## Noa M. Pinter-Wollman, PhD Department of Ecology and Evolutionary Biology University of California, Los Angeles nmpinter@ucla.edu https://pinterwollmanlab.eeb.ucla.edu/

# **Education**

2008	Ph.D. Animal Behavior. University of California, Davis
	Dissertation title: The effects of translocation on the behavior of African elephants (Loxodonta africana)
2004	M.S. Animal Behavior. University of California, Davis
2003	<b>B.Sc.</b> Biology in the program for outstanding students of the Life Sciences Faculty, <i>Summa Cum Laude</i> . Tel-Aviv University (TAU), Israel

## **Appointments**

2018-present	Associate Professor, Department of Ecology and Evolutionary Biology, UCLA
2016-2018	Assistant Professor, Department of Ecology and Evolutionary Biology, UCLA
2012-2016	Assistant Research Scientist, BioCircuits Institute, University of California, San Diego
2011-2012	Lecturer and core course coordinator, Program in Human Biology, Stanford University
2010-2011	Postdoctoral Fellow, Department of Statistics, Stanford University
2008-2010	NSF Postdoctoral Fellow in Biological Informatics, Department of Biology, Stanford University

# Grants and Fellowships

2016-2021	NIH NIGMS R01 #GM115509 "Modeling how keystone individuals emerge and influence disease transmission" (\$2,031,286)
2015-2019	NIH NIGMS R01 #GM113967 "Multiscale model of exploration-exploitation tradeoff: from genes to collectives" (Consortium PI, \$1,154,614)
2015-2018	NSF IOS-Behavioral Systems #1456010/1708455 "Collaborative Research: The effects of keystone individuals on collective behavior" (\$325,852 + \$24,789 supplement in 2017)
2015-2016	NAKFI Collective Behavior grant "How do architectural designs affect collective behavior?" (\$100,000)
2012-2015	Investigator in the NIH P50 #GM085764 Center of Excellence Grant to the San Diego Center for Systems Biology (SDCSB)
2008-2010	NSF Postdoctoral Fellowship in Biological Informatics (\$123,000)
2007	International Elephant Foundation (\$9,780)
2005-06	Lincoln Park Zoo – Field Conservation Funds (\$5,810)

## <u>Awards</u>

2018	Distinguished faculty teaching award, EEB department, UCLA
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## **Publications**

authors who conducted work as \* undergraduate or \*\*high school students; #equal contributors

