

# Curriculum Vitae

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## **Lee Koren, PhD**

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## **Academic position**

**Full Professor**, Faculty of Life Sciences, Bar-Ilan University, Ramat-Gan, Israel, 2023 - present.

**Research Associate**, Ecology and Evolutionary Biology Department, University of California, Santa Cruz, USA, 2021 - 2022 (sabbatical).

**Associate Professor**, Faculty of Life Sciences, Bar-Ilan University, Ramat-Gan, Israel, 2018 - 2023.

**Tenured Senior Lecturer**, Faculty of Life Sciences, Bar-Ilan University, Ramat-Gan, Israel, 2016 - 2018.

**Lecturer**, Faculty of Life Sciences, Bar-Ilan University, Ramat-Gan, Israel, 2012 - 2016.

## **Education**

**Post-doctoral Fellow**, Faculty of Veterinary Medicine, University of Calgary, Canada, 2009 - 2012. *Cortisol and corticosterone independence in mammalian and avian circulation, hair, and feathers*. Advisor: Prof. Katherine Wynne-Edwards

**Ph.D.**, Zoology Department, Tel-Aviv University, Israel, 2001 - 2007. *Vocalization as an indicator of individual quality in the rock hyrax*. Advisors: Prof. Eli Geffen and Dr. Ofer Mokady. Committee: Prof. Uzi Motro, Prof. Arnon Lotem, Prof. Yoram Yom-Tov

**M.Sc.**, *Summa Cum Laude*, Institute for Nature Conservation Research, Tel-Aviv University, Israel, 1998 - 2000. *Hyrax Socialization: First Evidence for a Matriarchal Society*. Advisors: Drs. Eli Geffen and Ofer Mokady

**B.Sc.** in Life Sciences, *Magna Cum Laude*, Tel-Aviv University, Israel, 1994 – 1997.

### **Academic awards and scholarships**

2011: Society for Behavioral Neuroendocrinology trainee travel award (\$1000)  
2009: Faculty of Veterinary Medicine Entrance Award for postdoctoral fellows, University of Calgary (\$25,000)  
2002-2005: PhD scholarship from The Faculty of Life Sciences, Tel-Aviv University (\$18,000 per year for 4 years)  
2005: Trotsky Foundation scholarship for outstanding PhD students (National level; \$1,000)  
2004: Beneen Foundation scholarship for PhD students (National level; \$1,000)  
2003: Trotsky Foundation scholarship for outstanding PhD students (National level; \$1,000)  
2003: Wolf Foundation scholarship for outstanding PhD students (National level; \$2,000)  
2001-2002: Dean's scholarship for outstanding PhD students (\$20,000 a year for 2 years)  
1999-2000: MSc scholarship from the Ecology and Environmental Studies Fund (\$15,000)  
1998-1999: Dean's scholarship for outstanding MSc students (\$18,000)  
1997: Dean's special mention for excellence during BSc degree

### **Professional service**

#### Institutional:

- Head of the Equality and Equity committee in the Faculty of Life Sciences (2024 – present).
- Organizer of a mentoring program for ‘first generation in academia’ graduate students in the Faculty of Life Sciences (2024 – present).
- Organizer of a 6-meeting series for female graduate students in the Faculty of Life Sciences on Combining Motherhood and a Scientific Career (2023 - present).
- Participating in PhD student toolbox seminar (2023) and Soft skills for graduate students course (2024 – present).
- Member of the Faculty of Life Sciences’ Events and Hosting committee (2022 – present).
- Faculty of Life Science’s International Students Coordinator (2021 – present).

- Member of the Women in STEM taskforce (2020 – present).
- Member of Life Science's First Year Curriculum Committee (2020 – 2021).
- Organizer Faculty of Life Science's PhD seminars (2018 – 2020).
- Organizer of a STEM young PI workshop and co-leader of its monthly forum (2016 - 2021)
- Organizing institutional seminar on Ecology and Sustainability (2018).
- Green campus - member of President's advisory board on Ecology and Sustainability (2016 – 2018).
- Member of Life Science's Safety Committee (2014 – 2018).
- Member of Life Science's Teaching and Curriculum Committee (2014 – 2021).
- Member of Bar-Ilan's Animal Use and Ethics Committee (2012 – 2015).
- Organizing faculty seminar for the Faculty of Life Sciences in Ein Gedi (2013).

National:

- Scientific advisor: The Ministry of Environment expert committee on noise pollution (2023).
- Chair of the annual AFIK (Israeli Women Professors' Association) conference, Tel Aviv University (2023-2024).
- Chair of Animal Sociality session at the Federation of the Israel Societies for Experimental Biology conference, Eilat (2023).
- Mentor for postdocs Women in STEM (2020 – present).
- Advisor for the National Teacher Center for STEM Education in Preschool (Da Gan; 2021 - present).
- Member of the scholarship committee, member of the distinguished member selection committee, judging graduate talks, Israeli Zoological Society (2020).
- Member of the Women in STEM taskforce (Researchers and Influencers; 2019 - present).
- Scientific advisor for Ministry of Education Biology curriculum: from organism to ecology (2019)
- Co-Host and Organizer of the SOUND Natural Dialogues meeting. Bar Ilan University (2018).

- Host and Organizer of Israeli Zoological Society meeting. Bar Ilan University (2018).
- Committee member for competitive grant agencies: Israel Science Foundation, USA-Israel Binational Science Foundation (2017 – 2018, 2024).
- Reviewer for Israeli Ministry of Innovation, Science and Technology grants, Psychobiology Institute (2023-2024).
- Organized and chaired Animal Communications session at the Federation of the Israel Societies for Experimental Biology conference, Eilat (2017).
- Elected member of the executive council of the Israeli Zoological Society (2013 - 2016).
- Judge of graduate talks and posters at the Israeli Zoological Society meeting (2012 – present).
- External reviewer (MSc, PhD – Hebrew University, Ben Gurion University, Tel-Aviv University).
- External member of PhD committees (Hebrew University, Ben Gurion University).

International:

- Editorial board member for the journal Hormones and Behavior (on behalf of the Society for Behavioral Neuroendocrinology via Elsevier, 2022 - present).
- External MSc examiner (University College Dublin, Ireland, 2020; University of Pretoria, South Africa, 2021).
- External PhD examiner (University of Auckland, New Zealand, 2021; WITS University, South Africa, 2024).
- Reviewer for DFG (Germany, 2020).
- Hyrax section coordinator for the Afrotheria Specialist Group (IUCN SSC - World Conservation Union Species Survival Commission; 2013 - 2016; 2017 - 2020; 2021 – 2025).
- Invited member of the Afrotheria Specialist Group (IUCN SSC - World Conservation Union Species Survival Commission; 2009 – present).

Ad-hoc reviewer: Animal Behaviour, Animal Conservation, Auk, Behavioral Ecology and Sociobiology, BioEssays, Comparative Biochemistry and Physiology Part A, Conservation Physiology, Ecology, Ecology and Evolution, Ethology, General and Comparative Endocrinology, Hormones and Behavior, Israel Journal of Ecology &

Evolution, Journal of Animal Ecology, Journal of Mammalogy, Journal of Zoology, Methods in Ecology and Evolution, Nature Communications, Oecologia, PLoS ONE, Proceedings of the Royal Society B, Reproduction.

Memberships: Animal Behavior Society, Behavioral Ecology Society, International Society for Wildlife Endocrinology, Israeli Zoological Society, Society for Behavioral Neuroendocrinology, Society for Conservation Biology.

