

CURRICULUM VITAE

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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
2008-2009	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

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, 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
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

2020

Phi Beta Kappa Advisory Committee, Princeton University
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, Lakipia, 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)

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

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

Greenfield, M.R., McHugh, K.A., Wells, R.S., **Rubenstein, D.I.** Anthropogenic injuries disrupt social associations of common bottlenose dolphins (*Tursiops truncatus*) in Sarasota Bay, Florida.

Manuscripts submitted for review

Fischer, I., Avrashi, S., Oz, T., Fadul, R., Gutman, K., **Rubenstein, D.I.**, Kroliczak, G., Mickiewicz, A., Goerg, S. & Gloeckner, A. The behavioral challenge of COVID-19 pandemic: indirect measurements, personalized interventions, enhanced adherence, and an opportunity for cooperation

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.

Esmaili, S., Jesmer, B.R., Albeke, S.E., Abrahms, B., Aikens, E.O., Badamjav, L.... **Rubenstein, D.I.**, et.al. Digestive system and body size shape resource selection by ungulates: a global test of the Forge Maturation Hypothesis.

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.

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

2020

Carlson, A.K., Taylor, W.W., **Rubenstein, D.I.**, Levin, S.A., & Liu, J. (2020) Global Marine Fishing across Space and Time. *Sustainability*, 12(11), 4714: doi.org/10.3390/su12114714

Tombak, K., Budischak, S.A., Hauck, S., Martinez, L.A. & **Rubenstein, D.I.** (2020) The non-invasive measurement of faecal immunoglobulin in African equids. *Science Direct*. doi.org/10.1016/j.ijppaw.2020.05.005

Grueter, C., Qi, X., Zinner, D., Bergman, T., Li, M., Xiang, Z., Zhu, P., Migliano, A.B., Miller, A., Krützen, M., Fischer, J., **Rubenstein, D.I.**, Vidya, T.N.C., Li, B., Cantor, M. & Swedell, L. (2020) Multilevel Organisation of Animal Sociality. *Trends in Ecology & Evolution*. doi.org/10.1016/j.tree.2020.05.003

Nuñez, C.M.V. & **Rubenstein, D.I.** (2020) Communication is key: Mother-offspring signaling can affect behavioral responses and offspring survival in feral horses (*Equus caballus*). *PLOS One*, 15(4):e0231343. doi:10.1371/journal.pone.0231343

Rubenstein, D.I. (2020) On assessing the importance of demographic change for social structure: a comment on Shizuka and Johnson. *Behavioral Ecology*, 31(1), 18-19.

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*.49:285-289 <https://doi.org/10.1111/mam.12165>

Rubenstein, D. I. (2019). On assessing the importance of demographic change for social structure: a comment on Shizuka and Johnson. *Behavioral Ecology*. doi.org/10.1093/beheco/arz164

Tombak, K. J., Wikberg, E. C., **Rubenstein, D. I.**, Chapman, C. A. (2019). Reciprocity and rotating social advantage among females in egalitarian primate societies. *Animal Behaviour*. doi.org/10.1016/j.anbehav.2019.09.010

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.

Nuñez, 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.

Nuñez, 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.

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.

Kulahci, I. G., **Rubenstein, D. I.**, Bugnyar, T., Hoppitt, W. J. E., Mikus, N., & Schwab, C. (2016). Social networks predict selective observation and information spread in ravens. *Royal Society Open Science*. 3(7), 160256.

Lalampaa, P. K., Wasonga, O. V., **Rubenstein, D. I.**, & Njoka, J. T. (2016). Effects of holistic grazing management on milk production, weight gain, and visitation to grazing areas by livestock and wildlife in Laikipia County, Kenya. *Ecological Processes*, 5(1), 17.

Pappano, D. J., Bergman, T. J., Beehner, J. C., Berger-Wolf, T., & **Rubenstein, D. I.** (2016). Seasonal influences on gelada social networks. *American Journal of Physical Anthropology*. 159, 247-247.

Rubenstein, D.I. (2016). Anthropogenic Impacts on Behavior: The Pros and Cons of Plasticity. In "Conservation Behavior". Eds. Saltz, D. and O. Berger-tal. Pp. 121-131. Cambridge Univ. Press.

Rubenstein, D.I., Low Mackey, B., Davidson, ZD, Kebede, F. & King, S.R.B. (2016). *Equus grevyi*. The IUCN Red List of Threatened Species 2016: e.T7950A89624491.

Rubenstein, D.I., Cao, Q. and J. Chui. (2016). Equids and ecological niches: behavioral and life history variations on a common theme. In "Wild Equids: Ecology, Management, and Conservation", Eds. Ransom, J.R. & P. Kaczencky. Pp. 58-68. Johns Hopkins University Press.

Rubenstein, D. R., & **Rubenstein, D. I.** (2016). From Pleistocene to trophic rewilding: A wolf in sheep's clothing. *Proceedings of the National Academy of Sciences*, 201521757.

Schieltz, J. M., & **Rubenstein, D. I.** (2016). Evidence based review: positive versus negative effects of livestock grazing on wildlife. What do we really know?. *Environmental Research Letters*, 11(11), 113003.

