Romain A. Dahan

Current Address:
734 E Roger Rd, Apt. 147
Tucson, AZ 85719
USA
E-mail: Romain.A.Dahan@gmail.com

Education

Ph.D in Evolutionary Biology 2014 – **2021**
School of Life Sciences, Arizona State University, USA 2017 – **2021**
Biology, University of Rochester, USA 2014 – 2016
Advisor: Dr. Christian Rabeling

M.A. Ecology and Evolution (Applied Evolution) *Ecology and Evolution,* Stony Brook University, USA 2012 – **2014**
Advisor: Dr. Liliana M. Dávalos

B.S. in Biology *Biology*, Canisius College, Buffalo, USA 2008 – **2012**

Scientific Baccalaureate, *Specialized Earth and Life Sciences* – Lycée La Source, Meudon, France 2008

Publications

Dahan RA*, Grove, NK^{+}, Bollazzi ML, Gerstner B^{+}, Rabeling C*. 2022. Decoupled evolution of multi-queen breeding and multiple mating in Acromyrmex leaf cutting ants (Hymenoptera: Formicidae). *Behavioral Ecology and Sociobiology* 76: 7.

Ostwald M*, **Dahan RA**, Shaffer Z, Fewell JH. 2021. Fluid nest membership drives variable relatedness in groups of a facultatively social bee. *Frontiers in Ecology and Evolution.* 9: 767380. Doi: 10.3389/fevo.2021.767380

Sinakevitch I*, Kurtzman Z, Choi HG, Ruiz Pardo DA, **Dahan RA**, Klein N, Bugarija B, Wendlandt E, Smith BH. 2020. Anti-RDL and anti-mGlutR1 receptors antibody testing in honeybee brain sections using CRISPR-Cas9. *J. Vis. Exp.* 155: e59993 doi: 10.3791/59993

Bengston SE*, **Dahan RA**, Donaldson Z, Phelps S, van Oers K, Sih A, Bell AM. 2018. Genomic tools for behavioral ecologists: advancing the understanding of repeatable individual differences in behavior. *Nat. Ecol. Evol.* 2: 944-955 doi: 1038/s41559-017-0411-4

Sosa-Calvo J.*, Schultz TR, Ješovnik A, **Dahan RA,** Rabeling C. 2018. Evolution, systematics and natural history of a new genus of cryptobiotic fugus-growing ants. *Sys. Entomolgy*. 43(3): 549-567 doi: 10.1111/syen.12289

Costanzo KS*, **Dahan RA**[+], Radwan D[+]. 2015. Effects of photoperiod on population performance and sexually dimorphic responses in two major arbovirus mosquito vectors, *Aedes albopictus* and *Aedes aegypti* (Diptera: Culicidae). *Int. J. Trop. Ins. Sci.* 36(4): 177-187. doi: 10.1017/S1742758416000163
Undergraduate research

Dahan RA*, Duncan RP, Wilson ACC, Dávalos LM*. 2015. Amino acid transporter expansions associated with the evolution of obligate endosymbiosis in sap-feeding insects (Hemiptera: Sternorrhyncha). *BMC Evol. Bio.* 15: 52.
doi: 10.1186/s12862-015-0315-3

Manuscripts in preparation

Dahan RA*, Rabeling C*. Multi-queen breeding is associated with the evolution of inquiline social parasitism in ants. *Submitted, Scientific Reports*

Bengston SE*, **Dahan RA**, Waters JL. A test of the physiological constraint hypothesis for the evolution of Pace-of-Life Syndromes. *In revisions*

*: Corresponding authors
[+]: Undergraduate researcher

Teaching Experience

BIO 415: Biometry (online), Arizona State University, Summer 2021
Instructor of record: designed the course, recorded lecture videos, designed assessments and course material

BIO 415/614: Biometry, Arizona State University,
Lecturer, lab instructor, grader, graduate level. Assisted in the design of an online version of the course
Instructor of record: Stephen Pratt
Fall 2017
Fall 2018
Fall 2019
Fall 2020
Summer 2020 (online development)
Spring 2021 (online)

