American Ornithologists' Union, Estes Park, CO.

Fristoe, Trevor S. Energy use by migrants in North American winter bird communities. 2014. Oral presentation for UNM Biology Brown Bag series.

Fristoe, Trevor S. Energy use by migrants in North American breeding bird communities. 2011. Oral presentation for UNM biology department Brown Bag series.

Poster Presentations

Fristoe, Trevor S., Botero, CA. Brains, Brawn, or Babies: Divergent trait syndromes enable persistence in Earth's most variable environments. 2018. Poster presentation at the Gordon Conference and Seminar on the Metabolic Basis of Ecology, Biddeford, ME.

Fristoe, Trevor S. The contribution of migrants to diversity and energy use in North American bird communities across the seasons. 2015. Poster presentation at the Meeting of the International Biogeography Society, Bayreuth, Germany.

Fristoe, Trevor S., Burger, JR., and Balk, MA. BMR and conductance are body size-independent adaptations to thermal environment in mammals. 2014. Poster presentation at Gordon Conference and Seminar on the Metabolic Basis of Ecology, Biddeford, ME.

Fristoe, Trevor S. Energy use in North American winter bird communities. 2013. Poster

presentation at the meeting of the American Ornithologists' Union, Chicago, IL.

Fristoe, Trevor S. Energy use by migrants in North American breeding bird communities. 2012. Poster presentation the Gordon Conference and Seminar on the Metabolic Basis of Ecology, Biddeford, ME.

Fristoe, Trevor S. Energy use by migrants in North American breeding bird communities. 2012. Poster presentation at the Meeting of the American Ornithologists' Union, Vancouver, BC.

GRANTS AND AWARDS

2014	Program in Interdisciplinary Biological and Biomedical Sciences Student Enrichment Opportunity (\$1000)
2012, 2013	UNM Bealmer Graduate Scholarship (\$500)
2012	UNM Research Project and Travel Grant (\$1000)
2012	Biology Society of New Mexico Outstanding TA Award (\$500)
2011, 2012, 2014	UNM GRAC Research Grant (\$500)
2011, 2012	UNM SRAC Research Grant (\$250)

VOLUNTEER EXPERIENCE AND SERVICE

February 2018	Invited talk for the joint meeting of the St. Louis Audubon Society and the Webster Groves Nature Study Society: “How big (and small) brains help wild birds survive” , Webster Groves, MO
November 2017	Instructor for birding basics course , Forest Park Forever, St. Louis, MO
September 2017	Invited talk for Audubon Society Pelican Days Festival: “How big (and small) brains help wild birds survive” , Audubon Center at Riverlands, West Alton, MO
2006 - 2009	Banding Station Volunteer , Alaska Bird Observatory, Fairbanks, AK

Reviewer for:

Proceeding of the National Academy of Sciences

Ecology Letters

Global Change Biology

Global Ecology and Biogeography

Ecography

Ecology

Functional Ecology

Journal of Biogeography

Oikos

Forests

European Journal of Ecology

SOCIETY MEMBERSHIP

International Biogeography Society

ART AND SCIENCE

- 2018 Logo design for Black Spruce Brewing Company in Fairbanks Alaska. Designs inspired by the natural history of Interior Alaska.
- 2017 Illustrated fossil and habitat reconstruction for the manuscript:
Gustafson, GT, Prokin, AA, Bukontaite, R, Bergsten, J, and Miller, KB. 2017. Tip-dated phylogeny of whirligig beetles reveals ancient lineage surviving on Madagascar. *Scientific Reports*, 7, 8619.
- 2015 Illustrator for the ornithology themed card game, Birds of a Feather by Nothing Sacred Games.