Uyehara, I. K., Sisanya, M., Hemp, C., & **Rubenstein, D. I.** (2016). Effects of traditional pastoralism on grasshopper (Caelifera) assemblages in East Africa. *African Journal of Ecology*, 54(2), 167-173.

2015

Barale, C., Beehner, J. (2015) Juvenile social relationships reflect adult patterns of behavior in wild geladas. *American Journal of Primatology*. 77(10), 1086-1096.

Costelloe, B.R. and **Rubenstein, D.I.** (2015) Coping with transition: offspring risk and maternal behavioral changes at the end of the hiding phase. *Animal Behaviour* 109: 217-2

de Froment, A.J., **Rubenstein, D.I.**, and S.A. Levin. (2015) An extra dimension to decision-making in animals: The three-way trade-off between speed, effort per-unit-time and accuracy, *PLoS Computational Biology*. 10(12), e1003937

Kartzinel, T. R., Chen, P. A., Coverdale, T. C., Erickson, D. L., Kress, W. J., Kuzmina, M. L., **Rubenstein, D.I.** & Pringle, R. M. (2015). DNA metabarcoding illuminates dietary niche partitioning by African large herbivores. *Proceedings of the National Academy of Sciences*, 112(26), 8019-8024

Kulahci, I., **Rubenstein, D.I.**, and Ghazanfar, A. (2015) Lemurs groom-at-a-distance through vocal networks. *Animal Behaviour*. 110. 179-186.

Larison, B., Harrigan, R.J., **Rubenstein, D.I.**, & Smith, T.B. (2015) Concordance on zebra stripes is not black and white. *Royal Society Open Science*. 2(1), 140452.

Larison, B., Harrigan, R. J., Thomassen, H. A., **Rubenstein, D. I.**, Chan-Golston, A. M., Li, E., & Smith, T. B. (2015). How the zebra got its stripes: a problem with too many solutions. *Royal Society Open Science*, 2(1), 140452

Nuñez, C. M., Adelman, J. S., & **Rubenstein, D. I.** (2015). Sociality increases juvenile survival after a catastrophic event in the feral horse (*Equus caballus*). *Behavioral Ecology*, 26:1, 138-147. DOI: 10.1093/beheco/aru163

Odadi, W. O., & **Rubenstein, D. I.** (2015). Herd Size-Dependent Effects of Restricted Foraging Time Allowance on Cattle Behavior, Nutrition, and Performance. *Rangeland Ecology & Management*. 68:4, p. 341-348.

Riginos, C., Karande, M. A., **Rubenstein, D. I.**, & Palmer, T. M. (2015). Disruption of a protective ant-plant mutualism by an invasive ant increases elephant damage to savanna trees. *Ecology* 96(3), 2015, pp. 654–661. DOI: /10.1890/14-1348.1

Rubenstein D.I. (2015) Networks of terrestrial ungulates: linking form and function. In: *Animal social networks* (Krause J, James R, Franks DW & Croft DP, eds). Oxford University Press, Oxford. pp. 184-196.

Rubenstein, D.I., Berger-Wolf, T., Tantipathananandh, C., Sundaresan, S., & Fischhoff, I. (2015). Similar but Different: Dynamic Social Network Analysis Highlights Fundamental Differences between the Fission-Fusion Societies of Two Equid Species, the Onager and Grevy's Zebra. *PLoS One*. (10)10:e0138645 doi: 10:1371/journal.pone.0138645.

Rubenstein, Daniel I, Kammen, Daniel M. (2015). The launch of Environmental Research Reviews. *Environmental Research Letters*, 10 (12), 120402 - 120402.

Schieltz, J. M., & **Rubenstein, D. I.** (2015). Caught between two worlds: genes and environment influence behaviour of plains× Grevy's zebra hybrids in central Kenya. *Animal Behaviour*, 106, 17-26.

Searchinger, T. D., Estes, L., Thornton, P. K., Beringer, T., Notenbaert, A., **Rubenstein, D.**, Heimlich, R., Licker, R. & Herrero, M. (2015). High carbon and biodiversity costs from converting Africa's wet savannahs to cropland. *Nature Climate Change*. doi:10.1038/nclimate2584

Tong, W. Shapiro, B. and **Rubenstein, D.I.** (2015) Genetic relatedness in two-tiered plains zebra societies suggests that females choose to associate with kin. *Behaviour*. DOI: 10.1163/1568539X-00003314

Zhang, Y., Cao Q.S., **Rubenstein D.I.**, Zang, S., Songer, M., Leimgruber, P., Chu, H., Cao, J., Li, K., and Hu, D.. (2015) Water use patterns of sympatric Przewalski's horse and Kulan: Interspecific comparison reveals niche differences. *PLoS one*, 10(7), e0132094.

2014

Kendall, Corinne J., Virani, Munir Z., Hopcraft, J. Grant C., Bildstein, Keith L., **Rubenstein, D.I.** (2014). African Vultures Don't Follow Migratory Herds: Scavenger Habitat Use Is Not Mediated by Prey Abundance. *PLoS ONE*. **1:9**: e83470. DOI: 10.1371/journal.pone.0083470

Kulahci, I. G., Drea, C. M., **Rubenstein, D. I.**, & Ghazanfar, A. A. (2014). Individual recognition through olfactory–auditory matching in lemurs. *Proceedings of the Royal Society B: Biological Sciences*, 281(1784), 20140071.