### Peer reviewed articles

1. Demartsev, V., Geva, Y., Alba Gonzalez, P., **Koren, L.**, Ilany, A. & Geffen, E. 2025. Alerting components in animal vocalization. *Animal Behaviour*
2. Mortlock, E., English, H., Borger, L., Matas, D., **Koren, L.**, Capellini, I. & Jennings, D. 2025. Drivers of individual differences in the sleep behaviour of fallow deer neonates. *Journal of Animal Ecology* 94: 449 - 461. DOI: 10.1111/1365-2656.14247
3. Dory, E.K., Gueta, A., Loterstein, Y., Moshe, L., Matas, D., **Koren, L.** & Weller, A. 2024. Intergenerational transfer of binge eating-like behavior: The additive impact of juvenile stress. *Appetite* 203: 107713. DOI: 10.1016/j.appet.2024.107713
4. Yael, A., Fishman, R., Matas, D., Doniger, T., Vortman, Y. & **Koren, L.** 2024. Fetal endocrine axes mRNA expression levels are related to sex and intrauterine position. *Biology of Sex Differences* 15: 61. DOI: 10.1186/s13293-024-00637-9
5. Alaman, A., Casas-Mas, E., Arbelo, M., Keynan, O. & **Koren, L.** 2024. Living fast, dying young: Anthropogenic habitat modification influences the fitness and life history traits of a cooperative breeder. *Ecology Letters* 27: e14434. DOI: 10.1111/ele.14434  
Featured in ynet (in Hebrew) [https://www.ynet.co.il/environment-science/article/syqgmioma?utm\\_source=ynet.app.ios&utm\\_term=syqgmioma&utm\\_campaign=general\\_share&utm\\_medium=social&utm\\_content=Header](https://www.ynet.co.il/environment-science/article/syqgmioma?utm_source=ynet.app.ios&utm_term=syqgmioma&utm_campaign=general_share&utm_medium=social&utm_content=Header)  
<https://www.birdguides.com/articles/habitat-change-impacts-social-organisation-of-babblers/>
6. Amin, B., Fishman, R., Quinn, M., Matas, D., Palme, R., **Koren, L.** & Ciuti, S. 2024. Sex-specific relationship between maternal and neonate cortisol in a free-ranging large mammal. *Peer Community Journal Ecology* 4: e57. DOI: 10.24072/pcjournal.431
7. Fishman, R., Kralj-Fišer, S., Margalit, S., **Koren, L.\*** & Vortman, Y\*. 2024. Quantitative genetics reveals sex-specific genetic architecture for fetal testosterone in a wild mammal. *Hormones & Behaviour* 161: 105525. DOI: <https://doi.org/10.1016/j.yhbeh.2024.105525> (\*equal contribution) including cover photo.

8. Fishman, R., **Koren, L.**, Ben-Shlomo, R., Shanas, U. & Vortman, Y. 2023. Paternity share predicts sons' fetal testosterone. *Scientific Reports*. DOI: <https://doi.org/10.1038/s41598-023-42718-6>
9. Goll, Y., Bordes, C., Weissman, Y., Shnitzer, I., Beukboom, R., Ilany, A., **Koren, L.\*** & Geffen, E. \* 2023. The interaction between cortisol and testosterone predicts leadership within rock hyrax social groups. *Scientific Reports*. DOI: <https://doi.org/10.1038/s41598-023-41958-w> (\*equal contribution).
10. Sarid, S., Naor, H., Asfur, M., Khokhlova, I.S., Krasnov, B.R., Kotler, B.P. Degen, A.A., Kam, M. & **Koren, L.** 2023. Free-living gerbils with higher testosterone take fewer risks. *Physiology & Behavior* 269: 114277. DOI: 10.1016/j.physbeh.2023.114277
11. Bordes, C., Beukboom, R., Goll, Y., **Koren, L.** & Ilany, A. 2022. High-resolution tracking of social interactions highlights nighttime drivers of animal sociality. *Communications Biology* 5: 1378. DOI: 10.1038/s42003-022-04317-5
12. Hemelrijk, C.K., Seex, L., Pederboni, M., Ilany, A., Geffen, E. & **Koren, L.** 2022. Adult sex ratios and partial dominance of females over males in the rock hyrax. *Frontiers in Ecology and Evolution*. DOI: 10.3389/fevo.2022.1004919
13. Demartsev, V., Haddas-Sasson, M., Ilany, A., **Koren, L\*.**, Geffen, E\*. 2022. Male rock hyraxes that maintain an isochronous song rhythm achieve higher reproductive success. *Journal of Animal Ecology* 92: 1520 – 1531. DOI: 10.1111/1365-2656.13801 (\*equal contribution). *One of the most downloaded JAE papers in 2022*.  
Featured in National Geographic  
<https://www.nationalgeographic.com/animals/article/why-these-furry-male-mammals-sing-with-human-like-rhythm>  
Nature <https://www.nature.com/articles/d41586-022-02990-4>  
BBC <https://www.discoverwildlife.com/news/how-male-rock-hyraxes-woo-their-potential-mates/>  
Jerusalem Post <https://www.jpost.com/science/article-718726>  
MSN <https://www.msn.com/en-us/health/other/what-is-a-rock-hyrax-and-why-do-they-sing-study/ar-AA12v0Vg?ocid=weather-verthp-feeds>  
Ha'aretz (in Hebrew) <https://www.haaretz.co.il/science/biology/2022-11-03/ty-article/.premium/00000184-3a1c-dfd0-a9a7-3f1e2c990000>
14. Frydman, G., Goll, Y., Geffen, E. & **Koren, L.**, 2022. Sex differences in frequencies in a species with modest sexual dimorphism. *Bioacoustics* 32(2): 230 – 240. DOI: 10.1080/09524622.2022.2105954
15. Kappeler, P.M., Huchard, E., Baniel, A., Canteloupe, C., Charpentier, M., Cheng, L., Davidian, E., Dubosq, J., Fichtel, C., Hemelrijk, C.K., Honer, O.P., **Koren, L.**, Micheletta, G., Prox, L., Sacca, T., Seex, L., Smit, N., Surbeck, M., van de Waal, E. & Girard-Buttoz, C. 2022. Sex and dominance: How to assess and interpret intersexual dominance relationships in mammalian societies. *Frontiers in Ecology and Evolution*.

16. Yirmiya, K., Motsan, S., Zagoory-Sharon, O., Schonblum, A., **Koren, L.** & Feldman, R. 2022. Continuity of psychopathology versus resilience across the transition to adolescence; Role of hair cortisol and sensitive caregiving. *Psychological Medicine* 1-12. DOI:10.1017/S0033291722001350
17. Cohen, Z.Z., Gotlieb, N., Erez, O., Wiznitzer, A., Arbel, O., Matas, D., **Koren, L.** & Henik, A. 2022. Attentional networks during the menstrual cycle. *Behavioural Brain Research* 425: 113817. DOI: 10.1016/j.bbr.2022.113817
18. Goll, Y., Bordes, C., Weissman, Y.A., Shnitzer, I., Beukboom, R., Ilany, A., **Koren, L.** & Geffen, E. 2022. Sex-associated and context-dependent leadership in the rock hyrax. *iScience* 25:104063. DOI: 10.1016/j.isci.2022.104063
19. Levhav, M., Schonblum, A., Arnon, L., Michael, Y., Salzer Sheelo, L., Eisner, M., Hadar, E., Meizner, I., Wiznitzer, A., Weller, A., **Koren, L.** & Agay-Shay, K. 2021. Residential greenness and hair cortisol levels during the first trimester of pregnancy. *Environmental Research*. DOI: 10.1016/j.envres.2021.112378
20. Frydman, G., Geffen, E. & **Koren, L.** 2021. Social status and social network in a captive rock hyrax (*Procavia capensis*) group. *Afrotherian Conservation*, 17: 6-8.
21. Davidson, A., Malkinson, D., Schonblum, A., **Koren, L.** & Shanas, U. 2021. Do boars compensate for hunting with higher reproductive hormones? *Conservation Physiology* 9. DOI: 10.1093/conphys/coab068
22. Amin, B., Jennings, D.J., Smith, A.F., Quinn, M., Chari, S., Haigh, A., Matas, D., **Koren, L.** & Ciuti, S. 2021. In utero accumulated steroids predict neonate anti-predator response in a wild mammal. *Functional Ecology* 35(6): 1197-1378. DOI: 10.1111/1365-2435.13790 (including cover picture).
23. Sargunraj, F., St. Juliana, J.R., Downs, C., Khokhlova, I.S., **Koren, L.**, Matas, D., Wynne-Edwards, K.E. & Kotler, B.P. 2021. Positive association between experimental cortisol increases and cage-measures of feeding behavior in wild-caught gerbils *Israel Journal of Ecology and Evolution* 67(3-4): 112-120. DOI: 10.1163/22244662-bja10014
24. Aharon-Rotman, Y., Buttemer, W.A., **Koren, L.** & Wynne-Edwards, K. 2021. Experimental corticosterone manipulation increases mature feather corticosterone content: implications for inferring avian stress history from feather analysis. *Canadian Journal of Zoology* 99(10): 948-952. DOI: 10.1139/cjz-2021-0091.
25. Alon, T., Matas, D., **Koren, L.\*** & Gootwine, E.\* 2021. Cortisol and testosterone levels in the plasma and wool of sheep with different litter sizes. *Livestock Science* 243:104381. DOI: 10.1016/j.livsci.2020.104381 (\*equal contribution).