BIO 345: Evolution, Arizona State University, Spring 2018
Recitation instructor
Instructors of record: Christian Rabeling and Jeff Jensen

BIO 340: Genetics, Arizona State University, Summer 2017
Recitation instructor, discussion leader, grader
Instructor of record: Susan Holechek

BIO 115: Introduction to organismal evolution, University of Rochester Spring 2016
Recitation instructor, lecturer, grader
Instructor of record: Christian Rabeling

BIO 112: Introduction to Biology II (Ecology, Evolution, Population biology), University of Rochester — Spring 2015
Lab instructor, grader
Instructor of record: Robert Minkley

Courses Qualified to Teach

Biometry, Biostatistics, Statistics for life sciences
Ecology, Evolution, Population Biology
Genetics
Invertebrate Biology
Introductory Biology

Academic Presentations

Dahan RA, Bengston SE, Rabeling CR. Social polymorphism, reproductive cheating, and the origins of reproductive isolation in ant social parasites. Contributed talk, IUSSI 2018, Guarujá, São Paulo, Brazil. — August 2018

Dahan RA, Bengston SE, Gerstner B, Bollazzi ML, Rabeling C. Polygyny, cheating morphs, and the speciation of inquiline social parasites in ants. Contributed talk, Evolution 2017, Portland, OR. — August 2017

Dahan RA, Gerstner B, Rabeling C. Mating systems and the evolution of obligate social parasites in leaf-cutting ants. Contributed talk, XXV International Congress of Entomology, Orlando, FL. — September 2016

Dahan RA, Gerstner B, Rabeling C. Mating systems, cheating behaviors, and the evolution of obligate social parasites. — March 2016
EEB Department talk, University of Rochester, Rochester, NY.

Dahan RA, Rabeling C. Testing the intra-specific route to social parasitism. — December 2015
SINNERS6, University of Scranton, Scranton, Pa.

Poster: Dahan RA, Duncan RP, Wilson ACC, Dávalos LM. Genome expansions in symbiotic sap-feeding insect (Hemiptera: Sternorrhyncha). Gordon Conference: Ecological and Evolutionary Genomics, University of New England, Biddeford, ME. — June 2015

Poster: Dahan RA, Radwan D, Costanzo KS. *Effects of Temperature and photoperiod on condition-specific competition between container-dwelling mosquitoes.* Ignatian Scholarship Day, Hosted by Canisius College, Buffalo NY, USA — April 2012

Academic Awards and Grants

ASU Graduate College Travel Award *$500* — August 2018

ASU School of Life Sciences Travel Award *$400* — August 2018

ASU Research Training Initiative grant *$1500* — March 2017

Environmental Science Award for Excellence in Research in Ecology*,* Biology Dept. Canisius College, Buffalo NY, USA — May 2012

Mentorship experience

Nathan Grove, Undergraduate**,** School of Life Sciences, ASU. — Fall 2018 – Summer 2021

Committee Work

Emma Crable, Barrett Honors College, ASU – Undergraduate honor thesis — 2017

Services

Stony Brook Ecology and Evolution, *Graduate student representative at faculty meetings* — Fall 2012 – Spring 2014

Stony Brook Ecology & Evolution graduate students E-board, *Vice President* — Fall 2013 – Spring 2014

ASU School of Life Sciences graduate student E-board

Graduate student recruitment coordinator — Fall 2017 – Spring 2018

Graduate Programs Committee representative — Fall 2018 – Spring 2019

Vice President — Fall 2019 – Spring 2020

Society Memberships

Society for the Study of Evolution — Since 2017

International Union for the Study of Social Insects – North American Section	Since 2016
Entomological Society of America	Since 2016
American Association for the Advancement of Science	Since 2018
Animal Behavior Society	Since 2020

Referees contact details

Dr. Christian Rabeling, PhD advisor
Phone: (480) 965- 2349
E-mail: Christian.rabeling@asu.edu

Dr. Liliana Dávalos, Master's advisor
Phone: (631) 632-1554
E-mail: Liliana.Davalos@stonybrook.edu

Dr. Stephen Pratt, Committee member, instructor of record for Biometry course
Phone: (480) 727-9425
E-mail: Stephen.Pratt@asu.edu