

C U R R I C U L U M V I T A E

Daniel I. Rubenstein

Class of 1877 Professor of Zoology

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Education

B.S.	1972	University of Michigan
Ph.D.	1977	Duke University
M.A.	1978	Cambridge University, England
Post-doctoral	1977-1980	King's College, Cambridge, England
M.A.	2003	Oxford University, England

Academic and Research Appointments

2020-present	Departmental Representative for Diversity and Inclusion
2016-2020	Director, Program in Environmental Studies, Princeton Environmental Institute
2014-present	Director of International Field Studies, Department of Ecology and Evolutionary Biology
2014-2019	Undergraduate Departmental Representative, Department of Ecology and Evolutionary Biology
2008-present	Class of 1877 Professor of Zoology, Princeton University
2004-2015	Director, Program in African Studies, Princeton University
1991-present	Professor, Department of Ecology and Evolutionary Biology
1991-2014	Chair, Department of Ecology and Evolutionary Biology
1990-1991	Associate Professor, Department of Ecology and Evolutionary Biology
1986-1990	Associate Professor, Program in Ecology, Evolution and Behavior
1980-1986	Assistant Professor, Department of Biology, Princeton University
1977-1980	Research Fellow, King's College, Cambridge University, U.K.

Honors and Awards

2022	Elected Member, American Academy of Arts and Sciences
2022	Visiting Fellow, Pembroke College, Oxford (Fall 2023)
2021-present	Council Ecological Society of America
2021-present	Council American Academy for the Advancement of Science (AAAS)
2020-2023	Director of Mid-Atlantic Region for the Society of Sigma Xi
2018	Visiting Fellow, King's College, Cambridge University
2018	Animal Behavior Society, Exemplar Award: Major Long-Term Contribution to Animal Behavior
2018	Society of Sigma Xi, John P. McGovern Science and Society Award,
2017	ACM SIGMOBILE Test-of-time Paper Award
2017	Environmental Research Letters Highlights of 2016 collection
2015	Visiting Research Scholar, Merton College, Oxford University
2015-present	Grevy's Zebra Technical Committee, Kenya
2015-2017	Visiting Professorship, Sydney University
2013-2015	President and Past President, Animal Behavior Society
2011-2014	Visiting Professor, University of Sydney, Australia
2013-2015	Visiting Fellowship, Ben-Gurion University of the Negev
2011-2013	President-elect, Animal Behavior Society

2008-2009	Visiting Scholar, Institute for Advanced Study, Princeton, NJ
2008	International Visiting Research Fellowship, University of Sydney, Australia
2008	Murray Lectureship, University of Sydney, Australia
2007	Animal Behaviour ‘Top Reviewer’
2003	Elected Fellow, American Association for the Advancement of Science (AAAS)
2001	George Eastman Professorship, Oxford University (2003-04)
1999	Princeton University, President’s Award for Distinguished Teaching
1998	Elected Fellow, Animal Behavior Society
1995-2001	Committee on Membership of Sigma Xi, The Scientific Research Society
1994-1995	President, Princeton Chapter, Sigma Xi, The Scientific Research Society
1993	Fellowship from Japan Society for the Promotion of Science
1987	Merton College Visiting Research Fellowship
1984-1991	NSF Presidential Young Investigator Award
1977-1981	King's College Research Fellowship
1976-1977	Fellowship in Science and Public Affairs
1974	Society of Sigma Xi
1972	Phi Beta Kappa

