

**CURRICULUM VITAE****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**

2016-present	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**

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	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
2008-09	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

2018 – present	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 – present	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: Waterstrider 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-present	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, <i>Behavioral Ecology and Sociobiology</i>
1992-1996	Associate Editor, <i>Ecological Applications</i>
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  
Board of Trustees, 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**

#### **2019**

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)  
48<sup>th</sup> 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**

28<sup>th</sup> 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**

46<sup>th</sup> Annual Meeting of the Animal Behavior Society, Piréópolis, 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  
5<sup>th</sup> 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**

3<sup>rd</sup> 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)

12<sup>th</sup> 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)**

Director, Program in Environmental Studies (ENV), Princeton Environmental Institute

Director of Field Studies, Ecology and Evolutionary Biology

Director, Princeton-Columbia Program in Tropical Biology and Sustainability

Chair, PEI Postdoctoral Fellowship Search Committee

Board of Directors, Princeton in Africa

Princeton University IACUC

Executive Committee, Princeton Environmental Institute (PEI)

Executive Committee, Program in Global Health & Health Policy (GHP)

Executive Committee, Program in Teacher Preparation

Executive Committee, Laboratory Animal Research (LAR)

Executive Committee, Certificate in Ethnographic Studies

Executive Committee, Global Health Policy Program

Life Sciences Research Foundation Review Committee

Faculty Fellow, Butler College

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**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.

### **Manuscripts submitted for review**

Anping, C, Reperant, L., Fischhoff, I. & **Rubenstein, D.I.** Increased vigilance of plains zebras in response to more bush coverage in Laikipia, Kenya

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

Tombak, T., Wikberg, E., **Rubenstein, D.I.**, Sicotte, P. & C. Chapman, Cracking the code of conduct: traits that structure female social networks in egalitarian primates.

### **Articles in press**

Stacy-Dawes, Jenna & **Rubenstein, D.I.** An update of the geographical distribution of giraffe, *Giraffa* spp., throughout sub-Saharan Africa and its implications for conservation. *Mammal Review*.

### **Articles**

#### **2019**

Crawford, .C.L., Volenec, Z.M., Sisanya, M., Kibet, R., **Rubenstein, D.I.** (2019). Behavioral and ecological implications of bunched, rotational cattle grazing in east African savanna ecosystem. *Rangeland Ecology & Management*, 72: 1, 204-209. DOI: 10.1016/j.rama.2018.07.016.

Ng'weno, C., Buskirk, S., Georgiadis, N., Gituku, B., Kibungei, A., Porensky, L., **Rubenstein, D.I.** & Green, J. Apparent competition, lion predation, and managed livestock grazing: can conservation value be enhanced? *Frontiers in Environmental Science*. 7, 123.

Nunez, C. M., & **Rubenstein, D.I.** (2019). Mother-infant communication in feral horses (*Equus caballus*): what are they saying, why are they saying it, and what might it tell us about the mammalian juvenile stage? in *Integrative and Comparative Biology* (Vol. 59, pp. E171-E171).

O'Bryan, L. R., Abaid, N., Nakayama, S., Dey, T., King, A. J., Cowlshaw, G., Garnier, S. & **Rubenstein, D.I.** (2019). Contact Calls Facilitate Group Contraction in Free-ranging Goats (*Capra aegagrus hircus*). *Frontiers in Ecology and Evolution*, 7, 73. doi: 10.3389/fevo.2019.00073

O'Connor, D., Stacy-Dawes, J., Muenzuza, A., **Rubenstein, D.I.**, et al. (2019) Updated geographic range maps for giraffe, *Giraffa* spp., throughout sub-Saharan Africa, and implications of changing distributions for conservation. *Mammal Review*. <https://doi.org/10.1111/mam.12165>

#### **2018**

Cabal, C. & **Rubenstein, D.I.** (2018) Above- and below-ground biomass allocation and functional trait response to soil water inputs and evaporation of two common savanna grasses. *Journal of Arid Environments*, 157, 1-12, DOI: 10.1016/j.jaridenv.2018.06.008.