26. Chavan, A.R., Griffith, O.W., Stadtmayer, D., Maziarz, J., Pavlicev, M., Fishman, R., **Koren, L.**, Romero, R. & Wagner, G.P. 2020. Evolution of embryo implantation was enabled by the origin of decidual stromal cells in eutherian mammals. *Molecular Biology and Evolution* 38(3): 1060-1074. DOI: 10.1093/molbev/msaa274
  
27. Weissman, Y., Demartsev, V., Ilany, A., Barocas, A., Bar-Ziv, E., **Koren, L.\*** & Geffen, E.\* 2020. A crescendo in the inner structure of snorts: A reflection of increasing arousal in rock hyrax songs? *Animal Behaviour* 166: 163-170. DOI: 10.1016/j.anbehav.2020.06.010 (\*equal contribution).  
 Featured in Scientific American  
<https://www.scientificamerican.com/podcast/episode/these-small-mammals-snort-to-a-different-tune/> and in the Union Journal <https://theunionjournal.com/these-small-mammals-snort-to-a-different-tune/>
  
28. Matas, D., Doniger, T., Sarid, S., Asfur, M., Yadid, G., Kam, M., Khokhlova, I.S., Krasnov, B.R., Degen, A. & **Koren, L.** 2020. Sex differences in non-model gerbil HPG axis. *General and Comparative Endocrinology* 291: 113418. DOI: 10.1016/j.ygcen.2020.113418
  
29. Morgan, L., Itin-Shwartz, B., **Koren, L.**, Meyer, J., Matas, D., Younis, A., Novak, S., Weizmann, N., Rapaic, O., Abu Ahmad, W., Klement, E. & Raz, T. 2019. Physiological and economic benefit of abandoning invasive surgical procedures and enhancing animal welfare in swine production. *Scientific Reports* 9:16093. DOI:10.1038/s41598-019-52677-6
  
30. **Koren, L.**, Weissman, Y., Shnitzer, I., Beukboom, R., Bar Ziv, E., Demartsev, V., Barocas, A., Ilany, A. & Geffen, E. 2019. Sexually opposite effects of testosterone on mating success in wild rock hyrax. *Behavioral Ecology* 30(6): 1611-1617. DOI:10.1093/beheco/arz125
  
31. Weissman, Y., Demartsev, V., Ilany, A., Barocas, A., Bar-Ziv, E., Geffen, E.\* & **Koren, L.\*** 2019. Social context mediates testosterone's effect on snort acoustics in male hyrax songs. *Hormones and Behavior* 114: 104535. DOI:10.1016/j.yhbeh.2019.05.004 (\*equal contribution)
  
32. Demartsev, V., Kershenbaum, A., Ilany, A., Barocas, A., Weisman, Y., **Koren, L.** & Geffen, E. 2019. Lifetime changes in syntactic complexity of rock hyrax songs are determined by social class differences. *Animal Behaviour* 153: 151-158. DOI: 10.1016/j.anbehav.2019.05.011
  
33. Fishman, R., Vortman, Y., Shanas, U. & **Koren, L.** 2019. Non-model species deliver non-model results: Nutria female fetuses neighboring males in utero have lower testosterone. *Hormones and Behavior* 111: 105-109. DOI:10.1016/j.yhbeh.2019.02.011



34. **Koren, L.**, Bryan, H., Matas, D., Tinman, S., Fahlman, A., Whiteside, D., Smits, J. & Wynne-Edwards, K.E. 2019. Towards the validation of endogenous steroid testing in wildlife hair. *Journal of Applied Ecology* 56: 547-561. DOI:10.1111/1365-2664.13306
35. Weissman Y., Demartsev, V., Ilany, A., Barocas, A., Bar Ziv, E., Shnitzer, I., Geffen, E. & **Koren, L.** 2019. Acoustic stability in hyrax snorts: vocal tightrope-walkers or wrathful verbal assailants? *Behavioral Ecology* 30(1): 223-230. DOI:10.1093/beheco/ary141
36. Schonblum, A., Arnon, L., Salzer, L., Hadar, E., Meizner, I., Wiznitzer, A., Weller, A. & **Koren, L.** 2018. Can hair steroids predict pregnancy longevity? *Reproductive Biology* 18: 410-415. DOI:10.1016/j.repbio.2018.09.004
37. Fishman, R., Vortman, Y., Shanas, U. & **Koren, L.** 2018. The advantages of in-utero sex ratio heterogeneity. *Royal Society Open Science* 5:171636. DOI:10.1098/rsos.171636
38. **Koren, L.**, Matas, D., Pečnerová, P., Dalén, L., Tikhonov, A., Gilbert, T.P.M., Wynne-Edwards, K.E. & Geffen, E. 2018. Testosterone in ancient hair from an extinct species. *Paleontology* 61(6): 797-802. DOI:10.1111/pala.12391  
Featured in nature <https://www.nature.com/articles/d41586-018-06000-4> and Ha'aretz (in Hebrew).
39. Ravid, E., Salzer, L., Arnon, L., Eisner, M., Wiznitzer, A., Weller, A., **Koren, L.** & Hadar, E. 2018. Is there an association between maternal anxiety propensity and pregnancy outcome? *BMC Pregnancy and Childbirth* 18: 287. DOI:10.1186/s12884-018-1925-8
40. Fishman, R., Vortman, Y., Shanas, U. & **Koren, L.** 2018. Female-biased sex ratios are associated with higher maternal testosterone levels in nutria (*Myocastor coypus*). *Behavioral Ecology and Sociobiology* 72:101. DOI:10.1007/s00265-018-2517-3
41. Hoffman, Y., Shrira, A., Kedar, M., Ben-Ezra, M., **Koren, L.**, Grossman, E., Dinnayi, M., Bayan, R., Bodner, E., Palgi, Y. & Zivotofsky, A.Z. 2017. Complex PTSD and its correlates amongst female Yazidi victims of sexual jihad residing in post-ISIS camps. *World Psychiatry*. 17:1 DOI:10.1002/wps.20475
42. Matas, D. & **Koren, L.** 2017. Age-related testosterone declines can be detected in men's fingernails. *Canadian Journal of Physiology and Pharmacology*. DOI:10.1139/cjpp-2017-0193
43. Halevi, G., Djalovski, A., Maymon, Y.K., Yirmiya, L., Zagoory-Sharon, O., **Koren, L.** & Feldman, R. 2017. The social transmission of risk: maternal stress physiology, synchronous parenting, and well-being mediate the effects of war exposure on child psychopathology. *Journal of Abnormal Psychology* 126(8): 1087-1103. DOI: 10.1037/abn0000307