Research Awards

2021-present	NSF: Imageomics: A new frontier of biological information powered by knowledge-guided machine learning
2018-2021	NSF: New Technologies for expanding the scale of research at the Mpala Research Center
2018-present	National Geographic Society: The Adaptive Significance of Zebra Stripes: Truly Nature's Multi-tool?
2016-2021	San Diego Zoo Global: New Technologies in Support of Grevy's Zebra Conservation Integrating Genomes, Microbiomes, Parasites, Diets, and Demography
2014-2019	Leverhulme Trust Contract - Emotional Awareness as a Basis for Social Success in a Non-Human: The Domestic Horse
2014-2019	The Nature Conservancy: NatureNet Science Fellows Program
2014-2019	NSF: EAGER-NEON: IBEIS: Combining Computer Vision and Mark-Recapture Data for NEON
2014-2019	NSF: “Collaborative Research: EAGER: Prototype of an Image-Based Ecological Information System (IBEIS)”
2012-2019	NSF: INSPIRE: Mingle: Sensing the Interactions of Animals
2012-2015	NSF: The Ontogeny of Male-Male Bonds in Wild Ethiopian Geladas (<i>Theropithecus gelada</i>). Princeton University, Ethiopia.
2012	NSF: Meeting: The Future of Research in Animal Behavior, Airlie Center, Warrenton VA, 27 April May 2012
2011-2012	NSF: Field Computational Ecology Course, Northern Kenya
2011-2012	USAID: University of Colorado, Livestock-Climate CRSP: A cost-effectiveness framework for Landscape rehabilitation and carbon sequestration in North Kenya
2007-2011	NSF IIS-CXT: Collaborative Research: Computational Methods for Understanding Social Interactions in Animal Populations
2007-2011	NSF FSML: Improvements in Facilities, Site Access and Data Management at Mpala Research Centre, Kenya
2006-2010	Oxford-Princeton Partnership Development: Tracking Animals for Conservation
2006-2010	PIIRS Interdisciplinary Research Initiative: Water, Savannas, and Society in Sub-Saharan Africa, and Technology for the Developing Regions
2006-2010	Denver Zoological Foundation and Princeton University: Grevy's Zebra/Lion Predator-Prey Relations
2003-2006	St. Louis Zoo: Population dynamics of Grevy's Zebra

2003-2006	St. Louis Zoo: Expanding Role of Communities in Grevy's Zebra Conservation
2002-2007	NSF: Wildlife Movements and Animal Tracking: Wireless Collars and 'Zebranet'
2002-2005	St. Louis Zoo: Conservation of Grevy's Zebra
2002-2005	St. Louis Zoo: Developing the Role of Communities in Conservation of Grevy's Zebra
2001-2005	NSF: Field Station Improvement: Mpala Research Center, Kenya
2001-2006	PEW: Program in Biocomplexity (Graduate student & postdoctoral training program)
2000-2004	NSF: Biocomplexity: Animal Movements on Human Impacted Landscapes
1999-2005	NSF: Zebra Social Behavior: Evolution of Multi-level Societies
1995-1999	NPS: Horse Social Behavior
1989-1995	BSF: Onager Social Behavior
1983-1985	NSF: Alternative Mating Strategies: Water strider Social Dynamics
1980-1983	NIMH: Zebra Mating Systems
1978	NSF-NATO: Post-doctoral Fellowship
1972-1975	NSF: Graduate Fellowship

Editorial Activities

2017-present	Associate Editor, <i>Journal of Ethology, Japan</i>
2015-2022	Editor, <i>Environmental Research Reviews</i>
2007-present	Editorial Board, <i>Environmental Research Letters</i>
2009-present	Editorial Board, <i>International Journal of Ecology</i>
2007	Animal Behavior 'Top Reviewer'
2006-present	Editorial Board, <i>Israel Journal of Ecology and Evolution</i>
1999-present	Editorial Board, <i>Evolutionary Ecology Research</i>
1991-2000	Associate Editor, Behavioral Ecology and Sociobiology
1992-1996	Associate Editor, Ecological Applications
1990-1998	Associate Editor, <i>Evolution</i>
1979-1980	Consulting Editor, <i>Animal Behaviour</i>

Membership in Professional Societies

American Association for the Advancement of Science
Animal Behavior Society
British Ecological Society
Citizen Science Association
Ecological Society of America
Sigma Xi
Society for the Study of Evolution
Society of Conservation Biology
International Society for Behavioral Ecology