Lekerpes, S. S., Jung'a, J. O., Badamana, M. S., & **Rubenstein, D. I.** (2014). Genetic polymorphism of beta-lactoglobulin in Kenyan small east African goat breed using PCR-RFLP and sequencing. *Scientific Journal of Animal Science*, 3(9), 233-239.

Nowzari, H., Hemami, M., Karami, M., Zarkesh, M.M.K., Riazi, B. and **Rubenstein, D.I.** (2013). Habitat use by the Persian Onager *Equus hemionus onager* (Perissodactyla: Equidae) in Qatrouyeh National Park, Fars, Iran. *Journal of Natural History*. **47**:2795-2814.

Nuñez, C., Adelman, J., **Rubenstein, D.I.**, (2013) A free ranging, feral mare (*Equus caballus*) affords similar maternal care to her genetic and adopted offspring. *American Naturalist*. **128**:5:674-681.

Nuñez, C., Adelman, J., Smith, J, Gesquiere, L.R., **Rubenstein, D.I.** (2014) Linking social environment and stress physiology in feral mares (*Equus caballus*): Group transfers elevate fecal cortisol levels. *General and Comparative Endocrinology*. **196**: 26-33.

Roberts, B.A. and **Rubenstein, D.I.** (2014) Maternal tactics for mitigating neonate predation risk during the postpartum period in Thomson's gazelle. *Behavior* 151: 1229-1248.

2013

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.**, Thain, D. (2013). National Research Council. Using science to improve the BLM Wild Horse and Burro Program: A way forward. *National Academies Press*. 630 pp

Crall, J.P., Stewart, C.V., Berger-Wolf, T.Y., **Rubenstein, D.I.**, and Sundaresan, S.R. (2013) HotSpotter - Pattern Species Instance Recognition. IEEE Workshop on Applications of Computer Vision, January, 2013. <http://www.computer.org/csdl/proceedings/wacv/2013/5053/00/06475023-abs.html>

Fischer, Ilan., A. Frid, S.J. Goerg, S.A. Levin, **D. I. Rubenstein**, R. Selten. (2013) Fusing Enacted and Expected Mimicry Generates a Winning Strategy that Promotes the Evolution of Cooperation. *Proceedings of the National Academy of Sciences*. **110(25)**10229.

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.

Nowzari, H., Hemami, M., Karami, M., Zarkesh, M.M.K., Riazi, B., **Rubenstein, D.** (2013). Habitat associations of persian wild ass (*Equus Hermionus Onager*) in QA - Trouyeh National Park, Iran, pp. 25-30 http://www.princeton.edu/~dir/pdf_dir/2013_IWMC%20proceedings-Persian%20Onagers.pdf

Rubenstein, D.I. & Hack, M.A. (2013) Migration. *Encyclopedia of Biodiversity* (2nd edition, 309-320). Academic Press, Amsterdam.

Rubenstein, D. I., & Rubenstein, D.R., (2013) Social Behavior. *Encyclopedia of Biodiversity* (2nd edition). Academic Press, Amsterdam. 571-579

Ward, A., Herbert-Read, J., Jordan, L., James, R., Krauser, J., Ma, Q., **Rubenstein, D.I.**, Sumpter, D., Morrell, L.J. (2013) Initiators, leaders and recruitment mechanisms in the collective movements of damselfish. *American Naturalist*. **181(6)**748-760.

2012

Chandler, M., D.P. Bebbler, S. Castro, M.D. Lowman, P. Muoria, N. Oguge, **D.I. Rubenstein**. (2012). International citizen science: making the local global. *Frontiers in Ecology and the Environment*. **10**: 328-331. <http://www.esajournals.org/doi/abs/10.1890/110283>

Dixit, A., S. Levin, and **D. Rubenstein**. (2012). Reciprocal insurance among Kenyan pastoralists. *Theoretical Ecology*. **6(2)**173-187.

2011

Crofoot, M. C., **D. I Rubenstein**, A. S. Maiya & T. Y. Berger-Wolf. (2011). Aggression, grooming and group-level cooperation in white-faced capuchins (*Cebus capucinus*): Insights from social networks. *American Journal of Primatology*. **73**: 821-833. DOI: 10.1002/ajp.20959.

Didier, K. A., A. Cotterill, I. Douglas-Hamilton, L. Frank, N. J. Georgiadis, M. Graham, F. Ihwagi, J. King, D. Malleret-King, **D. I. Rubenstein**, D. Wilkie, & R. Woodroffe. (2011). Landscape-scale conservation planning of the Ewaso Nyiro: A model for land use planning in Kenya? *Smithsonian Contributions to Zoology*, **632**: 105-123. N. J. Georgiadis, ed. Smithsonian Institution Scholarly Press. <http://hdl.handle.net/10088/167143>

Lahiri, M., C. Tantipathananandh, R. Warungu, **D. I. Rubenstein** & T. Y. Berger-Wolf. (2011). Biometric Animal Databases from Field Photographs: Identification of Individual Zebra in the Wild. *Proceedings of the ACM International Conference on Multimedia Retrieval (ICMR 2011)*, Trento, Italy. http://compbio.cs.uic.edu/~mayank/papers/LahiriEtal_ZebraID11.pdf

Nuñez, C., C. S. Asa & **D. I. Rubenstein**. (2011). Zebra Reproduction: Plains Zebra (*Equus burchelli*), Mountain Zebra (*Equus zebra*), and Grevy's Zebra (*Equus grevyi*). Pp. 2851-2865. In: *Equine Reproduction*, 2nd edition. A. O. McKinnon, E. L Squires, W. E. Vaala & D. D. Varner, eds. Wiley-Blackwell, Ames, Iowa.