- 44. Silk M.J., Finn K.R., Porter M.A., & **Pinter-Wollman N.** 2018. Can multilayer networks advance animal behavior research? <u>Trends in Ecology and Evolution</u>. 33:6.
- 43. Pinter-Wollman N., Penn A., Theraulaz G. & Fiore S.M. 2018 Interdisciplinary approaches for uncovering the impacts of architecture on collective behaviour. <u>Philosophical Transactions of the Royal Society B.</u> 20170232. http://dx.doi.org/10.1098/rstb.2017.0232
- 42. Pinter-Wollman N., Jelic A., & Wells N.M. 2018. The impact of the built environment on health behaviors and disease transmission in social systems. <u>Philosophical Transactions of the Royal Society B</u>. 20170245
- 41. <sup>#</sup>Pruitt J.N., <sup>#</sup>Wright C.M., <sup>#</sup>Lichtenstein J.L.L, \*Chism G.T., \*Mcewen B.I, Kamath A. & **Pinter-Wollman N.** 2018. Selection for collective aggressiveness favors social susceptibility in social spiders, <u>Current Biology</u>, 28:100-105.
- Wright C.M., Lichtenstein J.L.L., \*Montgomery G.A., Luscuskie L.P., Pinter-Wollman N., & Pruitt J.N. 2017. Exposure to predators reduces collective foraging aggressiveness and eliminates its relationship with colony personality composition. <u>Behavioral Ecology Sociobiology</u>. 71:126
- 39. Lichtenstein J.L.L, Wright C.M., \*McEwen B., **\*Pinter-Wollman N.** & **\***Pruitt J.N. 2017. The multidimensional behavioral hypervolumes of two interacting species predict their space use and survival. <u>Animal Behaviour</u>. 132:129-136
- 38. Mosqueiro T., Cook C., Huerta R., Gadau J., Smith B. & Pinter-Wollman N. 2017. Task allocation and site fidelity jointly influence foraging regulation in honeybee colonies. <u>Royal Society Open Science</u>. 4: 170344
- 37. Keiser C.N., **Pinter-Wollman N.**, \*Ziemba M.J., \*Kothamasu K.S., & Pruitt J.N. 2018. The primary case is not enough: Variation among individuals, groups, and social networks modify bacterial transmission dynamics. <u>Journal of Animal Ecology</u>. 87:369–378
- 36. **Pinter-Wollman N.**, \*Mi B. & Pruitt J.N. 2017. Social stability influences the effect of keystone individuals on group performance. Behavioral Ecology. 28(3): 883-889.
- 35. Pinter-Wollman N., Fiore S.M. & Theraulaz G. 2017. Uncovering the impact of architecture on collective behavior. <u>Nature Ecology and Evolution</u>. 1:0111 DOI: 10.1038/s41559-017-0111
- Pruitt J.N., Howell K.A., Gladney S.J., Yang Y., Lichtenstein J.L.L., Spicer M.E., Echeverri S.A., & Pinter-Wollman N. 2017. The behavioral hypervolume of predator groups and predator-predator interactions shape prey survival rates and selection on prey behavior. <u>American Naturalist</u>. 189(3):254-266.
- Lichtenstein J.L., Wright C.M., Luscuskie L.P., Montgomery G.A., Pinter-Wollman N. & Pruitt J.N., 2017. Participation in cooperative prey capture and the benefits gained from it are associated with individual personality. <u>Current Zoology</u>. doi: 10.1093/cz/zow097
- Pruitt J.N., Bolnick D.I., Sih A., DiRienzo N. & Pinter-Wolman N. 2016. Behavioral hypervolumes of spider communities predict community performance and disbandment. <u>Proceedings of the Royal Society B.</u> 283: 20161409.
- 31. Keiser C.N., Howell K.A., **Pinter-Wollman N.**, & Pruitt J.N. 2016. Personality composition alters the transmission of cuticular bacteria in social groups. <u>Biology Letters</u>. 12: 20160297. DOI: 10.1098/rsbl.2016.0297
- Pinter-Wollman N., Keiser C.N., Wollman R., & Pruitt J.N. 2016. The effect of keystone individuals on collective outcomes can be mediated through interactions or behavioral persistence. <u>American Naturalist.</u> 188(2):240-252.
- 29. Keiser C.N., **Pinter-Wollman N.**, \*Augustine D., \*Ziemba M., \*Hao L., Lawrence J., & Pruitt J.N. 2016. Individual differences in boldness influence patterns of social interactions and the transmission of cuticular bacteria among group-mates. <u>Proceedings of the Royal Society B.</u> 283: 20160457
- Pruitt J.N., Wright C.M., Keiser C.N., DeMarco A., Grobis M.M., & Pinter-Wollman N. 2016. The Achilles heel hypothesis: misinformed keystone individuals impair collective learning and reduce group success. <u>Proceedings</u> of the Royal Society B. 283: 20152888.
- 27. Pinter-Wollman N. 2015. Nest architecture shapes the collective behavior of harvester ants. <u>Biology Letters</u> 11: 20150695. <u>Media coverage: "How architecture can make ants better workers" Science News, Oct. 20th, 2015</u>.
- 26. \*Pless E., \*Queirolo J., Pinter-Wollman N., \*\*Crow S., \*Allen K., Mathur M.B., & Gordon D.M. 2015. Interactions increase forager availability and activity in harvester ants. <u>PLoS One.</u> 10(11): e0141971.