Continuing Extramural Activities

Board of Directors, Mpala Research Trust
Princeton University's representative to Mpala Research Centre Science Advisory Board
Board of Directors, The Patricia William Mwangaza Foundation, Inc.
Board of Trustees & President, Friends of the Hopewell Valley Open Space
Board of Trustees, Hawk Mountain Sanctuary
Advisory Board, Earthwatch United States
IUCN Equid Specialist Group—Species Survival Commission (Grevy's zebra coordinator)
NSF Animal Behavior and Education Review Panels
Committee member, Grevy's Zebra Technical Committee, Kenya Wildlife Service

Selected Professional Activities

2023

Induction into the American Academy of Arts and Science, Cambridge, MA
Princeton-in-Africa Board meetings
Smithsonian Tropical Research Institute visiting review committee
Center for Jewish Life Executive Committee and Board Meetings
STEAC Neon Committee meetings
Organizing HMEI morning CEREAL seminars
Organizer AAAS symposium on “Imageomics: Powering machine learning for understanding biological traits”
Wildlife Research and Training Institute Wildlife Scientific Conference Invited Speaker (Nairobi)
3rd International Workshop on Camer Traps, AI, and Ecology, Keynote speaker
Teacher Preparation Program Project QUEST Summer Workshop Leader
Animal Behavior Society Invited Speaker, Portland Oregon
International Mammalogical Congress Invited Speaker, Anchorage Alaska
Hawk Mountain Sanctuary Board Meeting
Mpala Research Center Board Meeting, Kenya
Grevy’s Zebra Technical Committee meetings, Kenya
American Association for the Advancement of Science (AAAS) Council meetings
Sigma Xi Board of Directors meetings
University of Johannesburg, Invited lecture
Imageomics “All Hands” meeting of PIs
Teacher Preparation Faculty Advisory Board meetings
Dining Services “Indigenous Chefs” seminar, Invited speaker
Imageomics Field course on Tropical Computational Ecology, co-organizer/lecturer University of Saskatchewan, Canada. Invited speaker
Turkana Basin Institute, Kenya. Invited speaker
Life Sciences Research Foundation Review Panel

2022

University of Florida, Biology Department, Invited speaker
AI for Environmental and Social Good, Dallas, Texas (Keynote-H2O.AI Conference)
Keynote speaker: From Animals to AI: New Directions in Leadership Research, University of Virginia, Darden Business School
IFoRE speaker, Sigma Xi Conference, Washington, DC.
Frontiers in Social Evolution, UK, Virtual Seminar
ESA, Montreal: Invited Speaker and Symposium coordinator and speaker
Equids in the Wild, Invited Speaker, Hungary
Ben Gurion University, Israel, Invited Lecturer
Cambridge University, UK, virtual lectures (2)
Annual Meeting and Student Research Conference AMNH, Virtual, discussant-mentor

2021

Focus on Public Participation in Environmental Research, Organizer, Virtual Webinar
University of Minnesota Behavior Group, Virtual Lecture
Princeton Voyages, Virtual Lecture
University of Florida, Virtual Lecture
Ben Gurion University, Mitrani Center, Israel, Virtual Lecture
Cambridge University, UK, Virtual Lectures (2)
55 Plus Talk, Virtual Lecture
Lecture in Evolutionary Biology, Virtual Guest Lecture
University of Michigan Lecture (Virtual) to Environmental Humanities

Rowan University Lecture, Virtual
Princeton Adult School, Virtual Lecture
Global Seminar Guest Lecturer, Kenya, Virtual
UM Africa Conference, Virtual Lecture
ABS Education Workshop, Virtual Organizer and Lecture
BBC Radio/Becoming Animal Interview, Virtual Lecture
Annual Meeting and Student Research Conference AMNH, Virtual, discussant-mentor
Living at the Intersection Symposium, Virtual Lecture
Inclusive Leadership: Systemic Racism Workshop, Virtual attendee
African Studies Workshop, Virtual Lecture
PEI Symposium: Biodiversity & Conservation, Virtual Lecture
SRC-PIK Workshop, Virtual Lecture
Resilience Workshop, Virtual Lecture
Wildlife Consultant, Rotating Planet Productions, Mpala Research Center
Royal Society Meeting, Guest Speaker
ABS Education Committee Mid-Year Workshop, Co-Organizer and Keynote Speaker
Life Science Research Foundation Council Meeting
Ecological Society Governance Committee
Sigma Xi Council Meeting

