

Tanjona H. Ramiadantsoa

CONTACT INFORMATION	University of Wisconsin-Madison Department of Integrative Biology 458 Lincoln Dr, Madison, WI 53706 USA University of Helsinki , Helsinki, Finland Ph.D., Ecology and Evolutionary Biology, November 2015 <ul style="list-style-type: none">Title: “Spatial processes in ecology and evolution, and implications for conservation.”Advisors: Otso Ovaskainen, Prof. and Ilkka Hanski, Prof. University of Antananarivo , Madagascar M.Sc., Combinatorics, April 2010 <ul style="list-style-type: none">Topic: <i>Flag major index on colored permutation group</i>Advisor: Arthur Randrianarivony, Prof. University of Wisconsin-Madison , Madison, WI, USA Postdoc., Department of Integrative Biology, 2016-present <ul style="list-style-type: none">Topics: <i>Abrupt Changes in Ecological Systems (ACES)</i>Advisors: Monica Turner, Prof. Anthony Ives, Prof. University of Minnesota , Twin Cities, MN, USA Postdoc. Department of Ecology, Evolution, and Behavior, 2014-2016 <ul style="list-style-type: none">Topics: <i>Energy budget model and phylogenetic comparative methods</i>Advisor: Emma Goldberg, Assistant Professor	+ 1 608 265-8001 ramiadantsoa@wisc.edu
EDUCATION		
APPOINTMENTS		
RESEARCH INTERESTS	Mathematical ecology, theoretical ecology, landscape ecology, energy budget, macroevolution, abrupt change, conservation	
REFEREED JOURNAL PUBLICATIONS	<ol style="list-style-type: none">Ramiadantsoa, T., Hanski, I., Ovaskainen, O., in press. “Responses of Generalist and Specialist Species to Fragmented Landscapes.” <i>Theoretical Population Biology</i>Ratajczak, Z., Carpenter, S.R., Ives, A.R., Kucharik, C.J., Ramiadantsoa, T., Stegner, M.A., Williams, J.W., Zhang, J. and Turner, M.G., 2018. Abrupt Change in Ecological Systems: Inference and Diagnosis. <i>Trends in ecology and evolution</i>. in pressIhantamalala, F.A., Rakotoarimanana, F.M., Ramiadantsoa, T., Rakotondramanga, J.M., Pennober, G., Rakotomanana, F., Cauchemez, S., Metcalf, C.J., Herbreteau, V. and Wesolowski, A., 2018. Spatial and temporal dynamics of malaria in Madagascar. <i>Malaria journal</i>, 17(1), p.58.Ramiadantsoa, T., Sirén, J., Hanski, I. 2017 “Phylogenetic comparative method for geographical radiation.” <i>Annales Zoologica Fennici</i> 54:237-257Ramiadantsoa, T., Ovaskainen, O., Rybicki J., Hanski, I., 2015 “Large-Scale Habitat Corridors for Biodiversity Conservation: A Forest Corridor in Madagascar.” <i>PLoS ONE</i>, 10(7): e0132126	
SUBMITTED AND UNDER REVISION	<ol style="list-style-type: none">Ramiadantsoa, T., Stegner, M. A., Williams, J. W., Ives, A. “The potential role of intrinsic processes in generating abrupt and quasi-synchronous tree declines during the Holocene.” In review in <i>Ecology</i>.Ramiadantsoa, T., Goldberg, E. “Exploring the role of body size in shaping thermal performance of insects.” Under revision.	

IN PREPARATION	<ol style="list-style-type: none"> 1. Ramiadantsoa, T., Zhang, J., and Kucharik, C.J. “Spatiotemporal trends in crop yields, variability, and yield gaps across the USA” 2. Ramiadantsoa, T. and Ives, A.R. “The role of stochasticity for population stability” 3. Ramiadantsoa, T., Ratajzak, Z., and Turner, M.G. “Goldilock model for assing forest-fire dynamics” 4. Ramiadantsoa, T. et al. “Review: Evidence of biodiversity loss in Madagascar”
TEACHING AND MENTORING	Original ideas and main organizer <hr/> <ul style="list-style-type: none"> • E^2M^2: Ecological and Epidemiological Modeling in Madagascar 2016 & 2018 Centre ValBio, Ranomafana, Madagascar • Introduction to Mathematical Ecology January 2014 Universit d’Antananarivo, Madagascar Lecturer <hr/> <ul style="list-style-type: none"> • Girl solve It! Summerschool math camp June 2017 University of Minnesota, USA • Reserve Planning in the Tropics. Finnish study abroada Fall 2011-2012 Instructor: Mar Cabeza, Prof. Centre ValBio, Ranomafana, Madagascar • Conservation Biology in Fragmented Landscapes Fall 2011-2013 Topics: Extinction, Spatially Realistic Metapopulation Models University of Helsinki, Finland
PROFESSIONAL ACTIVITIES	Organizing committee <hr/> <ul style="list-style-type: none"> • Inspire session, ESA, New Orleans August 2018 Theme: “Understanding extreme events: linking empirical observation to concepts and theory” • Spring Symposium March 2012 University of Helsinki, Finland Field assistant <hr/> <ul style="list-style-type: none"> • Grand Teton and Yellowstone National Parks, USA Summer 2017 Post fire forest regeneration (Monica Turner, Prof.) • Mulu National Park, Borneo Spring 2013 Dung beetles survey (Ilkka Hanski, Prof.) • Sundsvall, Sweden Fall 2010 Wood-decaying fungi survey (Otso Ovaskainen, Prof.)
PROFESSIONAL SERVICES	<ul style="list-style-type: none"> • Student judge award, theory section ESA 2016-present • Member of Ecological Society of America 2016-present • President of Finland-Madagascar Association 2012-2015
CONFERENCES AND PRESENTATIONS	2018 <hr/> Ecological Society of America annual meeting New Orleans, LO, USA, 5-10 August 2018 Title: “Developing Goldilocks models to understand ecological responses to extreme events: fire and trees in Yellowstone National Park”