- 25. Pruitt J.N. & **Pinter-Wollman N.** 2015. The legacy effects of keystone individuals on collective behavior scale to how long they remain within a group. <u>Proceedings of the Royal Society B.</u> 282:20151766.
- 24. Pinter-Wollman N. & Brown M.J.F. 2015. Variation in nest relocation of harvester ants is affected by population density and food abundance. <u>Behavioral Ecology</u>. 26:1569-1576.
- 23. Greening B.R., **Pinter-Wollman N.**, & Fefferman N.H. 2015. Higher-order interactions: Understanding the knowledge capacity of social groups using simplicial sets. <u>Current Zoology</u>. 61(1):114 -127.
- 22. Pinter-Wollman N. 2015. Persistent variation in spatial behavior affects the structure and function of interaction networks. <u>Current Zoology</u>. 61(1):98-106.
- Udiani O., Pinter-Wollman N., & Kang Y. 2015. Identifying robustness in the regulation of collective foraging of ant colonies using an interaction-based model with backward bifurcation. <u>Journal of Theoretical Biology.</u> 367:61– 75.
- 20. \*Hui A. & Pinter-Wollman N. 2014. Individual variation in exploratory behaviour improves speed and accuracy of collective nest selection by Argentine ants. <u>Animal Behaviour.</u> 93:261-266.
- Pinter-Wollman N., Hobson E.A., Smith J.E., Edelman A.J., Shizuka D., Waters J.S., de Silva S., Prager S.D. Sasaki T., Wittemyer G., Fewell J., & McDonald D.B. 2014. The dynamics of animal social networks: analytical, conceptual, and theoretical advances. <u>Behavioral Ecology</u>. 25(2):242-255. <u>Most cited paper in the journal in the years 2014-2015.</u>
- 18. Jandt J.M., Bengston S., **Pinter-Wolman N.**, Pruitt J., Raine N.E., Dornhaus A. & Sih A. 2014. Behavioral syndromes and social insects: personality at multiple levels. <u>Biological Reviews.</u> 89(1):48-67.
- 17. Pinter-Wollman N., \*\*Bala A., \*Queirolo J., Merrel A., M.C. Stumpe, Holmes S. & Gordon D.M. 2013. Harvester ants use interactions to regulate forager activation and availability. <u>Animal Behaviour.</u> 86:197-207.
- 16. Flanagan T., **Pinter-Wollman N.**, Moses M., & Gordon D.M. 2013. Fast and flexible: Argentine ants recruit from nearby trails. <u>PLoS One</u>. 8(8): e70888
- 15. Gordon D.M., \*Dektar K., & Pinter-Wollman N. 2013. Harvester ant colony variation in foraging activity and response to humidity. <u>PLoS One</u>. 8(5): e63363.
- 14. Greene, M. J., **Pinter-Wollman N.**, & Gordon D.M. 2012. Combined chemical cues inform harvester ant foragers' decisions to leave the nest in search of food. <u>PLoS One</u>. 8(1): e52219
- 13. Pinter-Wollman N., \*Hubler J., \*Holley J.A., Franks N.R. & Dornhaus A. 2012. How is activity distributed among and within tasks in *Temnothorax* ants? <u>Behavioural Ecology</u>, Sociobiology. 66:1407-1420
- 12. Pinter-Wollman N. Gordon D.M. & Holmes S. 2012. Nest site and weather affect the 'personality' of harvester ant colonies. <u>Behavioral Ecology</u>. 23:1022-1027
- 11. **Pinter-Wollman N.** 2012. Human–elephant conflict in Africa: the legal and political viability of translocations, wildlife corridors, and transfrontier parks for large mammal conservation. <u>Journal of International Wildlife Law</u> <u>and Policy</u>. 15(2):152-166
- 10. Pinter-Wollman N. 2012. Personality in social insects: how does worker personality determine colony personality? <u>Current Zoology</u>. 58(4): 579-587
- Pinter-Wollman N., Wollman R., Guetz A., Holmes S., & Gordon D.M. 2011. The effect of individual variation on the structure and function of interaction networks in harvester ants. <u>Journal of the Royal Society, Interface</u>. 8: 1562-1573. <u>Media coverage: "Ants take a cue from Facebook" Science Now, April 12th, 2011</u>
- 8. **Pinter-Wollman N.** 2009. Spatial behavior of translocated African elephants (*Loxodonta africana*) in a novel environment: using behavior to inform conservation actions. <u>Behaviour</u>. 146:1171-1192
- Pinter-Wollman N., Isbell L., & Hart L. 2009. Assessing translocation outcome: Comparing behavioral and physiological aspects of translocated and resident African elephants (*Loxodonta africana*). <u>Biological</u> <u>Conservation</u>. 142:1116-1124
- Pinter-Wollman N., Isbell L., & Hart L. 2009. The relationship between social behavior and habitat familiarity in African elephants (*Loxodonta africana*). <u>Proceedings of the Royal Society B</u>. 276:1009-1014. <u>Media coverage:</u> <u>"Elephant Enclaves"</u> Interview on the CBC program Quirks & Quarks, January 3rd 2009