44. Goll, Y., Demartsev, V., **Koren, L.** & Geffen, E. 2017. Male hyraxes increase countersinging as strangers become 'nasty neighbours'. *Animal Behaviour* 134: 9-14. DOI:10.1016/j.anbehav.2017.10.002
45. **Koren, L.** & Gordon, I. 2017. Beyond the social stereotype of hormones. *Psychoneuroendocrinology* 84: 207-209. DOI:10.1016/j.psyneuen.2017.06.007. Invited Letter to the Editor.
46. Demartsev, V., Ilany, A., Kershenbaum, A., Geva, Y., Margalit, O., Shnitzer, I., Barocas, A., Bar-Ziv, E., **Koren, L.** & Geffen, E. 2017. The progression pattern of male hyrax songs and the role of climactic ending. *Scientific Reports* 7: 2794. DOI:10.1038/s41598-017-03035-x
47. Demartsev, V., Ilany, A., Barocas, A., Bar Ziv, E., Shnitzer, I., **Koren, L.** & Geffen, E. 2016. A mixed strategy of counter-singing behaviour in male rock hyrax vocal competitions. *Behavioral Ecology and Sociobiology*. DOI:10.1007/s00265-016-2222-z
48. Koresh, E., Matas, D. & **Koren, L.** 2016. Exploring silastic tube implants for experimental testosterone elevation in wildlife. *Research in Veterinary Medicine*, 108: 1-7. DOI:10.1016/j.rvsc.2016.07.005
49. Warburton, E.M., Kam, M., Bar-Shira, E., Friedman, A., Khokhlova, I.S., **Koren, L.**, Asfur, M., Geffen, E., Kiefer, D., Krasnov, B.R. & Degen, A., 2016. The effect of parasite pressure on host behavioral defence and parasite reproductive output in a rodent-flea system. *Parasitology Research*, 115: 3337-3344. DOI:10.1007/s00436-016-5093-3
50. Arnon, L., Hazuta, N., Tabachnika, T., Weller, A. & **Koren, L.** 2016. Maternal testosterone and reproductive outcome in a rat model of obesity. *Theriogenology*, 86: 1042-1047. DOI:10.1016/j.theriogenology.2016.03.033
51. Bar Ziv, E., Ilany, A., Demsalev, V., Barocas, A., Geffen, E. & **Koren, L.** 2016. Individual, social, and sexual niche traits affect copulation success in a polygynandrous mating system. *Behavioral Ecology and Sociobiology*, 70: 901-912. DOI:10.1007/s00265-016-2112-4
52. Demartsev, V., Bar-Ziv, E., Shani, U., Goll, Y., **Koren, L.** & Geffen, E. 2016. Harsh vocal elements affect counter-singing dynamics in male rock hyrax. *Behavioral Ecology*, 27(5): 1397-1404. DOI:10.1093/beheco/arw063
53. Matas, D., Keren-Rotem, T., & **Koren, L.** 2016. A method to determine integrated steroid levels in wildlife claws. *General and Comparative Endocrinology*, 230-231: 26-28. DOI: 10.1016/j.ygcen.2016.03.020.  
Featured in Atlas of Science <http://atlasofscience.org/corticosterone-in-chameleon-claws/#more-15234>

54. Butynski, T., Hoeck, H., **Koren, L.** & de Jong, Y.A. 2015. *Procavia capensis*. The IUCN Red List of Threatened Species 2015: e.T41766A21285876.
55. Bryan, H.M., Smits, J.E.G., **Koren, L.**, Paquet, P.C., Wynne-Edwards, K.E., & Musiani, M. 2015. Heavily hunted wolves have higher stress and reproductive steroids than wolves with lower hunting pressure. *Functional Ecology*, 29 (3): 347-356. DOI:10.1111/1365-2435.12354  
Featured in Psychology Today <http://www.psychologytoday.com/blog/animal-emotions/201411/wolves-hunting-affects-stress-reproduction-and-sociality>, Vancouver Sun <http://www.vancouversun.com/touch/story.html?id=10374289>, Times Colonist <http://www.timescolonist.com/news/local/heavily-hunted-wolves-more-stressed-study-says-1.1549439>, Science Mag <http://news.sciencemag.org/biology/2014/11/wolf-hair-reveals-high-stress-levels-hunted-population>, The Scientist <http://www.the-scientist.com/?articles.view/articleNo/41447/title/Hairy-Situation-for-Wolves/>, CBC news <http://www.cbc.ca/news/canada/north/wolves-with-high-hunting-threat-get-stressed-out-study-1.2832750>
56. Demartsev, V., Kershenbaum, A., Ilany, A., Barocas, A., Bar Ziv, E., **Koren, L.** & Geffen, E. 2014. Male hyraxes increase song complexity and duration in the presence of alert individuals. *Behavioral Ecology*, 25 (6): 1451-1458. DOI:10.1093/beheco/aru155.  
Featured in WIRED Science <http://www.wired.com/2014/09/hyraxes-sing-better-for-attentive-audiences/>
57. Ilany, A., Barocas, A., **Koren, L.**, Kam, M. & Geffen, E. 2013. Structural balance in the social networks of a wild mammal. *Animal Behaviour*, 85: 1397-1405.  
DOI:10.1016/j.anbehav.2013.03.032
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65. **Koren, L.** & Geffen, E. 2009. Complex call in male rock hyrax (*Procavia capensis*): a multi-information distributing channel. *Behavioral Ecology and Sociobiology*, 63: 581-590. DOI: 10.1007/s00265-008-0693-2  
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71. Fassos, F.F., Berkovitch, M., Daneman, N., **Koren, L.**, Cameron, R., Klein, J., Falcitelli, C., Daneman, R., St. Louis, P. & Koren, G. 1996. Efficiency of deferiprone in the treatment of acute iron intoxication in rats. *Clinical Toxicology*, 34: 279-287.

## Grants received

From	To	Source	Title	Total Grant (\$)
December 2023	November 2025	Yad Hanadiv	Uncovering the 'black box' of scientific discovery: The zoologist as a case study	120,000 (440,000 NIS)
October 2023	September 2028	Israel Science Foundation	Drivers and reducers of sexual conflict in utero	350,000 (1,400,000 NIS)
December 2022	November 2024	Sheba-Bar Ilan Collaboration	The Nutria as a model for human <i>in utero</i> environmental exposure studies (with Lauren Petrick)	50,000
October 2022	September 2023	Faculty of Life Sciences	Internal grant	25,000
October 2021	October 2022	Ihel Foundation	Residential greenness and chronic stress biomarker measured by hair cortisol concentrations during the second trimester of pregnancy (with Keren Agay-Shay, BIU)	2,800 (9,000 NIS)
April 2019	April 2020	Ihel Foundation	The relationship between social stress and fertility	3,400 (12,000 NIS)
April 2019	April 2020	Ihel Foundation	Do maternal hormonal levels, stress, and depression mediate the associations between proximity to green spaces, pregnancy duration, and intrauterine growth? (with Keren Agay-Shay, BIU)	2,800 (10,000 NIS)
October 2016	September 2019	Israel Science Foundation	Snort and tell: How do harsh sound components reveal individual parameters?	200,000 (651,000 NIS)
October 2016	September 2020	US-Israel Binational Science Foundation	Linking wildlife social and sexual networks (with Erol Akcay, University of Pennsylvania, USA)	158,400
October 2015	September 2017	National Institute for Psychobiology in Israel	An experimental study on wildlife risk-taking behavior: does testosterone help overcome anxiety-related behaviors in males and females?	50,000

### **Oral presentations in scientific meetings (Koren lab trainees)**

**Koren, L.** Warick, H., Raz, T. & Ilany, A. 2024. Sperm characteristics reveal rock hyrax mating tactics. Israeli Society for Evolutionary Biology (Contributed talk). Jerusalem, Israel.

Warick, H., Raz, T., Ilany, A. & **Koren, L.** 2024. Sperm characteristics and testosterone levels reveal rock hyrax mating tactics. European Conference on Behavioural Biology (Contributed talk). Zurich, Switzerland.

Casas-Mas, E., Alaman, A., Keynan, O., **Koren, L.** & Arbelo, M. 2024. Territory characterization of cooperative breeder birds using remote sensing and species distribution models. Conference on Remote Sensing for Agriculture, Ecosystems, and Hydrology XXVI (Contributed talk). Edinburgh, United Kingdom.

Sarid, S., Naor, H., Asfur, M., Khokhlova, I.S., Krasnov, B.R., Koteler, B.P., Degen, A.A., Kam, M. & **Koren, L.** 2023. Free-living gerbils with high testosterone take less risks. International Society of Wildlife Endocrinology Conference (Contributed talk). Corbett National Park, India.