Odadi, W. O., M. Jain, S. E. Van Wieren, H.H.T. Prins & **D. I. Rubenstein** (2011). Facilitation between bovids and equids in an African savanna. *Evolutionary Ecology Research* **13**: 237-252.

Rubenstein, D. I. (2011). Family equidae (Horses and relatives). Pp. 106-143. In: *Handbook of Mammals of the World, Vol. 2, Hoofed Mammals*, D. E. Wilson and R. A. Mittermeier, eds. Lynx Edicions, Barcelona, Spain.

2010 - 1974

Fischhoff, I. R., S. R. Sundaresan, H. M. Larkin, J. E. Cordingley, M-J. Sellier & **D. I. Rubenstein**. (2010). A rare fight between two female plains zebra (*Equus burchelli*). *Journal of Ethology* **28**: 201-205. DOI 10.1007/s10164-009-0183-7

Jordan, L., C. Avolio, J. Herbert-Read, J. Krause, **D. Rubenstein** & A. Ward. (2010). Group structure in a restricted entry system is mediated by both resident and joiner preferences. *Behavioral Ecology and Sociobiology*. **64(7)**: 1099–1106. DOI: 10.1007/s00265-010-0924-1

Rubenstein, D. I. (2010). The secret lives of horses. *Odyssey Magazine*. **19(5)**: 24-27.

- Madosky, J. M., **D. I. Rubenstein**, J. J. Howard & S. Stuska. (2010). The effects of immunocontraception on harem fidelity in a feral horse (*Equus caballus*) population. *Applied Animal Behavior Science* **128**: 50-56. DOI: 10.1016/j.applanim.2010.09.013
- Nuñez, C.M.V., J.S. Adelman & **D. I. Rubenstein**. (2010). Immunocontraception in wild horses (*Equus caballus*) extends reproductive cycling beyond the normal breeding season. *PLoS ONE*. **5(10)**: e13635. doi:10.1371/journal.pone.0013635
- Rubenstein, D. I.** (2010). Ecology, social behavior, and conservation in zebras. Pp. 231–258. In: *Advances in the Study Behavior: Behavioral Ecology of Tropical Animals*, Vol. 42. R. Macedo, ed. Elsevier Press, Oxford, UK. DOI: 10.1016/S0065-3454(10)42007-0
- Cordingley, J. E., S. R. Sundaresan, I. R. Fischhoff, B. Shapiro, J. Ruskey & **D. I. Rubenstein**. (2009). Is the endangered Grevy's zebra (*Equus grevyi*) threatened by hybridization? *Animal Conservation* **12**: 505-513. DOI: 10.1111/j.1469-1795.2009.00294.x
- Cordingley, J. E., S. R. Sundaresan, B. J. Larison, B. Shapiro & **D. I. Rubenstein**. (2009). Response: Grevy's zebra conservation: overcoming threats of isolation, genetic hybridization and demographic instability. *Animal Conservation* **12**: 520-521.
- Didier, K. A., D. Wilkie, I. Douglas-Hamilton, L. Frank, N. Georgiadis, M. Graham, F. Ihwagi, A. King, A. Cotterill, **D. Rubenstein** & R. Woodroffe. (2009). Conservation planning on a budget: a "resource light" method for mapping priorities at a landscape scale? *Biodiversity and Conservation*, **18**: 1979-2000.
- Fischhoff, I. R., J. Dushoff, S. R. Sundaresan, J. E. Cordingley & **D. I. Rubenstein**. (2009). Reproductive status influences group size and persistence of bonds in male plains zebra (*Equus burchelli*). *Behavioral Ecology and Sociobiology* **63**: 1035-1043. DOI 10.1007/s00265-009-0723-8
- Low B., S. R. Sundaresan I. R. Fischhoff & **D. I. Rubenstein**. (2009). Partnering with local communities to identify conservation priorities for endangered Grevy's zebra. *Biological Conservation*. **142(7)**: 1548-1555.
- Nuñez, C.M.V., J. S. Adelman, C. Mason & **D. I. Rubenstein**. (2009). Immunocontraception decreases group fidelity in a feral horse population during the non-breeding season. *Applied Animal Behaviour Science* **117** (1-2): 74-83.
- Rubenstein, D. I.** (2009). Social behavior and sociobiology. Pp. 237-255. In: *Evolution: The First Four Billion Years*. M. Ruse and J. Travis (eds). Harvard University Press, Cambridge, MA. <http://www.hup.harvard.edu/catalog/RUSEVL.html?show=contents>
- Rubenstein, D. I.**, & C. Nuñez. (2009). Sociality and reproductive skew in horses and zebras. Pp. 196-226. In: *Reproductive Skew in Vertebrates: Proximate and Ultimate Causes*. R. Hager, C. B. Jones (eds). Cambridge University Press. <http://www.cambridge.org/catalogue/catalogue.asp?isbn=9780521864091>
- Franceschini, M. D., **D. I. Rubenstein**, B. Low & L. M. Romero. (2008). Fecal glucocorticoid metabolite analysis as an indicator of stress during translocation and acclimation in an endangered large mammal, the Grevy's zebra. *Animal Conservation* **11**: 263-269.
- Sundaresan, S. R., I. R. Fischhoff, H. M. Hartung, P. Akilong & **D. I. Rubenstein**. (2008). Habitat choice of Grevy's zebras (*Equus grevyi*) in Laikipia, Kenya. *African Journal of Ecology* **46(3)**: 359-364. doi: 10.1111/j.1365-2028.2007.00848.x (September 21, 2007)
- Fischhoff I. R., S. R. Sundaresan, J. Cordingley, H. M. Larkin, M-J. Sellier & **D. I. Rubenstein** (2007). Social relationships and reproductive state influence leadership roles in movements of plains zebra (*Equus burchelli*). *Animal Behaviour* **73(5)**: 825-831.
- Fischhoff, I. R., S. R. Sundaresan, J. Cordingley & **D. I. Rubenstein**. (2007). Habitat use and movements of plains zebra (*Equus burchelli*) in response to predation danger from lions. *Behavioral Ecology* **18(4)**: 725-729. doi: 10.1093/beheco/arm036