- 5. Hart B. L., Hart L. A., & Pinter-Wollman N. 2008. Large brains and cognitive behavior: Where do elephants fit in? <u>Neuroscience & Biobehavioral Reviews</u>. 32:86-98
- 4. Carey J. R., **Pinter-Wollman N.,** Wyman M., Muller H., Molleman F., & Zhang N. 2007. A search for principles of disability using experimental impairment of Drosophila melanogaster. Experimental Gerontology. 42:166-172
- 3. **\*Pinter-Wollman N.**, Dayan T., Eilam D., & Kronfeld-Schor N. 2006 Can aggression be the force driving temporal separation between competing common and golden spiny mice? <u>Journal of Mammalogy</u>. 87(1):48-53
- 2. Gordon D.M., \*Chu J., \*Lillie A., \*Tissot M., & \*\***Pinter N.** 2005. Variation in the transition from inside to outside work in the red harvester ant *Pogonomyrmex barbatus*. <u>Insectes Sociaux</u>. 52:212-217
- 1. Innocenti G., **\*\*Pinter N.,** & Galil B.S. 2003. Observations on the agonistic behavior of the swimming crab *Charybdis longicollis* Leene, infected by the rhizocephalan barnacle *Heterosaccus dollfusi* Boschma. <u>Journal of</u> <u>Canadian Zoology</u>. 81:173-176

PDFs of publications can be found here: <u>https://pinterwollmanlab.eeb.ucla.edu/sample-page/</u>

h-index (according to Google Scholar): 17

#### Invited Contributions

- 4. Pinter-Wollman N. 2015. Editorial: An introduction to the special column on animal social networks <u>Current</u> <u>Zoology</u>. 61(1):42-44.
- 3. Pinter-Wollman N. & Mabry K. 2010. Remote-sensing of behavior. In: <u>Encyclopedia of Animal Behavior</u>. Eds. Breed M. and Moore J. Vol 3. pp:33-40. Academic Press, Oxford.
- 2. Mabry K. & **Pinter-Wollman N.** 2010. Spatial orientation and time: Methods. In: <u>Encyclopedia of Animal Behavior</u>. Eds. Breed M. and Moore J. Vol 3. pp:308-314. Academic Press, Oxford.
- 1. **Pinter-Wollman N.** 2009. Book Review: Exploring Animal Social Networks. By Darren P. Croft, Richard James, and Jens Krause. <u>The Quarterly Review of Biology</u>. 84: 99-100.

## **Teaching experience**

- 2018 Advanced Statistics in Ecology and Evolutionary Biology EEB 172/C202, UCLA
- 2018 Ecology, Evolution and Genetics LS7B, UCLA
- 2017 Designed and taught 'Advanced Statistics in Ecology and Evolutionary Biology' (EEB C202), UCLA
- 2017-18 Taught in the animal behavior core course for graduate students EEB 200C, UCLA
- 2016 Co-instructor in the EEB R-bootcamp EEB 201, UCLA.
- 2016 Instigated, organized, and facilitated a professional development seminar series on academic careers in systems biology for postdocs and advanced graduate students, UCSD.
- 2012 Instigated, designed and taught an upper division undergraduate seminar on science 'Science Education in Human Biology' (HumBio 5E) at the Program of Human Biology, Stanford University.
- 2011-12 Lecturer and core course coordinator, Program in Human Biology, Stanford University.

#### Other teaching related experience:

- 2018 Participated in symposium on Exploring Practical Ways to Incentivize and Reward Teaching Effectiveness and Instructional Innovation, UCLA
- 2017- Steering committee of the NSF funded RCN-UBE: Statistical Thinking in Undergraduate Biology (STUB) Network: A network for coordinating the teaching and assessment of statistical thinking in introductory biology.