Alaman, A., Casas-Mas, E., Arbelo, M., **Koren, L.** & Keynan, O. 2023. Uncovering the impact of human disturbance on a hyper-arid habitat through long-term study of desert bird species (Contributed talk). International Conference for Conservation Biology. Kigali, Rwanda.

**Koren, L.** 2023. Sex, testosterone, and fitness in wild rock hyrax (Invited talk). Israeli Society of Evolutionary Biology. University of Haifa, Israel.

**Koren, L.** 2023. Insights from steroids measured in wildlife hair, feathers, and claws. Federation of the Israel Societies for Experimental Biology (Invited talk and session chair). Eilat, Israel.

Alaman, A., Casas, E., Keynan, O., Arbelo, M. & **Koren, L.** 2022. Anthropogenic habitat modification affects life history traits and fitness of a cooperative breeder (Contributed talk). The Zoological Society of Israel. Tel Hai College, Israel.

Alaman, A., Keynan, O. & **Koren, L.** 2022. Anthropogenic habitat modification influences life history traits and fitness of a cooperative breeder (Contributed talk). Spanish Ornithological Conference. Maon, Menorca, Spain.

Alaman, A., Keynan, O. & **Koren, L.** 2022. Anthropogenic habitat modification influences life history traits and fitness of a cooperative breeder (Contributed talk). Israeli Conference for Conservation Science. Tel Aviv University, Israel.

Yael, A., Fishman, R., Matas, D., Vortman, Y. & **Koren, L.** 2022. The intrauterine position effect on androgen receptor expression in fetal nutria brains (Contributed talk).

Sexual Dimorphism of Neuronal Circuits and Behavior conference. Weizmann Institute, Israel.

Fishman, R., **Koren, L.**, Ben-Shlomo, R., Shanas, U. & Vortman, Y. 2022. Favoring genetic diversity over ‘good genes’: Multiple paternity and fetal testosterone (Contributed talk). International Society for Behavioral Ecology. Stockholm, Sweden.

Sargunaraj, F., St. Juliana, J.R., Downs, C., Khokhlova, I.S., **Koren, L.**, Matas, D. & Kotler, B.P. 2022. The association between cortisol levels and feeding behavior in gerbils (*Gerbillus andersoni allenbyi*)(Contributed talk). The Zoological Society of Israel. Tel Aviv University, Israel.

Yael, A., Fishman, R., Matas, D., Vortman, Y. & **Koren, L.** 2022. The intrauterine position effect on androgen receptor expression in fetal nutria brains (Contributed talk). The Zoological Society of Israel. Tel Aviv University, Israel.

Fishman, R., **Koren, L.**, Ben Shlomo, R., Shanas, U. & Vortman, Y. 2021. Favoring litter diversity over ‘sexy sons’- multiple paternity and fetal testosterone levels in the nutria (Contributed talk). Animal Behavior Society Meeting (online).

Levhar, M., Michael, Y., Schonblum, A., Arnon, L., Salzer, L., Eisner, M., Hadar, E., Meizner, I., Wiznitzer, A., Weller, A., **Koren, L.** & Agay-Shay, K. 2021. Residential greenness and lower stress during pregnancy: hair cortisol levels as a chronic stress biomarker among pregnant women in Israel (Contributed talk). International Society for Environmental Epidemiology. New York, USA (online).

Amin, B., Jennings, D., **Koren, L.** & Ciuti, S. 2021. In utero accumulated steroids predict neonate anti-predator response in a wild mammal (Contributed talk). The Association for the Study of Animal Behaviour Easter Conference (online).

Levhar, M., Michael, Y., Schonblum, A., Arnon, L., Salzer, L., Eisner, M., Hadar, E., Meizner, I., Wiznitzer, A., Weller, A., **Koren, L.** & Agay-Shay, K. 2021. Surrounding greenness and first trimester hair cortisol levels among pregnant women in a cross-sectional study (Contributed talk). 4th Early Career Researchers Conference on Environmental Epidemiology (online).

Frydman, G., Goll, Y., Geffen, E., **Koren, L.**, 2020. New heights: Ultrasonic vocalizations in the rock hyrax (*Procapra capensis*) (Contributed talk). The Zoological Society of Israel. Haifa University, Israel (online).

Fishman, R., **Koren, L.**, Ben Shlomo, R., Shanas, U., Vortman, Y. 2020. Multiple paternity in the nutria: Better genes or genetic variability? (Contributed talk). The Zoological Society of Israel. Haifa University, Israel (online).

**Koren, L.** 2020. Sex differences in gerbil risk-taking behaviour, brain and HPG axis (Invited talk; postponed due to Corvid19). Sexual Dimorphism of Neuronal Circuits and Behavior conference. Weizmann Institute, Israel.

**Koren, L.** 2020. Mars and Venus: Opposite effects of testosterone on social status and copulation success in wild male and female rock hyrax (Invited talk and session chair). Dynamics of Dominance of Females Relative to Males in a Group workshop, Lorentz Center, Leiden, Netherlands.

Frydman, G., Geffen, E. & **Koren, L.** 2019. Will you hear my call? Ultrasonic elements in rock hyrax (*Procavia capensis*) vocalizations (Contributed talk). The Zoological Society of Israel. Hebrew University, Jerusalem, Israel.

Sarid, S., Asfur, M., Kam, M., Degen, A., Kotler, B. & **Koren, L.** 2019. The influence of testosterone on risk-taking behavior in *Gerbillus nanus* in its natural habitat (Contributed talk). The Zoological Society of Israel Hebrew University, Jerusalem, Israel.

**Koren, L.**, Weissman, Y., Shnitser, I., Beukboom, R., Bar Ziv, E., Demartsev, V., Barocas, A., Ilany, A., & Geffen, E. 2019. Testosterone is associated with male and female copulation success in opposite ways in wild rock hyrax (Contributed talk). The First Meeting of the Israeli Society for Evolutionary Biology. Tel Aviv University, Israel.

Weissman, Y., Demartsev, V., Ilany, A., Barocas, A., Bar-Ziv, E., **Koren, L.** & Geffen, E. 2019. A crescendo in the inner structure of snorts: A reflection of increasing arousal in rock hyrax songs? (Contributed talk). Israeli Bioacoustics Symposium, Ben Gurion University, Midreshet Ben-Gurion, Israel.

Frydman, G., Geffen, E. & **Koren, L.** 2019. Do rock hyrax songs include an ultrasonic component? (Contributed talk). Israeli Bioacoustics Symposium, Ben Gurion University, Midreshet Ben-Gurion, Israel.

Weissman, Y., Demartsev, V., Ilany, A., Barocas, A., Bar-Ziv, E., **Koren, L.** & Geffen, E. 2019. Snorting crescendo: A reflection of increasing arousal in rock hyrax songs? (Contributed talk). International Bioacoustics Congress, University of Sussex, Brighton, UK.

Weisman, Y., Demartsev, V., Ilany, A., Barocas, A., Bar-Ziv, E., Geffen, E., **Koren, L.** 2019. How is testosterone related to the snort element in hyrax? (Contributed talk). International Society of Wildlife Endocrinology Conference, Krueger Park, South Africa.

Ilany, A., Bordes, C., Beukeboom, R., Goll, Y., **Koren, L.** 2019. Social allocation maintains bond stability in a wild rock hyrax population (Contributed talk). Association for the Study of Animal Behaviour, Konstanz, Germany.



Weisman, Y., Demartsev, V., Ilany, A., Barocas, A., Bar-Ziv, E., Geffen, E., **Koren, L** 2018. Noisy crescendo developing in rock hyrax songs (Contributed talk). The Zoological Society of Israel, Faculty of Life Sciences, Bar Ilan University, Ramat Gan, Israel.

Fishman, R., Vortman, Y., Shanas, U., **Koren, L** 2018. Who took my testosterone? Lower testosterone in female nutria fetuses adjacent to male fetuses in utero (Contributed talk). The Zoological Society of Israel, Faculty of Life Sciences, Bar Ilan University, Ramat Gan, Israel.