- Pringle, R. M., T. P. Young, **D. I. Rubenstein** & D. J. McCauley. (2007). Herbivore-initiated interaction cascades and their modulation by productivity in an African savanna. *Proceedings of the National Academy of Sciences, USA* **104**(1): 193-197.
<http://www.pnas.org/cgi/content/full/104/1/193>
- Rubenstein, D. I.**, S. Sundaresan, I. Fischhoff & D. Saltz (2007). Social networks in wild asses: Comparing patterns and processes among populations. Pp: 159-176. In: *Exploration into the Biological Resources of Mongolia, Vol. 10*. A. Stubbe, P. Kaczensky, K. Wesche, R. Samjaa, M. Stubbe (eds.). Martin-Luther-University Halle-Wittenberg, Halle (Saale).
- Sundaresan, S. R., I. R. Fischhoff, J. Dushoff & **D. I. Rubenstein**. (2007). Network metrics reveal differences in social organization between two fission-fusion species, Grevy's zebra and onager. *Oecologia* **151**(1): 140-149. doi:10.1007/s00442-006-0553-6
- Sundaresan, S. R., I. R. Fischhoff & **D. I. Rubenstein**. (2007). Male harassment influences female movements and associations in Grevy's zebra (*Equus grevyi*). *Behavioral Ecology* **18**(5): 860-865. doi:10.1093/beheco/arm055
- Rubenstein, D. I.** (2006). Horses, asses, and zebras. Pp. 690-695. In: *The Encyclopedia of Mammals*. D. W. MacDonald (ed.). Oxford University Press.
- Rubenstein, D. R., **D. I. Rubenstein**, P. W. Sherman & T. A. Gavin (2006). Pleistocene Park: Does re-wilding North America represent sound conservation for the 21st century? *Biological Conservation* **132**: 232-238. dx.doi.org/10.1016/j.biocon.2006.04.003
- Saltz, D., **D. I. Rubenstein** & G. C. White (2006). The impact of increased environmental stochasticity, due to climate change on the dynamics of Asiatic wild ass. *Conservation Biology* **20**(5): 1402-1409. dx.doi.org/10.1111/j.1523-1739.2006.00486.x
- Muoria, P. K., P. Muruthi, **D. Rubenstein**, N. O. Oguge & E. Munene (2005). Cross-sectional survey of gastro-intestinal parasites of Grevy's zebras in southern Samburu, Kenya. *African Journal of Ecology* **43**: 392-395.
- Weinstock, J., E. Willerslev, A. Sher, W. Tong, S. Y.W. Ho, **D. Rubenstein**, J. Storer, J. Burns, L. Martin, C. Bravi, A. Preito, D. Froese, E. Scott, L. Xulong & A. Cooper (2005). Evolution, systematics, and phylogeography of Pleistocene horses in the New World: A molecular perspective. *PloS Biology* **3**(8): 1373-1379. doi:10.1371/journal.pbio.0030241
- Zhang, P., C. M. Sadler, T. Liu, I. Fischhoff, M. Martonosi, S. A. Lyons & **D. I. Rubenstein**. (2005). Habitat monitoring with ZebraNet: Design and experiences. Pp: 235-257. In: *Wireless Sensor Networks: A Systems Perspective*. N. Bulusu and S. Jha (eds.). Artech House, Norwood, MA.
- Rubenstein, D. I.** (2004). Zebra sociality: Different stripes for different types. *Balliol College Record*. Pp 18-23.
- Rubenstein, D. I.** (2004). Herd dynamics: Why aggregations vary in size and complexity. Pp 994-1000. In: *Encyclopedia of Animal Behavior*, M. Bekoff, (ed.). Greenwood Press, Westport, CT.
- Rothley, K. D., C. N. Berger, C. Gonzalez, E. M. Webster & **D. I. Rubenstein**. (2004). Combining strategies to identify reserves in fragmented landscapes. *Conservation Biology* **18**: 1121-1131.
- Tien, J. H., **D. I. Rubenstein** & S. A. Levin (2004). A field study on the proximate mechanisms of fish shoaling. *Evolutionary Ecology Research* **6**: 555-565.
- Rubenstein, D. I.**, & M. Hack (2004). Natural and sexual selection and the evolution of multi-level societies: insights from zebras with comparisons to primates. Pp. 266-279. In: *Sexual Selection in Primates: New and Comparative Perspectives*. P. Kappeler and C. P. van Schaik (eds.). Cambridge University Press.
- Hack, M. A., R. East & **D. I. Rubenstein**. (2002). Status and action plan for the Plains zebra (*Equus burchelli*). Pp 43-57. In *Equids: Zebras, Asses, and Horses: Status Survey and Conservation Action Plan*.