- 2017 UCLA Summer Institute on Scientific Teaching, organized by the Center for Education, Innovation, & Learning in the Sciences (CEILS).
- 2017 Participated in a workshop on enhancing student success in science, sponsored by the Dean of Life Sciences and the Dean of Physical Sciences, UCLA.
- 2016 Participated in the annual CEILS workshop on best practices in teaching, UCLA

#### Service:

2017-20	Editor for the journal Biology Letters, a publication of the Royal Society (board member).
2017-20	Editor for the journal Behavioral Ecology (editorial board).
2017-18	Organized the Southern California Animal Behavior meeting
2017-18	Guest editor for the Philosophical Transactions of the Royal Society B, special issue on architecture and collective behavior.
2016	Organized and ran a workshop on the effects of architecture on collective behavior, Phoenix, AZ
2016	Ad-hoc reviewer for NSF IOS Behavioral Systems
2014-17	Elected committee member, Animal Behavior Society Conservation Committee
2014-15	Outreach activities coordinator for the San Diego Center for Systems Biology (SDCSB)
2014	Co-organizer of a session 'Social Insects as Complex Systems' at the 7th International Symposium on Biomathematics and Ecology: Education and Research (BEER-2014), Claremont, CA
2014	Guest Editor for 'Current Zoology', special issue on Animal Social Networks
2014	Panelist on an NSF IOS Behavioral Systems review panel
2014	Organizer of the BCI seminar series, UCSD
2010	Organizer, Animal Collective Behavior: Decision Making of Groups Symposium at the national meeting of the Animal Behavior Society at Williamsburg, VA
2004-2005	Vice president of the Society for Conservation Biology, Davis chapter

#### Reviewed for:

<u>Granting agencies</u>: NSF Behavioral Systems Cluster, NSF Division of Environmental Biology, ABS student grants, ISF (Israel Science Foundation), DFG (Deutsche Forschungsgemeinschaft), ANR (Agence National De La Recherche)

<u>Journals</u>: Acta Biotheoretica, Animal Behaviour, Animal Conservation, Behavioral Ecology, Behaviour, Behavioural Ecology Sociobiology, Behavioural Processes, Biological Conservation, Biology Letters, Current Opinion in Insect Science, Current Zoology, Ecography, Ecology, Ecology and Evolution, Ecology Letters, European J. of Wildlife Research, Insect Science, Insectes Sociaux, Integrative and Comparative Biology, Integrative Zoology, Italian J. of Zoology, J. of Comparative Psychology, J. of the Royal Society Interface, J. of Theoretical Biology, J. of Wildlife Management, Nature Communications, PNAS, Proceedings of the Royal Society B, Physical Review E, Scientific Reports, The Science of Nature (Naturwissenschaften), Zoo Biology.

## Outreach:

- 2017 Developed and presented a lesson on solar eclipse to pre-school children at the Early Care Education center at UCLA.
- 2017 Grand award judge at the Intel International Science and Engineering Fair (ISEF), Animal Sciences category, Los Angeles, CA.
- 2017 Lessons on ant biology teaching experimental design and basic natural history to five 2<sup>nd</sup>-3<sup>rd</sup> grade classrooms at the Lab School, UCLA.

- 2016 Presented a lesson on ant behavior to pre-school children at the Early Care Education center at UCLA.
- 2016 Developed and taught a lesson plan on ant biology at the Montessori School of La Jolla (pre-school).
- 2015-16 Participated in Reuben H. Fleet Science Center's Spotlight on San Diego Science series to develop new Next Generation Science Standards (NGSS) aligned activities with K-12 teachers.
- 2015 Saturday Science Club for Girls and Women Scientist Action Summer Camp at the San Diego Reuben H. Fleet Science Center.
- 2014-17 Coordinator of SDCSB's public outreach activities.
- 2014 Outreach activities at the San Diego Reuben H. Fleet Science Center: Senior Monday (lay audience lecture to seniors) and Women Scientist Action Summer Camp (science activities for middle school girls).
- 2013 Developed lesson plan and taught 6<sup>th</sup> grade students as part of the BioCircuits Elementary School Science Partnership at Ocean Knoll Elementary School.
- 2011-12 Docent at Año Nuevo State Park guided interpretative tours to the elephant seal breading colony.