**Koren, L.** 2018. Measuring wildlife steroids over time scales. Bilateral UK-Israel conference on Climate change agriculture and food supply (invited Plenary Speaker). Volcani Institute. Bet Dagan, Israel.

Navon, N., Kra, G., Lifshitz, L., **Koren, L.** & Zachut, M. 2018. Immune system markers in dairy cows that differ in the degree of metabolic stress postpartum under heat stress conditions (Contributed talk). The 30th Annual Cattle Science Convention, Jerusalem, Israel.

**Koren, L.**, Weissman, Y., Shnitser, I., Beukboom, R., Bar Ziv, E., Demartsev, V., Barocas, A., Ilany, A., & Geffen, E. 2018. Mars and Venus: Opposite effects of testosterone on copulation success in wild male and female rock hyrax (Contributed talk). International Society for Behavioral Ecology. Minneapolis, USA.

Weisman, Y., Demartsev, V., Ilany, A., Barocas, A., Bar-Ziv, E., Geffen, E., **Koren, L.** 2017. How is testosterone related to the snort element in hyrax? (Contributed talk) The Zoological Society of Israel, Tel Aviv University, Israel.

**Koren, L.** 2017. Keritanized tissues in nature conservation (invited Keynote Speaker). Ohalo College, Kazrin, Israel.

**Koren, L.** 2017. Wild dialogues? Information encoded in hyrax songs (invited Plenary Speaker). Dialogs and Data Science Meeting. Bar Ilan University, Israel.

**Koren, L.**, Matas, D., Pečnerová, P., Dalén, L., Tikhonov, A., Gilbert, T.P.M. & Geffen, E. 2017. Testosterone in ancient hair from an extinct species (Contributed talk). International Society of Wildlife Endocrinology Conference. Orlando, Florida, USA.

Weisman, Y., Demartsev, V., Ilany, A., Barocas, A., Bar-Ziv, E., Geffen, E., **Koren, L.** 2016. Information encoded in hyrax snorts (Contributed talk). Federation of the Israel Societies for Experimental Biology. Eilat, Israel.

Fishman, R., Vortman, Y., Shanas, U., **Koren, L** 2016. Maternal attributes and nutria sex ratios (Contributed talk). The Zoological Society of Israel, Faculty of Agriculture, Hebrew University, Rehovot, Israel.

**Koren, L.** 2016. Same steroids, different strategies: sex differences in wildlife (invited Keynote Speaker). Israeli Biological Psychiatry Meeting. Tel Aviv Jaffa College, Israel.

**Koren, L.** 2016. Glucocorticoid time scales (invited Keynote Speaker). Biotic and Abiotic Agricultural Meeting. Volcani Institute. Bet Dagan, Israel.

**Koren, L.,** Vortman, Y., Shanas, U., Fishman, R. 2016. Maternal testosterone and wildlife sex ratios (Contributed talk). International Society for Behavioral Ecology. Exeter, UK.

Weisman, Y., Demartsev, V., Ilany, A., Barocas, A., Bar-Ziv, E., Geffen, E., **Koren, L.** 2016. Information encoded in hyrax snorts (Contributed talk). International Society for Behavioral Ecology. Winner of Travel Award, Exeter, UK.

**Koren, L.** 2016. Is testosterone conducive to female fitness? Hormones: a Teeter-Totter of Sociality and Stress (invited Plenary Speaker). An international student organized conference at the Weizmann Institute of Science, Rehovot, Israel.

**Koren, L.** 2016. What can hair, feathers, and claws tell us about wildlife? Israeli Lab Animal Forum (invited Keynote Speaker). Bet Dagan, Israel.

Weisman, Y., Demartsev, V., Ilany, A., Barocas, A., Bar-Ziv, E., Geffen, E., **Koren, L.** 2015. Information encoded in hyrax snorts (Contributed talk). The Zoological Society of Israel, Ruppin College, Israel.

**Koren, L.** 2015. Integrated matrices reveal wild vertebrate life history traits (invited Keynote Speaker). International Society of Wildlife Endocrinology Conference. Berlin, Germany.

**Koren, L.** 2014. Hair steroids predict individual differences in wildlife behavioral strategies (invited Plenary Speaker). Ecology, Evolution & Behavior Student Organized Conference. Hebrew University, Jerusalem, Israel.

**Koren, L.** Bar Ziv, E., Ilany, A., Demartsev, V., Barocas, A., Geffen, E. 2014. Sexual networks reveal subtle patterns of female mate choice in a polygynandrous wild mammal (Contributed talk). International Society for Behavioral Ecology, New York City, USA.

**Koren, L.** 2012. Hair and feather steroids are associated with fitness in wildlife (invited Plenary Speaker). Society for Hair Testing, Hair Cortisol Symposium, Toronto, Canada.

**Koren, L.,** Nakagawa, S., Burke, T., Geffen, E., Soma, K.K. & Wynne-Edwards, K.E., 2011. Detection of corticosterone and cortisol in avian feathers and plasma (Contributed talk). University of Calgary Faculty of Veterinary Medicine Research Day, Calgary, Canada.

**Koren, L.** 2010. Wanted: Hair (testing) (Contributed talk). Canadian Spring Conference for Behaviour and Brain, Fernie, BC, Canada.

**Koren, L.** 2007. Does singing reflect individual parameters in rock hyraxes? (Contributed talk) The Zoological Society of Israel, Achva Academic College, Israel.

**Koren, L.** 1997. Comparing the difference in the reactions to a stuffed animal and a real animal in four mentally and physically disabled persons (invited Plenary speaker). Animals and Society Conference, Tel-Aviv University, Israel.

#### **Poster presentations and Abstracts in scientific meetings (Koren lab trainees)**

Kachuki Dory, E., Guetta, A., Moshe, L., Loterstein, Y., Matas, D., **Koren, L.** & Weller, A. 2024. Intergenerational binge eating-like behavior and stress in adolescence. Annual Meeting of the Society for the Study of Ingestive Behavior, Chicago, Illinois, USA.

Alaman, A., Casas, E., Arbelo, M., Keynan, O. & **Koren, L.** 2023. Living fast, dying young: anthropogenic habitat modification influences the fitness and life history traits of a cooperative breeder. Behaviour. Bielefeld, Germany.

Yael, A., Fishman, R., Matas, D., Vortman, Y. & **Koren, L.** 2023. Fetal HPG and HPA axes components' expression levels are related to intrauterine position and sex. Society for Behavioral Neuroendocrinology. Tours, France.

Yael, A., Fishman, R., Matas, D., Vortman, Y. & **Koren, L.** 2022. The intrauterine position effect on androgen receptor expression in fetal nutria brains. Society for Behavioral Neuroendocrinology. Atlanta, USA (poster and flash talk). Winner of Best Graduate Student Poster.

Alaman, A., Keynan, O. & **Koren, L.** 2022. Breeding in an ecological trap? Breeding success of Arabian babblers (*Argya squamiceps*) in the Sheizaf Nature Reserve. The Zoological Society of Israel. Tel Aviv University, Israel.

Sargunraj, F., St. Juliana, J.R., Downs, C., Khokhlova, I.S., **Koren, L.**, Matas, D., & Kotler, B.P. 2020. The association between cortisol and feeding behavior in gerbils (*Gerbilus andersoni allenbyi*). The Zoological Society of Israel. Haifa University, Israel (online).

Naor, H., Kam, M., **Koren, L.**, 2020. The ecology of danger: Who takes risks? The Zoological Society of Israel. Haifa University, Israel (online).

Matas, D., Doniger, T., Sarid, S., Asfur, M., Yadid, G., Kam, M., Khokhlova, I.S., Krasnov, B.R., Degen, A. & **Koren, L.** 2019. Sex differences in gerbil HPG axis. Steroids and Nervous System. Torino, Italy.

Ohev, S., Rapps, K., Koren, L., Meiri, N. & Weller, A. 2019. Effects of caloric restriction after increased body weight on anxiety-like behaviors in adult female Wistar rats. Israel Society for Biological Psychiatry meeting. Kfar Blum, Israel.