2020

Mitrani Desert Research Institute, Sde Boqer, Ben Gurian University, Visiting Lecture
Rowan College of South Jersey at Gloucester County, World Classroom Visiting Lecture
Cambridge University Conservation Initiative, Visiting Lecture
University of Florida, Visiting Lecture
Student Conference on Conservation Science, American Museum of Natural History, NYC,
Mentor/Speaker
Ecology Society of America, Symposium organizer and speaker
Northern Conservation Clubs Teacher workshop, Kenya. Co-leader
Great Grevy's Rally 2020, Kenya. Co-organizer
University of Utah, Frontier Distinguished Lecture
University of Utah, Ecology and Evolutionary Biology Seminar
American Association for the Advancement of Science (AAAS) Symposium organizer and speaker,
Seattle
Smithsonian Tropical Research Institute, Bambi Lecture
Hawk Mountain Board Meeting
Earthwatch Board Meeting
Environmental Research Letters Board Meeting
Mpala Research Center Board Meeting

2019

Student Conference on Conservation Science, American Museum of Natural History, NYC,
Mentor/Speaker
SUNY Stony Brook, NY. Ecology and Evolution and Computer Science Seminar Speaker
International Wild Equid Conference, Prague, Czech Republic, Speaker
Ecology Society of America, Symposium organizer and speaker
BioMas Seminar, Mpala Research Center, Speaker
“Science Friday,” Mpala Research Center, Co-organizer
Community Conservation Day, Mpala Research Center, Co-organizer
Northern Kenya Conservation Clubs Workshop, Kenya, Co-leader and Keynote Speaker
CoCCon Workshop, Princeton, Co-organizer and Speaker
AAAS Annual Meeting, Washington, DC, Symposium Organizer & Speaker
AI Conference on Environmental & Social Good (H2O.ai), San Francisco, CA, Invited Speaker

Gordon Conference on Plant-Herbivore Interaction, Ventura, CA, Invited Speaker
Ivy Directors Meeting – Food Sustainability, Princeton University, Invited Speaker

2018

Winter Animal Behavior Society Conference, Steamboat Springs, CO, Speaker
Great Grevy's Rally Coordinator, Laikipia, Kenya
Food & Sustainability Committee Princeton University, Seminar Speaker
Rice University, Seminar Speaker
Sigma Xi Annual Meeting, Keynote Speaker
Cambridge University, Zoology Department Seminar Speaker
Cambridge University, King's College, Seminar Speaker
Cambridge University, Conservation Initiative
Durham University, Seminar Speaker
Chester Zoo, Seminar Speaker
Konstanz University, Seminar Speaker
Princeton Reunions Food Symposium, Speaker

2017

University of Wisconsin, Emlen Lectures
East African Wildlife Association, New York, Keynote Speaker
Managing Subjective Risk Conference, Berlin, Co-organizer & Keynote Speaker
The Earth in 2050: Boundaries, Obstacles, and Opportunities, Princeton, Speaker
Lecture, Stony Brook University, Kenya, Speaker
New Ways of Cattle Rearing Workshop, Kenya, Organizer & Speaker
Grevy's Zebra Technical Committee, Kenya, Organizer for GGR2
Symposium on Movement and Migration, Tel Aviv, Israel, Speaker
Citizen Science Symposium Organizer & Speaker, AAAS Annual Meeting, Boston, MA
Lecture, Department of Psychology, Columbia University
Lecture, Food Sustainability Symposium, Princeton University
Food & Sustainability Committee Princeton University
SAMSI workshop on Data Driven Modeling in Animal Behavior, Raleigh, NC, Participant
Advisory Committee, Biology Department, Oxford University
Cognitive Social Dynamics Meeting, Princeton University, Speaker
Sustainable Development Goals Symposium Organizer & Speaker, Eco.Soc.America, Portland, OR
Speaker, Animal Behavior Society, Toronto, Canada