- P. D. Moehlman (ed.). IUCN/SSC Equid Specialist Group. IUCN, Gland, Switzerland.
<http://www.iucn.org/themes/ssc/publications/actionplans.htm>
- Juang, P., H. Oki, Y. Want, M. Martonosi, L.-S. Peh & **D. Rubenstein** (2002). Energy-efficient computing for wildlife tracking: Design tradeoffs and early experiences with ZebraNet. In: *Architectural Support for Programming Languages and Operating Systems*. (Proceedings of ASPLOS-X, San Jose, CA, October 2002).
- Rubenstein, D. I.** (2001). Horses, asses, and zebras. Pp. 482-487. In: *Encyclopedia of Mammals*. D. W. MacDonald (ed.). Oxford University Press.
- Hack, M. A., & **D. I. Rubenstein** (2001). Migration. Pp. 221-234. In: *Encyclopedia of Biodiversity*, Volume 4. S. A. Levin (ed.). Academic Press.
- Rubenstein, D. I.** (2001). Social behavior. Pp. 295-304. In: *Encyclopedia of Biodiversity*, Volume 5. S. A. Levin (ed.). Academic Press.
- Saltz, D., M. Rowen & **D. I. Rubenstein** (2000). The effect of space-use patterns of reintroduced Asiatic wild ass on effective population size. *Conservation Biology* **14**: 1852-1861.
- Krause, J., D. J. Hoare, S. Krause, C. K. Hemelrijk & **D. I. Rubenstein** (2000). Leadership in fish shoals. *Fish and Fisheries* **1**: 82-89.
- Rubenstein, D. I.** (1999). *Reforming Science & Mathematics Education: Making Inquiry Based Science Self-Sustaining*. January 21, 1999. Online publication.
http://lsc-net.terc.edu/do.cfm/conference_material/6879/show/use_set-
 Sponsored by: Merck Institute for Science Education/NSF at their Local Systemic Change Meeting.
- Hack, M., & **D. I. Rubenstein** (1998). Zebra zones. *Natural History* **107**(2): 26-29.
- Rubenstein, D. I.** (1998). Behavioral ecology and conservation policy: On balancing science, applications, and advocacy. Pp 527-553. In: *Behavioral Ecology & Conservation Biology*. T. Caro (ed.). Oxford University Press.
- Krause J., G. D. Ruxton & **D. I. Rubenstein** (1998). Is there an influence of group size on predator hunting success? *Journal of Fish Biology* **52**: 494-501.
- Krause, J., G. J. Godin & **D. I. Rubenstein** (1998). Group choice as a function of group size difference and assessment time in fish: the influence of species vulnerability to predation. *Ethology* **104**: 68-74.
- Bumann D., J. Krause & **D. I. Rubenstein** (1997). Mortality risk of spatial positions in animal groups: the danger of being in the front. *Behaviour* **134**: 1063-1076.
- Krause J., **D. I. Rubenstein** & D. Brown (1997). Shoal choice behaviour in fish: the relationship between assessment time and assessment quality. *Behaviour* **134**: 1051-1062.
- Gueron, S., S. A. Levin & **D. I. Rubenstein** (1996). The dynamics of mammalian herds: From individuals to aggregations. *Journal of Theoretical Biology* **182**: 85-98.
- Saltz, D., & **D. I. Rubenstein** (1995). Population dynamics of a reintroduced Asiatic Wild Ass (*Equus hemionus*) herd. *Ecological Applications* **5**: 327-335.
- Rubenstein, D. I.** (1994). Princeton's science advisors: A neural network. Pp. 167-169. In: *Scientists, Educators, and National Standards Action at the Local Level, Forum Proceedings*. Sigma Xi, The Scientific Research Society.
- Rubenstein, D. I.** (1994). The ecology of female social behavior in horses, zebras, and asses. Pp. 13-28. In: *Animal Societies: Individuals, Interactions, and Organization*. P. Jarman and A. Rossiter (eds.). Kyoto University Press.
- Rubenstein, D. I.** (1993). Science and the pursuit of a sustainable world. *Ecological Applications* **3**: 585-587.