- Caputo, M., **Rubenstein, D.I.**, Froneman, P.W., Bouveroux, T. (2018). Striping patterns may not influence social interactions and mating in zebra: Observations from melanic zebra in South Africa. *African Journal of Ecology*, 56:428–431, DOI: 10.1111/aje.12463.
- Costelloe, B.R. & **Rubenstein, D.I.** (2018). Temporal structuring of vigilance behaviour by female Thomson's gazelles with hidden fawns. *Animal Behaviour*. 145, 87-97, DOI: 10.1016/j.anbehav.2018.09.007.
- Greenbaum, G., Renan, S., Templeton, A.R., Bouskila, A., Saltz, D., **Rubenstein, D.I.**, & Bar-David, S. (2017). Revealing life-history traits by contrasting genetic estimations with predictions of effective population size. *Conservation Biology*. 32 (4), 817-827, DOI: 10.1111/cobi.13068.
- Henry, L.P., Tokita, C.K., Misra, M., & **Rubenstein, D.I.** (2018). Mutualistic acacia ants exhibit reduced aggression and more frequent off-tree movement near termite mounds. *Biotropica* 50(4): 559–562, DOI: 10.1111/btp.12572.
- Kendall, C.J., **Rubenstein, D.I.**, Slater, P.L., Monadjem, A. (2017). An assessment of tree availability as a possible cause of population declines in scavenging raptors. *Avian Biology*, DOI: 10.1111/jav.01497.
- Kulahci, I.G, Ghazanfar, A.A., & **Rubenstein, D.I.** (2018) Consistent individual variation across interaction networks indicates social personalities in lemurs. *Animal Behaviour*. 136. 217-226, DOI: 10.1016/j.anbehav.2017.11.012.
- Kulahci, I., Ghazanfar, A., & **Rubenstein, D.I.** (2018). Knowledgeable lemurs become more central in social networks. *Current Biology* 28 (8), 1306-1310. e2, DOI: 10.1016/j.cub.2018.02.079.
- Monk, C.T., Barbier, M., Romanczuk, P., Watson, J.R., Alós, J., Shinnosuke N., **Rubenstein, D.I.**, Levin, S., Arlinghaus, R. (2018). How ecology shapes exploitation: a framework to predict the behavioural response of natural resource users along exploration-exploitation tradeoffs. *Ecology Letters*. 21 (6), 779-793, DOI: 10.1111/ele.12949.
- O'Brien, T.G., Kinnaird, M.F., Ekwanga, S., Wilmers C., Williams, T., Oriol-Cotterill, A., **Rubenstein, D.I.**, Frank, L.G. (2018). Resolving a conservation dilemma: Vulnerable lions eating endangered zebras. *PLoS One* 13 (8), DOI: 10.1371/journal.pone.0201983.
- Odadi, W. O., Riginos, C., & Rubenstein, D. I. (2018). Tightly bunched herding improves cattle performance in african savanna rangeland. *Rangeland ecology & management*, 71(4), 481-491.
- Parham, J., Stewart, C., Crall, J., **Rubenstein, D.I.**, Holmberg, J., & Berger-Wolf, T. (2018). Focusing animal identification with annotations of interest. 2018 IEEE Winter Conference on Applications of Computer Vision (WACV), 1075-1083.
- Rubenstein, D.I.** (2018). Moving beyond structure to function. *Animal Behaviour*. 136, 173-174, DOI: 10.1016/j.anbehav.2018.01.001.
- Schuttler, S. G., Sears, R. S., Orendain, I., Khot, R., **Rubenstein, D.I.**, Rubenstein, N., & Kays, R. (2018). Citizen Science in Schools: Students Collect Valuable Mammal Data for Science, Conservation, and Community Engagement. *BioScience*, 69(1), 69-79.
- Tucker, M.A., Böhning-Gaese, K., Fagan, W.F., Fryxell, J.M., Moorter, B., **Rubenstein, D.I.** et al. (2018). Moving in the Anthropocene: global reductions in terrestrial mammalian movements. *Science*. 359 (6374), 466-469, 10.1126/science.aam9712.

## 2017

- Berger-Wolf, T., **Rubenstein, D.I.**, Stewart, C.V., Holmberg, J.A., Parham, J., Meron, S., Crall, J., van Oast, J., Kiciman, E. & L. Joppa. (2017) Wildbook: Crowdsourcing, computer vision and data science for conservaton. Presented at *The Data for Good Exchange 2017*. arXiv:1710.08880 [cs.CY].

- Gersick, A. S., & **Rubenstein, D. I.** (2017). Physiology modulates social flexibility and collective behaviour in equids and other large ungulates. *Phil. Trans. R. Soc. B*, 372(1727), 20160241, DOI: 10.1098/rstb.2016.0241.
- Hauck, S., & **Rubenstein, D. I.** (2017). Pastoralist societies in flux: A conceptual framework analysis of herding and land use among the Mukugodo Maasai of Kenya. *Pastoralism*, 7(1), 18, DOI: 10.1186/s13570-017-0090-4.
- Núñez, C. M., Adelman, J. S., Carr, H. A., Alvarez, C. M., & **Rubenstein, D. I.** (2017). Lingering effects of contraception management on feral mare (*Equus caballus*) fertility and social behavior. *Conservation Physiology*, 5(1), cox018, DOI: 10.1093/conphys/cox018.
- Núñez, C. M., Adelman, J. S. A., Carr, H.A., Knight, C., & **Rubenstein, D.I.** (2017) "Prolonged Effects of Contraception Management on Feral Horse (*Equus Caballus*) Reproductive Physiology and Behavior." In *INTEGRATIVE AND COMPARATIVE BIOLOGY*, vol. 57, pp. E366-E366, DOI: 10.1093/icb/icx002.
- Odadi, W. O., Fargione, J., & **Rubenstein, D. I.** (2017). Vegetation, wildlife and livestock responses to planned grazing management in an African pastoral landscape. *Land Degradation & Development*. 28 (7), 2030–2038, DOI: 10.1002/ldr.2725.
- Parham, Crall, J., Stewart, C., Berger-Wolf, T., & **D.I. Rubenstein.** (2017) AAAI 2017 Spring Symposium on AI for Social Good, Stanford, CA, 2017.
- Schieltz, J.M., Okanga, S., Allan, B.F., & **Rubenstein, D.I.** (2017) GPS tracking cattle as a monitoring tool for conservation and management, *African Journal of Range and Forage Science*. 34 (3), 173-177, DOI: 10.2989/10220119.2017.1387175.

## 2016

- Barnier, F., Duncan, P., Fritz, H., Blanchard, P., **Rubenstein, D. I.**, & Pays, O. (2016). Between-gender differences in vigilance do not necessarily lead to differences in foraging-vigilance tradeoffs. *Oecologia*, 1-12.
- Giuggioli, L., Potts, J.R., **Rubenstein, D.I.** and Levin, S.A., (2016). Stigmergy, collective actions, and animal social spacing (vol 110, pg 16904, 2013). *Proceedings of the National Academy of Sciences*, 113(6), pp.E812-E812.
- Kahumbu, P., Martins, D., Schieltz, J. & **Rubenstein, D.I.** (2016) Transforming the next generation through citizen science in Kenya: the kids twiga tally. *Swara, April-June*, 52-56.
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