2016

National Museums of Kenya, Unlocking Citizen Science Potential, Keynote Speaker
TNC NatureNet Symposium, Washington, DC, Speaker
Great Grevy's Rally Black and White Ball, Keynote presenter of final results
Great Grevy's Rally, Kenya, Organizer
Kids Twiga Tally (Giraffe Count), Laikipia, Kenya, Organizer
AAAS Annual Meeting, Washington, DC, Symposium Organizer & Speaker
Ramat Hanadiv Nature Park, Israel, Keynote Speaker
Princeton Club, Toronto, Canada, Speaker
Wagner College, Staten Island, NY, Seminar speaker
NJIT Collective Behavior Workshop, Newark, NJ, Collaborator
MIT Citizen Science “Call of the Wild” Symposium, Boston, MA, Speaker
Unlocking Africa’s Potential for Citizen Science, Kenya, Speaker

2015

Great Zebra and Giraffe Count, Nairobi, Kenya

Invited Speaker, Tulane University (series of lectures)
Reality Mining Workshop, Princeton, NJ
Invited Speaker, African Studies Indaba, Princeton University
Invited Speaker, US Embassy, Nairobi, Kenya
Rutgers University Field School, Kenya
AMNH Conservation Conference, New York, NY, Lecturer
Reality Mining Workshop, Berlin, Germany
Great Zebra and Giraffe Count, Nairobi, Kenya
TNC NatureNet Symposium, Washington, DC, Speaker
TNC Research Symposium, San Jose, CA
Animal Behavior Society, Anchorage, Alaska, Presidents' symposium organizer & speaker
AAAS Annual Meeting, San Jose, CA, Symposium Organizer & Speaker
International Equine Society Meeting, Stuttgart, Germany, Keynote Speaker
Rutgers University/NJ Institute Technology, Seminar speaker
University of Manchester, UK. Seminar speaker
Humboldt University, Workshop Participant & Speaker

2014

TNC NatureNet Symposium, Washington, DC
TNC Research Symposium, San Jose, CA
Kazak Scout and Conservation Managers Workshop on Przewalski Horse, Khulan and Sheep Interactions and Management, XinJiang, China
Public Lecture, Hawk Mountain Sanctuary
AAAS, Annual Meeting, Chicago, Symposium Speaker
Lecturer, University of Pennsylvania Seminar
Lecturer, University of California – Los Angeles Seminar
Lecturer, Ways of Knowing, Princeton University
Lecturer, Princeton Football Lecture Series
Kenyan US Ambassador Workshop, Princeton
Public Lecture, UCLA
Mpala Discovery Day, Kenya
Presidential Keynote & Local Host, Animal Behavior Society Conference – Princeton University
Review Committee, Israel Nature and Park Authority
Keynote (2), Israel Ecological Society
Lecturer, Princeton Food Studies Conference
Lecturer, Systematic Risk in Global Agriculture, Princeton University
Film Festival “The Art of Science Story Telling,” Princeton University

2013

National Academy Committee on Wild Horse and Burro Management (Committee Member)
AAAS, Annual Meeting, Boston
NatureNet Selection Committee, The Nature Conservancy
Distinguished Lecturer, University of Brunei Darussalam
Public Lecture, Hawk Mountain Sanctuary
Public Lecture, Princeton Club, Phoenix
Rutgers University (Darwin Day Lecture)
Animal Behavior Society Annual Meeting, Colorado (President-Elect, Symposium Organizer)
International Equine Conference, Kentucky (Keynote speaker)
AMNH Conservation Conference, New York, NY (Lecturer)
Princeton Club of New York (Lecturer)
University of Ben-Gurion (Fellowship/Public Lectures)

2012

International Wild Equid Meeting, Vienna, Austria (Keynote speaker)
International Equine Science Meeting, Regensburg, Germany (Keynote speaker)
National Academy Committee on Wild Horse and Burro Management (Committee Member)
Symposium on Animal Movements, Lund, Sweden (Keynote speaker)
AMNH Conservation Conference, New York, NY (Lecturer)
Packard Meeting (The Nature Conservancy Fellows Program), Palo Alto, CA (Participant)
Animal Behavior Society Annual Meeting, New Mexico (President-Elect, Symposium Organizer)