Cohen, Z.Z., Gotlieb, N., Erez, O., Wiznitzer, A., **Koren, L.** & Henik, A. 2019. Attentional networks during the menstrual cycle. International Convention of Psychological Sciences. Paris, France.

Bordes, C.N.M., Beukeboom, R., Goll, Y., **Koren, L.** & Ilany, A. 2018. Proximity sensors reveal nocturnal activity patterns in a wild rock hyrax population. European Conference for Behavioural Biology. Liverpool, UK.

Yirmiya, K., Motsan, S., Vengrober, A., Schonblum, A., **Koren, L.** & Feldman, R. 2018. Symbolic play and hair cortisol mediate the effect of trauma exposure on adolescents' prosocial behavior and peer problems: a longitudinal study. Prosocial Development, Values, and Morals in Children Conference. Hebrew University, Jerusalem, Israel.

Goll, Y., Demartsev, V., **Koren, L.**, & Geffen, E. 2018. Male hyraxes increase countersinging as strangers become 'nasty neighbours'. International Society for Behavioral Ecology. Minneapolis, USA.

Ilany, A., Bordes, C., Beukboom, R. & **Koren, L.** 2018. Mating partners or just friends? Linking social and sexual networks using proximity sensors in the rock hyrax. International Society for Behavioral Ecology. Minneapolis, USA.

**Koren, L.**, Fishman, R., Shanas, U. & Vortman, Y. 2018. Multiple advantages to neighboring the opposite sex in-utero. International Congress of Neuroendocrinology, Toronto, Canada.

Goll, Y., Demartsev, V., **Koren, L.**, & Geffen, E. 2017. Male hyraxes increase countersinging as strangers become 'nasty neighbours'. (Contributed talk). The Zoological Society of Israel, Tel Aviv University, Israel.

Bordes, C., Beukboom, R., **Koren, L.** & Ilany, A. 2017. Mapping hyrax social networks using proximity loggers (Contributed talk). The Zoological Society of Israel, Tel Aviv University, Israel.

Fishman, R., Vortman, Y., Shanas, U. & **Koren, L.** 2017. The advantages of in-utero sex ratio heterogeneity. The Zoological Society of Israel, Tel Aviv University, Israel.

Sarid, S., Asfur, M., Kam, M., Khokhlova, I., Degen, A., **Koren, L.** 2017. Sex differences in hypothalamic-pituitary-gonadal axis response in wild gerbils. The Zoological Society of Israel, Tel Aviv University, Israel.

Fishman, R., Vortman, Y., Shanas, U. & **Koren, L.** 2017. The advantages of in-utero sex ratio heterogeneity. International Society of Wildlife Endocrinology Conference. Orlando, Florida, USA.

Sarid, S., Asfur, M., Kam, M., Khokhlova, I., Degen, A., **Koren, L.** 2017. Sex differences in hypothalamic-pituitary-gonadal axis response in wild gerbils. International Society of Wildlife Endocrinology Conference. Orlando, Florida, USA.

Cohen, Z.Z., Erez, O., Wiznitzer, A., **Koren, L.**, Henik, A. 2017. Attentional networks during the menstrual cycle. 20th Conference of the European Society for Cognitive Psychology. Potsdam, Germany.

Schonblum, A., Arnon, L., Salzer, L., Hadar, E., Meizner, I., Wiznitzer, A., Weller, A. & **Koren, L.** 2016. Maternal hair steroids predict gestational pathologies. The Zoological Society of Israel, Faculty of Agriculture, Hebrew University, Rehovot, Israel.

Demsalev, V., Ilany, A., Barocas, A., Geva, Y., Bar Ziv, E., **Koren, L.**, Geffen, E. 2015. Can hyraxes sing the blues? Possible evidence for musical features in male rock hyrax (*Procavia capensis*) complex calls. The Zoological Society of Israel, Ruppin, Israel.

**Koren, L.**, Ciuti, S., Wynne-Edwards, K.E., Boyce, M.S., Musiani, M. 2014. Hair testosterone reveals sex differences in wildlife behavioural strategies. International Conference on Hormones, Brain and Behavior, Liege, Belgium.

Bryan, H.M., Musiani, M., **Koren, L.**, Wynne-Edwards, K.E., and Smits, J.E.G. 2013. Hormonal patterns reflect social instability in a heavily hunted wolf population. American Society of Mammalogists Meeting, Philadelphia, Pennsylvania, USA.

Demartsev, V., Kershenbaum, A., Ilany, A., Barocas, A., Bar Ziv, E., **Koren, L.**, Geffen, E. 2013. Male hyraxes increase song complexity and duration in the presence of alert individuals. International Ethological Conference Association for the Study of Animal Behaviour – Newcastle Gateshead, UK.

Demartsev, V., Kershenbaum, A., Ilany, A., Barocas, A., Bar Ziv, E., **Koren, L.**, Geffen, E. 2012. Male hyraxes increase song complexity and duration in the presence of alert individuals. The Zoological Society of Israel, Haifa University, Israel.

Barocas A., Ilany A., **Koren L.**, Kam M., Geffen E. 2012. Smaller social groups help rock hyraxes live longer. International Society of Behavioral Ecology, Lund, Sweden.

Barocas A., Ilany A., Demartsev V., Bar-Ziv E., **Koren L.**, Kam M., Geffen E. 2012. Temporal change in rock hyrax social networks: Group-specific structure and key individuals. Network symposium. Laramie, WY, USA.

**Koren, L.**, Nakagawa, S., Burke, T., Soma, K.K., Wynne-Edwards, K.E., Geffen 2011. Feather steroids and survival in wild house sparrows. Animal Behavior Society, Bloomington, Indiana, USA.

**Koren, L.**, Wynne-Edwards, K.E., and The Collaborative Group of Wildlife Samples. 2011. Cortisol and corticosterone in stressed cortisol-dominant wildlife. Society for Behavioral Neuroendocrinology, Querétaro, Mexico.

Barocas A., Ilany A., **Koren L.**, Kam M., Geffen E. 2011. Variance in social network centrality within rock hyrax groups predicts longevity. Animal Behavior Society, Bloomington, IN, USA.

Barocas A., Ilany A., **Koren L.**, Kam M., Geffen E. 2011. Intermediate dispersal strategies and reduced survival in male rock hyraxes. Guild of Rocky Mountain Ecologists and Evolutionary Biologists annual meeting, Boulder, CO, USA.

Ilany A., Barocas A., **Koren L.**, Kam M., Geffen E. 2011. My enemy's enemy is my friend: structural balance in the networks of rock hyraxes. The Zoological Society of Israel, Tel-Aviv, Israel.

Bryan, H.M., Bond, L., **Koren, L.**, Smits, J. E. G., and Wynne-Edwards, K. 2011. Endogenous steroids in wildlife hair. University of Calgary Veterinary Medicine Research Day, Calgary, Alberta, Canada.

Ilany A., Barocas A., **Koren L.**, Kam M., Geffen E. 2010. Why do rock hyraxes sing in response to pup screams? The Zoological Society of Israel, Michmoret, Israel.

**Koren, L.**, Nakagawa, S., Burke, T., Wynne-Edwards, K.E. 2010. A salivary cortisol ELISA provides superior corticosterone quantification in avian plasma and feathers. Society for Behavioral Neuroendocrinology, Toronto, Canada.

**Koren, L.**, Mokady, O., Geffen, E. 2006. Elevated testosterone levels and social ranks in female rock hyrax. International Society for Behavioral Ecology, Tours, France.

#### **Invited scientific talks (non-conference seminars)**

Haifa University, Oranim, Department of Biology and Environment. 2025.

Hebrew University, Department of Ecology, Evolution and Behavior. 2025.

University of Minnesota, Conservation Sciences Graduate Program. 2023.

University of Strasbourg, Department of Ecology, Physiology & Ethology. 2023.

University of Haifa, Department of Evolutionary and Environmental Biology. 2023.

International Remote Seminar on Frontiers in Social Evolution (FINE). 2023.

University of Florida, Department of Biology. 2021.