- Rubenstein, D. I.** (1993). On the evolution of juvenile lifestyles in mammals. Pp. 38-57. In: *Juvenile Primates: Life history, Development, and Behavior*. M. E. Pereira and L. A. Fairbanks (eds.). Oxford University Press.
- Rubenstein, D. I., & M. Hack** (1992). Horse signals: the sounds and scents of fury. *Evolutionary Ecology* **6**: 254-260.
- Rubenstein, D. I.** (1991). The greenhouse effect and changes in animal behavior: effects on social structure and life-history strategies. In: *Consequences of Global Warming for Biodiversity*. R. Peters (ed.). Yale University Press.
- Ginsberg, J. R., & **D. I. Rubenstein** (1990). Sperm competition and zebra mating behaviour. *Behavioral Ecology and Sociobiology* **26**: 427-434.
- Rubenstein, D. I.** (1990). Critical thinking and biology teaching. Pp. 11-23. In: *Continuing Dialogue*. R. H. Dollase (ed.). CETE Report, Middlebury College.
- Dobson, A., A. Jolly & **D. I. Rubenstein** (1989). The greenhouse effect and biological diversity. *Trends in Ecology and Evolution* **4**: 64-78.
- Rubenstein, D. I., & M. E. Hohmann** (1989). Parasites and social behavior of island feral horses. *Oikos* **55**: 300-312.
- Rubenstein, D. I.** (1989). Life history and social organization in arid adapted ungulates. *Journal of Arid Environments* **17**: 145-156.
- Rubenstein, D. I.** (1989). Sperm competition in the water strider *Gerris remigis*. *Animal Behaviour* **38**: 631-636.
- Rubenstein, D. I.** (1987). Alternative reproductive tactics in the spider *Meta segmentata*. *Behavioral Ecology and Sociobiology* **20**: 229-237.
- Wrangham, R. W., & **D. I. Rubenstein** (1986). Social evolution in birds and mammals. Pp. 452-470. In: *Ecological Aspects of Social Evolution*. **D. I. Rubenstein & R. W. Wrangham**, (eds.). Princeton University Press, Princeton, NJ.
- Rubenstein, D. I., & R. W. Wrangham** (1986). Socioecology: Origins and trends. Pp. 3-20. In: *Ecological Aspects of Social Evolution*. **D. I. Rubenstein & R. W. Wrangham**, (eds.). Princeton University Press, Princeton, NJ.
- Rubenstein, D. I.** (1986). Ecology and sociality in horses and zebras. Pp. 282-302. In: *Ecological Aspects of Social Evolution*. **D. I. Rubenstein & R. W. Wrangham**, (eds.). Princeton University Press, Princeton, NJ.
- Bischoff, R. J., J. L. Gould & **D. I. Rubenstein** (1985). Tail size and female choice in the guppy (*Poecilia reticulata*). *Behavioral Ecology and Sociobiology* **17**: 253-255.
- May, R. M., & **D. I. Rubenstein** (1985). Reproductive strategies. Pp. 1-23. In: *Reproduction in Mammals*, Volume 4. C. R. Austin and R. V. Short (eds.). Cambridge University Press, Cambridge, UK.
- Rubenstein, D. I.** (1984). Resource acquisition and alternative mating strategies in water striders. *American Zoologist* **24**: 345-353.
- Horn, H. S., & **D. I. Rubenstein** (1984). Behavioural adaptations and life history. Pp. 279-300. In: *Behavioural Ecology*. J. R. Krebs and N. B. Davies (eds.). Blackwell Scientific Publications. Oxford.
- Schulman, S. R., & **D. I. Rubenstein** (1983). Kinship, need and the distribution of altruism. *American Naturalist* **121**: 776-788.
- Rubenstein, D. I.** (1982). Reproductive value and behavioural strategies: Coming of age in monkeys and horses. *Perspectives in Ethology* **5**: 469-487.