2011

25th International Congress of Conservation Biology (ICCB), Society of Conservation Biology, Auckland, New Zealand (Lecturer)
48th Annual Meeting of the Animal Behavior Society, Bloomington, Indiana (Lecturer)
Department of Ecology and Evolutionary Biology Seminar, Yale University, CT (Lecturer)
School of Natural Resources & the Environment, Dean's Lecture Series, University of Michigan, Ann Arbor (Lecturer)
Animal Behavior grant review panel, National Science Foundation, Arlington, VA
Works and Process Seminar Series, Guggenheim Museum, New York City (Lecturer)
Master's Seminar, Balliol College, New York City (Lecturer)
International Equine Conference: Equine Welfare, Preservation and Public Health, Alexandria, VA (Lecturer)
University of Michigan School of Natural Resources (Lecturer)

2010

28th Annual Ethology Meeting—Animal Behavior and Conservation, University of Alfenas, Brazil (Keynote speaker)
The Altenberg Symposia in Theoretical Biology: Connecting the Threads—Network Theory for Living Systems, University of Vienna (Lecturer)
Ecology, Evolution and Environmental Biology Graduate Research Seminar, Columbia University, NY (Lecturer)
Duke University Marine Laboratory, Beaufort, NC (2 Lectures)
Science Faculty Engagement in High School: How does it work? Faculty conversation. Hunter College, NY
From Mongolia to Maasailand: A comparative assessment of linkages between pastoralist land rights and social-ecological sustainability. An exploratory workshop sponsored by the Princeton Institute for International and Regional Studies (PIIRS), Princeton, NJ (Co-organizer & Lecturer)
Evolution, Ethics and Environment, Symposium to honor the Inamori Foundation and the Kyoto Prize Laureates, Princeton University (Co-organizer & Lecturer)
University of Laval, Department of Biology, Quebec City, Canada (Lecturer)
Beijing Forestry University, Beijing, China (Lecturer)
Rutgers University, New Brunswick, NJ (Lecturer)
'Discovery Day', Mpala Research Centre, Kenya (Lecturer)
55Plus Retirement Group, Princeton, NJ (Lecturer)

2009

46th Annual Meeting of the Animal Behavior Society, Pireópolis, Brazil (Presidential Lecture)
Storer Life Sciences Lecturer in 'Major Issues in Modern Biology', University of California, Davis
NJ State Museum, Science Lecture Series, Trenton (Lecturer)
Anne B. Sheperd Lecturer, Princeton Adult School, Princeton, NJ
5th Annual Plant Biology Initiative Symposium: Mutualism & Evolution of Cooperation and Trading, Harvard University, Cambridge, MA (Lecturer)
Department of Biology, University of Missouri, Columbia (Lecturer)

2008

- 3rd Annual Orna Eshed Memorial Symposium, ‘Ungulates and the Mountain Gazelle’, Ohalo College in Qatzrin, the Golan Heights, Israel (Keynote Speaker)
- Annual Meeting of the Israel Zoological Society, Ruppin Academic College, School of Marine Sciences, Michmoret, Israel (Keynote Speaker)
- Fenner School of Environment and Society, Australian National University (Lecturer)
- Workshop on ‘Collective Actions–Individuals to Populations’, Sydney Institute of Marine Sciences, AU (Lecturer)
- 12th Congress of the International Society for Behavioral Ecology (ISBE), Cornell University (Lecturer)
- From Field Observations to Mechanisms: A program in evolutionary biology. Festschrift to honor Peter and Rosemary Grant, Princeton University (Co-organizer & Lecturer)
- St. Louis Zoological Park, St. Louis, MO (Lecturer)
- Symposium on Energy, Climate and the Environment, National Academy of Engineering, Princeton University (Lecturer)
- Department of Biological Sciences, University of New Orleans, LA (Lecturer)
- Sustaining the Global Common, workshop sponsored by the Princeton Institute for International and Regional Studies (PIIRS), Princeton, NJ (Co-organizer & Lecturer)