#### **Invited Presentations:**

2018	18th Congress IUSSI in Guarujá, Brazil
	Invited symposium speaker "Causes and Consequences of Division of Labour in Insect Societies"
2018	Integrating the ecology and evolution of social interactions
	Plenary speaker at the Yodzis Colloquium in Fundamental Ecology, Canadian Society for Ecology
	and Evolution, University of Guelph, Canada
2018	Spatial constraints on social behavior
	Marschak Interdisciplinary Colloquium on Mathematics in the Behavioral Sciences, UCLA
2017	The effects of spatial constraints on social interactions and collective behavior
	Keynote speaker, Emergent properties of individual behavior workshop, University of Kentucky
2016	Dynamic animal social networks
	Center for Adaptive Network Dynamics, California NanoSystems Institute, UCSB
2016	The effects of architecture on collective behavior
	Leonardo Art Science Evening Rendezvous (LASER), UCLA
2016	How can we resolve spatial constraints and higher order interactions in social networks?
	Multilayer Networks Conference, UC Davis
2018	Individual variation in collective behavior
	Santa Fe institute, NM
2017	Biology Department, University of Kentucky
	7th Annual UCI Systems Biology Regional Conference, UCI
2016	Center for Behavior Evolution and Culture, UCLA
	Department of Entomology, Pennsylvania State University
	Ecology, Behavior and Evolution Section, UCSD
	Department of Ecology & Evolutionary Biology, UCLA
2015	Biology department, California State University, Long Beach
	Institute for Quantitative and Computational Biosciences, UCLA
2014	Biology Colloquium, Harvey Mudd College, Claremont CA
	Entomology Colloquium, University of Illinois, Urbana-Champaign
	BioCircuits Institute Seminar Series, UC San Diego
2014	The Interactions that regulate collective behavior
	Workshop on Animal Social Networks, NIMBioS, Knoxville TN
2013	From ants to colonies: individual variation in collective behavior
	Clore Center for Biological Physics, Weizmann Institute of Science, Israel
	Biology Seminar Series, San Diego State University
2012	Foraging regulation at two time scales
	Social Insect Research Group, Arizona State University

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2012	From ants to colonies: individual variation in collective behavior
	Behavior, Evolution, and Culture Seminar Series, UCLA
	Symposium on Networks in Biological, Social, and Geographic Systems, University of Wyoming
	Seminar at the EBE Section, Biology Department, UC San Diego
	Biology Department Colloquium, San Francisco State University
2011	Animal Behavior Graduate Group Seminar Series, UC Davis
	Program in Interdisciplinary Biological and Biomedical Sciences (PIBBS), UNM
	Eco-evo lunch, Biology Department, Stanford University
2009	The effects of translocation on African elephants – using behavioral studies to inform conservation:
	The Society for Conservation Biology, Central California Coast Chapter
2008	Stranger in a strange land: Spatial and social behavior of African elephants in a novel environment
	Eco-evo lunch, Biology Department, Stanford University
	Department of Zoology, Tel-Aviv University, Israel
	Animal Behavior Graduate Group Seminar Series, UC Davis
2007	The effects of translocation on African elephants
	SCB/EVE Undergraduate Conservation Biology Seminar Series, UC Davis
	Geography Graduate Group Wildlife Conservation, Law and Policy Seminar Series, UC Davis
2006	Africa and African Diaspora Brown Bag, UC Davis

#### Presentations at Conferences and Symposia:

Pinter-Wollman N., 2017. Multilayer networks can advance the study of animal social behavior. 54<sup>th</sup> Annual meeting of the Animal Behavior Society, Toronto, Canada. *Talk.* 

**Pinter-Wollman N.**, Keiser C.N., Wollman R. & Pruitt J.N., 2016. Uncovering the effects of keystone individuals on collective behavior. *International Society for Behavioral Ecology*, Exeter, UK. *Poster*.