Institut Pasteur de Madagascar

Antananarivo, Madagascar, 22 January 2018

Title: "Importance of large scale habitat corridor for biodiversity conservation"

2017

Ecological Society of America annual meeting

Portland, OR, USA. 5-11 August 2017

Title: "Community-level modeling of abrupt changes in paleoforests"

Biological Colloquium, University of Wisconsin-Madison

Madison, WI, USA. 2 March 2017

Title: "A generalist approach to niche specialization"

2016

Kellog Biological Station

Kellog, MI, USA. 15 August 2016

Title: "Species' responses to habitat destruction"

Ecological Society of America annual meeting

Fort Lauderdale, FL, USA. 7-12 August 2016

Title: "Exploring the potential of energy budget models and body size in determining species' niche"

Midwest Mathematical Biology Conference

La Crosse, WI, USA. 21-22 May 2016

Title: "Exploring the potential of energy budget models and body size in determining species niche"

2014

Evolution seminar, University of Minnesota

Twin cities, MN, USA. 21 April 2014

Title: "Phylogenetic inference of geographical radiation"

Spring Symposium, University of Helsinki

Helsinki, Finland. 3-5 March 2014

Title: "The efficiency of a habitat corridor between two large national parks in Madagascar"

2013

Spring Symposium, University of Helsinki

Helsinki, Finland. 4-6 March 2013

Title: "Geographical radiation in Malagasy dung beetles"

Biomathematics day, University of Helsinki

Helsinki, Finland. 23 October 2013

Title: "Model of evolutionary radiation and geographical range dynamics applied to Malagasy dung beetles"

International Prosimian Congress

Ranomafana, Madagascar. 5-9 August 2013

Attendee

2012

Biomathematics day, University of Helsinki

Helsinki, Finland. 18 April 2012
Title: “Parsimonious mechanisms behind community- level patterns”

2011

Spring Symposium, University of Helsinki

Helsinki, Finland. 7-9 March 2011
Title: “Competitive species communities in spatially heterogeneous habitats”

2007

Study abroad seminar US embassy, Antananarivo

Antananarivo, Madagascar. November 2007
Title: “Deforestation in Ambodiaviavy community forest”

WORKSHOPS ATTENDED

Dynamics and Differential Equations

Minneapolis, MN, USA. 22-25 June 2016
Organizers: Michael Jolly (Indiana U), Peter Polacik (U of Minnesota, Twin Cities),
Geneviève Raugel (U de Paris XI), Roger Temam (Indiana U), Edriss Titi (Texas A
& M U), Yingfei Yi (U of Alberta)

Mathematics for an Evolving Biodiversity

Montréal, Canada. 16-20 September 2013
Organizers: Jonathan Davies (McGill), Amaury Lambert (UMPC Paris 6), Nicolas
Lartillot (Montréal)

Qualitative Behaviour of Stochastic Systems and Applications

Bielefeld, Germany. 18-20 June 2012
Organizers: Leonid Bogachev (Leeds, GBR), Benjamin Bolker (Hamilton, CAN),
Yuri Kondratiev (Bielefeld, GER), Otso Ovaskainen (Helsinki, FIN)

Stochastic Demography in Fluctuating Environments: Theory and Empirical Patterns

Lovund, Norway. 23-27 April 2012
Organizers: Norwegian University of Science and Technology, Centre for Conservation
Biology

Assessing the Impacts of Climate Change on Madagascar’s Biodiversity and Livelihoods

Antananarivo, Madagascar. 28-31 January 2008
Organizers: Conservation International, WWF, WCS and USAID

Species Distribution Modeling: Methods for Conservation Biologists

Antananarivo, Madagascar. 21-25 January 2008
Organizers: ReBioMa and Univeristy of Berkley, California

EXTERNAL COURSES

Issues in Diversity

Oulu, Finland. 3-7 September 2012
Organizer: University of Oulu

Theory of Speciation: Helsinki Summer School 2012

Turku, Finland. 19-26 August 2012
Organizers: Biomathematics Group, University of Helsinki

Markov Chain Stability and Applications: 22nd Jyväskylä Summer School

Jyväskylä, Finland. 13-17 August 2012
Organizer: Faculty of Mathematics and Science and the Faculty of Information
Technology at the University of Jyväskylä

Stochastic Differential Equations

Lammi, Finland. 25-27 September 2010

Organizers: Finnish Doctoral Programme in Computational Sciences and National Graduate School in Materials Physics

Study abroad Madagascar

Ranomafana, Madagascar. September-November 2007

Organizers: SUNY Stony Brook University

OTHER	UW Science Expeditions, campus scientific open-house	April 2017
APPEARANCES	Interview and appearance in the journal Finlands natur	2010
GRANTS	Institute on the Environment (IonE), University of Minnesota	2015
	Using experiments to root mathematical models of environmental niches (\$2,000)	
PEER REVIEWING	Oikos, Population Ecology, Journal of Applied Ecology, Plos ONE, National Science Foundation	
COMPUTER SKILL	C++, R, Mathematica, L ^A T _E X, GitHub, ArcMap.	
LANGUAGE SKILL	Malagasy: Native French: Fluent English: Fluent	