2007

- European Science Foundation (ESF), Eurocores TECT Conference “The Evolution of Cooperation and Trading”, Budapest, Hungary (Lecturer)
- ESF Eurocores Workshop: Studying the Challenges of the Global Commons, Stockholm, Sweden (Co-organizer & Lecturer)
- International Equid Research Programme Workshop, Oxford, UK (Lecturer)
- Museum of Vertebrate Zoology, University of California, Berkeley (Lecturer)

University Service (Current)

- Departmental Representative, Diversity and Inclusion
- Director of Field Studies, Ecology and Evolutionary Biology
- Advisor & Coordinator, Campus as Lab Fellowship, Office of Sustainability Princeton
- Director, Princeton-Columbia Program in Tropical Biology and Sustainability
- Chair, EEB DEI Postdoctoral Fellowship Search Committee
- Board of Directors, Princeton in Africa
- Board of Directors for Center for Jewish Life (CJL)
- Executive Committee, Program in Global Health & Health Policy (GHP)
- Executive Committee, Program in Teacher Preparation
- Executive Committee, Laboratory Animal Research (LAR)
- Executive Committee, Global Health Policy Program
- Executive Committee, Phi Beta Kappa
- Life Sciences Research Foundation Review Committee
- Phi Beta Kappa Advisory Committee, Princeton University
- Faculty Fellow, Butler College
- Faculty Fellow, Yeh College

PUBLICATIONS

Books Edited

National Research Council. (2013). Using science to improve the BLM Wild Horse and Burro Program: A way forward. National Academies Press. 630 pp. (Authors: Asa, C., Beever, E., Coughenour, M., Eggert, L., Garrott, R., Huntsinger, L., Kalof, L., Krausman, P., Oli, M., Palmer, G., Petersen, S., Powell, D., **Rubenstein, D.I.**, Thain, D.)

Rubenstein, D. I., & R. W. Wrangham, eds. (1986). Ecological Aspects of Social Evolution: Birds and Mammals. Princeton University Press, Princeton, NJ. Pp. 551.

Bertram, B. C. R., T. H. Clutton-Brock, R. I. M. Dunbar, D. I. Rubenstein & R. W. Wrangham (1982). Current Problems in Sociobiology. Cambridge University Press.

In Press

Kline, J., Stewart, C., Berger-Wolf, T., Ramirez, M., Stevens, S., Babu, R.R., Banerji, N., Sheets, A., Balasubramaniam, S., Campolongo, E., Thompson, M., Stewart, C.V., Kholiavchenko, M., **Rubenstein, D.I.**, Van Tiel, N., & Miliko, J. A Framework for Autonomic Computing for In Situ Imageomics

GeoWildLife 2023: 1st ACM SIGSPATIAL International Workshop on AI-driven Spatio-temporal Data Analysis for Wildlife Conservation

Rubenstein, D.I. 2023. Equids and Predators. In: The equids; A successful suite of species. Eds. H. Prins & I Gordon. Springer.

Manuscripts submitted for review

Hex, S. & **Rubenstein, D.I.** "A Visual Signal to Achieve Joint Attention in Wild Plains Zebras (*Equus quagga*)"

Cao, Q.L., Lu, X., Zhang, Y., Hu, D., Leimgruber, P., Fleming, C.H., Chu, H., **Rubenstein, D.I.**, & Songer, M. Mitigating the impacts of road on two Asian equids: lessons from their home range requirements

Kirathe, J.N., Githaiga, J.M., Chira, R.M., & **Rubenstein, D.I.** Habitat selection by Grevy's zebra (*Equus grevyi*): Conservation Implications

Oh, W.S. & **Rubenstein, D.I.** Emergent network patterns of internal displacement in Somalia driven by natural disasters and conflicts

Tombak, K.J., Bak-Coleman, J.B., Nonnamaker, E., Parham, J., Stewart, C., Warungu, R., & **Rubenstein, D.I.** Zebra groups fission and fuse in response to Darwin's hostile forces, providing clues to the evolution of equid societies

Abraham, J., Lin, B., Miller, A., Henry, L., Demmel, M., Warungu, R., Mwangi, M., Lobura, P., Pallares, L., Ayroles, J., Pringle, R., & **Rubenstein, D.I.** Determinants of microbiome composition: insights from free-ranging hybrid zebras (*Equus quagga x grevyi*)

Rubenstein, D.I., Kirathe, J., Sundaresan, S., Fischhof, I., Tombak, K., Low Mackey, B., Davidson, Z., Odadi, W., Ghege, G., Warungu, R., Berger-Wolf, T., Stewart, C., Homberg, J. & Parham, J. Conserving the Grevy's zebra: The importance of building enduring partnerships to jointly develop and use new science.