- Rubenstein, D. I.** (1982). Complexity in evolutionary processes. Pp. 87-89. In: *Current Problems in Sociobiology*. King's Sociobiology Group (eds.). Cambridge University Press. Cambridge, UK.
- Rubenstein, D. I.** (1982). Risk, uncertainty, and evolutionary strategies. Pp. 91-111. In: *Current Problems in Sociobiology*. Bertram, B. C. R., Clutton-Brock, T. H., Dunbar, R. I. M., **Rubenstein, D. I.**, & Wrangham, R. W. (eds.). Cambridge University Press. Cambridge, UK.
- Parker, G. A., & **D. I. Rubenstein** (1981). Role assessment, reserve strategy, and acquisition of information in asymmetric animal contests. *Animal Behaviour* **29**: 221-240.
- Rubenstein, D. I.** (1981). Combat and communication in the Everglades pygmy sunfish. *Animal Behaviour* **29**: 249-258.
- Rubenstein, D. I.** (1981). Population density, resource patterning, and territoriality in the Everglades pygmy sunfish. *Animal Behaviour* **29**: 155-172.
- Rubenstein, D. I.** (1981). Individual variation and competition in the Everglades pygmy sunfish. *Journal of Animal Ecology* **50**: 337-350.
- Rubenstein, D. I.** (1981). Behavioural ecology of island feral horses. *Equine Veterinarian J.* **13**: 27-34.
- Rubenstein, D. I.**, & R. W. Wrangham (1980). Why is altruism toward kin so rare? *Zeitschrift fur Tierpsychologie* **54**: 381-387.
- Rubenstein, D. I.** (1980). On the evolution of alternative mating strategies. Pp. 65-100. In: *Limits to Action: The Allocation of Individual Behaviour*. J. E. R. Staddon (ed.). Academic Press, N.Y.
- Wilbur, H. M., **D. I. Rubenstein** & L. Fairchild (1978). Sexual selection in toads: the role of female choice and male body size. *Evolution* **32**: 264-270.
- Rubenstein, D. I.** (1978). On predation, competition, and the advantages of group living. *Perspectives in Ethology* **3**: 205-231.
- Fairchild, L., **D. I. Rubenstein**, S. T. Patti & P. H. Klopfer (1977). Seasonal changes in the feeding strategies of mixed and single species flocks. *Ibis* **119**: 85-87.
- Rubenstein, D. I.**, & M. A. R. Koehl (1977). The mechanisms of filter-feeding: some theoretical considerations. *American Naturalist* **111**: 981-994.
- Klopfer, P. H., & **D. I. Rubenstein** (1977). The concept "Privacy" and its biological basis. *Journal of Social Issues* **33**: 52-65.
- Rubenstein, D. I.**, R. J. Barnett, R. S. Ridgely & P. H. Klopfer (1977). Adaptive advantages of mixed species feeding flocks in Costa Rica. *Ibis* **119**: 10-21.
- Hazlett, B. A., **D. I. Rubenstein** & D. Rittschoff (1975). Starvation, aggression and energy reserves in the crayfish (*Orconectes virilis*). *Crustaceana* **28**: 11-26.
- Patti, S. T., **D. I. Rubenstein** & N. Rubenstein (1974). Distributional notes on the birds of Cayman Brac. *Florida Scientist* **37**: 155-156.
- Rubenstein, D. I.**, & B. A. Hazlett (1974). Examination of the antagonistic behavior of the crayfish *Orconectes virilis* by character analysis. *Behavior* **50**: 193-216.
- Klopfer, P. H., **D. I. Rubenstein**, R. S. Ridgely & R. J. Barnett (1974). Migration and species diversity in the tropics. *Proceedings of the American Academy of Science, USA* **71**(2): 339-340.
- Hazlett, B. A., D. Rittschoff & **D. I. Rubenstein** (1974). Behavioral biology of the crayfish *Orconectes virilis* 1. Home ranges. *American Midland Naturalist* **92**: 301-319.

Manuscripts in Progress

Habiba, Berger-Wolfé, T., **Rubenstein, D.I.**, Spread of information and disease in equid social networks.

Quinn, R. L., I. Fischhoff & D. I. Rubenstein. Plains zebra diet variability: A stable isotopic approach. *Oecologia*.

Rothley, K. D., **D. I. Rubenstein**, S. Marshall & T. Chase. Conservation of the northern harrier (*Circus cyaneus*) in the sandplain natural communities on Martha's Vineyard Island, Massachusetts.

Sumpter, D., I. Couzin, I. Fischhoff & **D. I. Rubenstein**. On the dynamics of zebra groupings in time and space. *Animal Behaviour*.

Reviews and Short Essays

Alberts, S.C. & **Rubenstein, D.I.** (2017) Obituary: Stuart Altmann. *African Primates*.

Rubenstein, D. I. & Kammen, D.M. (2014) The launch of Environmental Reviews Research. *Environmental Research Letters*. **10** 120402

Rubenstein, D. I. (2010). Water, Savannas, and Society: Sustaining People and Wildlife Through Better Science. *African Voices* **2(2)**: 9-12. (<http://www.puvoicesofafrica.com/files/vol3.pdf>)

Moehlman, P.D., Rubenstein, D.I. & Kebble, F. (2008). Equis grevyi, IUCN Red List of Threatened Species. Version 2011.1.

Rubenstein, D. I., & M. Martonosi (2006). Wireless Networks and Zebra Movements: Radio Tracking Enters the 21st Century. *Mpala Foundation Newsletter* **2006**: 2-3.

Rubenstein, D. I. (1991). Mammalian Dispersal patterns: The Effects of Social Structure on Population Genetics, B. Diane Cherpko-Sade and Zuleyma Tang Halpin, (eds.) *American Scientist* **79**: 82-83.

Rubenstein, D. I. (1990). The ups and downs of researching cycling populations. *Bioscience* **40**: 319.

Rubenstein, D. I. (1987). Introductions to animal behavior. Review of *Animal Behavior: A Concise Introduction* by Mark Ridley and *An Introduction to Behavioural Ecology* by J.R. Krebs and N.B. Davies. *Trends in Ecology and Evolution* **11**: 346-347.

Rubenstein, D. I. (1988). Wild Horses of the Great Basin: Social Competition and Population Size by Joel Berger, 1986. *American Scientist* **76**: 196.

Rubenstein, D. I. (1985). Animal behaviour: The serpent's seductive scent. *Nature (News & Views)* **316**:18-19.

Rubenstein, D. I. (1983). Toward a realistic sociobiology. *Contemporary Psychology* **28**: 271-272.

Rubenstein, D. I. (1983). A provocative look at chromosomal evolution. *Bioscience* **33**: 58.

Rubenstein, D. I. (1982). Feeding as optimization. *Science* **217**: 820-821.

Rubenstein, D. I. (1980). Arachnology. *Animal Behaviour* **28**: 315-316