**Pinter-Wollman N.** 2015. Nest architecture shapes the collective behavior of harvester ants. 52<sup>nd</sup> Annual meeting of the Animal Behavior Society. Anchorage, AK. *Talk.* 

**Pinter-Wollman N.** 2014. Persistent behavioral variation affects the structure and function of interaction networks. *7<sup>th</sup> International Symposium on Biomathematics and Ecology: Education and Research (BEER)*. Claremont, CA. **Talk**.

**Pinter-Wollman N.** 2014. Effects of nest architecture on collective behavior of ant colonies. 17<sup>th</sup> Congress of the International Union for the Study of Social Insects. Cairns, Australia. **Talk.** 

**Pinter-Wollman N.** 2013. Harvester ants use interactions to regulate forager activation and availability. 50<sup>th</sup> Annual meeting of the Animal Behavior Society. Boulder, CO. **Talk.** 

Hobson E.A., **Pinter-Wollman N**., Smith J.E., Edelman A.J., Shizuka D., Waters J.S., de Silva S., Prager S.D. Sasaki T., Wittemyer G., Fewell J., & McDonald D.B. 2013. The dynamics of animal social networks: analytical, conceptual, and theoretical advances. *50<sup>th</sup> Annual meeting of the Animal Behavior Society*. Boulder, CO. **Poster**.

**Pinter-Wollman N.** 2012. Nest site and weather affect the personality of harvester ant colonies. 49<sup>th</sup> Annual meeting of the Animal Behavior Society. Albuquerque, NM. **Talk.** 

**Pinter-Wollman N.** 2011. Individual variation in the interaction networks of harvester ants. *Behavior: joint meeting of the International Ethological Conference and the Animal Behavior Society*. Bloomington, IN. *Talk*.

**Pinter-Wollman N.** 2010. Effects of interaction network structure on information flow in social insects. 16<sup>th</sup> Congress of the International Union for the Study of Social Insects. Copenhagen, Denmark. **Talk.** 

Pinter-Wollman N. 2010. Collective animal behavior. 47<sup>th</sup> Annual meeting of the Animal Behavior Society. Williamsburg, VA. *Talk.* 

**Pinter-Wollman N.** and Gordon D.M. 2009. Effects of interaction network structure on task allocation in social insects. *31*<sup>±</sup> International Ethological Conference. Rennes, France. *Poster*.

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**Pinter-Wollman N.** 2008. The relationship between social behavior and habitat familiarity in African elephants. 45<sup>th</sup> Annual meeting of the Animal Behavior Society. Snowbird, UT. **Talk.** 

**Pinter-Wollman N.** 2007. Exploration of a novel environment by translocated African elephants. 44<sup>th</sup> Annual meeting of the Animal Behavior Society. Burlington, VT. **Talk.** 

**Pinter-Wollman N.** 2007. Home range acquisition in translocated African elephants. *3<sup>rd</sup> Animal Behavior Graduate Group Research Conference.* Davis, CA. *Talk.* 

**Pinter-Wollman N.** 2007. The effects of translocation on African elephants. *9<sup>th</sup> Bay Area Conservation Biology Symposium.* Berkeley, CA. *Talk.* 

**Pinter-Wollman N.**, Dayan T., Kronfeld-Schor N. and Eilam D. 2004. Does aggression drive temporal separation between competing common and golden spiny mice? *41<sup>e</sup>* Annual meeting of the Animal Behavior Society, Oaxaca, Mexico. *Talk.* 

**Pinter N.** Innocenti G. & Galil B.S. 2002. Observations on the agonistic behavior of the swimming crab *Charybdis longicollis* Leene, infected by the rhizocephalan barnacle *Heterosaccus dollfusi* Boschma. *14th Israeli Mediterranean-coast Symposium*. Haifa University, Israel. *Talk*.

**Pinter N.**, Dayan T., Eilam D. & Kronfeld-Schor N. 2001. Aggressive interactions between two species of spiny mice: *Acomys russatus* and *Acomys cahirinus*. *38<sup>th</sup> meeting of the Zoological Society of Israel*. Haifa University, Israel. Abstract in the Israel Journal of Zoology, 2002 48 (2):176. *Talk*.