Fischer, I., Levin, S. & **Rubenstein, D.I.** The evolution of wealth: socially constrained rationality and equality in competition with imbalanced opportunities.

Kirathe, J., N. Kirtahe, Nderitu, J. Githaiga, John, R. Chira, & **Rubenstein, D.I.** Grevy's zebra (*Equus grevyi*, Oustalet 1882) habitat use and selection in Samburu-Laikipia landscape, Kenya.

Articles

2023

Elhamod, M., Khurana, M., Manogaran, H.B., Uyeda, J.C., Balk, M.A., Dahdul, W., Bakis, Y., Bart, H.L., Mabee, P.M., Lapp, H., Balhoff, J.P., Charpentier, C., Carlyn, D., Chao, W-L., Stewart, C.V., **Rubenstein, D.I.**, & Berger-Wolf, T. (2023) Discovering Novel Traits From Images Using Phylogeny-Guided Neural Networks. *Proceedings of the 29th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, 3966-3978.

Rubenstein, D.I. (2023) In: Prins, H.H.T., Gordon, I.J. (eds) The Equids Fascinating Life Sciences, Springer International Publishing, Cham, 323-345, doi.org/10.1007/978-3-031-27144-1_12.

Tombak, K.J. & **Rubenstein, D.I.** (2023) How Equids Cope with Macroparasites. In: Prins, m H.H.T., Gordon, I.J. (eds) The Equids. Fascinating Life Sciences, Springer International Publishing, Cham, doi.org/10.1007/978-3-031-27144-1_11.

Tombak, K.J., Gersick, A.S., Reisinger, L.V., Larison, B., & **Rubenstein, D.I.** (2023) Zebras of all stripes repel biting flies at close range (vol 12, 18617, 2022) *Scientific Reports* 13(1).

Price, E., Khandelwal, PC., **Rubenstein, D.I.**, & Ahmad, A. (2023) A Framework for Fast, Large-scale, Semi-Automatic Inference of Animal Behavior from Monocular Videos, *bioRxiv*, doi:https://doi.org/10.1101/2023.07.31.551177.

Tombak, K.J., Hex, S.B.W., & **Rubenstein, D.I.** (2023) New estimates indicate that males are not larger than females in most mammals, *bioRxiv*, 2023.02.23.529628, doi.org/10.1101/2023.02.23.529628.

Elhamod, M., Khurana, M., Manogaran, H.B., Uyeda, J.C., Balk, M.A., Dahdul, W., Bakış, Y., Jr. Bart, H.L., Mabee, P.M., Lapp, H., Balhoff, J.P., Charpentier, C., Carlyn, D., Chao, W-L., Stewart, C.V., **Rubenstein, D.I.**, Berger-Wolf, T. & Karpatne, A. (2023) Discovering Novel Biological Traits From Images Using Phylogeny-Guided Neural Networks, *arXiv*, 2306.03228v1, doi.org/10.48550/arXiv.2306.03228.

2022

Cooney, D.B., Morris, D.H., Levin, S.A., **Rubenstein, D.I.** and Romanczuk, P. (2022) Social dilemmas of sociality due to beneficial and costly contagion, *PLOS Computational Biology*, 18(11):e1010670, doi.org/10.1371/journal.pcbi.1010670.

Karczmarks, L., Chan, Stephen CY., **Rubenstein, D.I.**, Chui, S. YS & Cameron, ElZ. (2022) Individual identification and photographic techniques in mammalian ecological and behavioural research-Part 1: Methods and concepts, *Mammalian Biology*, 102:545-549.

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