University of California Santa Cruz, Ecology and Evolution Biology Department. 2021.

Arava and Dead Sea Science Center. 2021.

Haifa University, Oranim, Department of Biology and Environment. 2021.

Tel Aviv University, School of Zoology. 2021.  
 Long-term animal behavior research series, Duke University. 2020 (with Amiyaal Ilany).  
 Hebrew University, Veterinary School. 2018  
 Bar Ilan University, Department of Psychology. 2017.  
 Hebrew University, Department of Ecology, Evolution and Behavior. 2016.  
 Ben Gurion University, Department of Desert Studies. 2016.  
 Bar Ilan University, Faculty of Life Sciences. 2013.  
 Hebrew University, Faculty of Medicine. 2013.  
 Ben Gurion University, Department of Desert Studies. 2013.  
 University of Calgary, Faculty of Veterinary Medicine. 2010.  
 University of Calgary, Department of Biological Sciences. 2009.  
 Hebrew University, Department of Evolution, Systematics and Ecology. 2009.  
 University of Indiana, Bloomington, Department of Biology. 2007.  
 McMaster's University, Department of Psychology, Neuroscience & Behaviour. 2007.

## **Outreach**

2023-2024: Transmeet (scientists/artists exhibition)  
 2022: Girlsweek speaker.  
 2021: High school science exposure program.  
 2019: European Science and Innovation. 'Scientist's night' Ted-style talk.  
 2018: Speaking against hyrax culling in the media (radio and TV interviews).  
 2018: Interview for the association of Biology Teachers on life trajectories.  
 2013-6, 2018: Science Olympics. Scientific careers and research for high school students.  
 National project.  
 2017: The National Teacher Center for STEM Education in Preschool educational conference (Da Gan).  
 2017: Sex equality forum in Modiin Junior High.  
 2016: Community junior high school presentation.  
 2016: Bashaar activity with youth in the periphery of Israel.  
 2016: Bar Ilan University senior's club.  
 2016: Girlpower. Ministry of Science program encouraging girls to develop a science career.  
 2014-6, 2021: Science and the Halacha program for high school students.  
 2013-6: Brookdale program for senior citizens. Life science weekly lectures.  
 2015-6: Elementary school "Meet the Scientists Day".  
 2014: Interview on ynet.com about hyrax vocalizations.  
 2013: Co-creating a public website for hyrax information (with Amiyaal Ilany).  
<http://thehyrax.wix.com/hyrax>  
 2013: Representing Faculty of Life Sciences, Bar Ilan University at President Shimon Peres' Conference. Decision Making Round Table.  
 2013: Science for All Project. Lecturing on vocal communication and hormone and behaviour. Ministry of Science.  
 2013: Workshop for excellent senior high school biology students. Bar Ilan University.  
 2012: Zelda Young Show, CHIR 100.7 (Toronto, Canada), invited by Canadian Friends of Bar Ilan University.

2012: Represented new faculty recruits. Bar Ilan University Board of Trustees and Donors.

### **Teaching, mentoring and leadership**

2024 - present: Bar Ilan University. Faculty of Life Sciences. Field course in animal behaviour (won teaching grant for it).

2014 - present: Bar Ilan University. Faculty of Life Sciences. Endocrinology.

2014 - present: Guest lecturer in “Behavioral Genetics” (Life Sciences) and “Methodologies in Behavioral Research” (Brain Centre).

2014 - present: Bar Ilan University. Faculty of Life Sciences. First year Introduction to Biology course: Vertebrates (two courses: Biology majors and Biotechnologists).

2013 - 2025: Bar-Ilan University. Psychology Department and Gonda Brain Centre. Guest lecturer in Prof. Aaron Weller’s undergraduate “Hormones and Behavior” and graduate “Hormones and Social Behavior” courses.

2013 - present: Bar-Ilan University. Faculty of Life Sciences. Part of team teaching “Challenges of Modern Biology”. Undergraduate level course.

2013 - 2014: Bar Ilan University. Faculty of Life Sciences. Wildlife Hormones and Social Behavior.

2013 - 2015: Bar-Ilan University. Facilitating seminars on Steroid Determination of Sex Ratios (Undergraduate level course), and Maternal Androgens (Graduate level course).

2012: University of Calgary, Faculty of Veterinary Medicine. Part of team teaching in “Wildlife Handling and Field Procedures”. Graduate level course.

2010 - 2011: University of Calgary, Faculty of Veterinary Medicine. Teaching Doctor of Veterinary Medicine students the “Stress Physiology and Behaviour” unit in the ‘Animal Behaviour’ course.

2009 - 2012: University of Calgary, mentoring PhD students (Heather Bryan, Jesse Petterson, Karina Lamy) and research assistants (Paula Rodriguez, Lea Bond) in non-invasive steroid hair-extraction.

2006 - 2012: Tel Aviv University, mentoring graduate students in the hyrax study system that I established (Adi Barocas and Amiyaal Ilany). Teaching field, molecular and hormonal laboratory techniques. Conceiving and writing grants for further research questions that evolved from my study.



1999 - 2005: Ein Gedi Field Site, Tel Aviv University, mentoring undergraduate students and supervising their research projects (David Debby, Revital Ben David, Merav Rahat, Liat Weis, Gil Levy, Nati Cohen, Modi Ruppin, and Lea Ventura). Teaching research assistants (Beth Sanzenbacher, Itamar Aravot, Yotam Orchan, Oren Modan, Inbal Tauber) the hyrax trapping and handling routine for the hyrax study system.

1998 - 2000: Tel Aviv University, laboratory teaching assistant for the Zoology Department's undergraduate Vertebrate Anatomy course.

<b>Staff</b>		
Dr. Devorah Matas	Lab manager	10/2012 - present
<b>Graduate students</b>		
<b>PhD</b>		
Yarden Marom	<i>Sex differences in brains and development</i>	10/2025 -
Peter Imre Fabian	<i>Hyrax vocal signature</i>	2/2025 -
Heloise Brotier	<i>Hyrax behaviour and vocal honesty</i>	2/2024 -
Pablo Gonzalez	(Co-supervised with Prof. Eli Geffen)	1/2023 -
Sohini Bhattacharya	<i>Greenness, air-pollution, temperature, and hair steroid hormone levels during the second trimester of pregnancy and pregnancy outcomes</i> (Co-supervised with Prof. Aron Weller and Dr. Keren Agay-Shay)	10/2022 -
Alex Alaman	<i>Ecological traps in the desert: the effect of agricultural landscape for the Arabian Babbler (<i>Turdoides squamiceps</i>) in the Sheizaf Nature Reserve (Israel)</i> (Co-supervised with Dr. Oded Keynan)	11/2020 – 4/2025 Currently a field manager at the social weavers project, South Africa
Ruth Fishman	<i>Factors contributing to individual variation in fetal testosterone levels in the nutria (<i>Myocastor coypus</i>)</i> (Co-supervised with Drs. Uri Shanas and Yoni Vortman)	3/2016 – 6/2022 Currently a postdoc at the Weizmann Institute
Yishai Weisman	<i>Rock hyrax (<i>Procavia capensis</i>) snorts</i> (Co-supervised with Prof. Eli Geffen)	1/2014 - 9/2019 Currently the Biblical Zoo Zoologist
<b>MSc</b>		
Shira Schwartz	<i>Nutria brain profiles</i>	8/2024 -
Liel Boris	<i>Paternity effects on fetal HPA and HPG axes components</i> (Co-supervised with Dr. Yoni Vortman)	10/2023 -

Geeta Sharma	<i>The effects of experimentally manipulated corticosterone on Arabian babbler (<i>Argya squamiceps</i>) sociality</i> (Co-supervised with Dr. Oded Keynan)	10/2023 – 3/2025
Noi Ben Dor	<i>Nutria (<i>Myocastor coypus</i>) fetal yolk fluid, trimester classification, hormones, and environmental effects</i> (Co-supervised with Dr. Yoni Vortman)	10/2022 – 2/2025
Hunter Warick	<i>Social status and sperm characteristics in rock hyrax</i> (Co-supervised with Dr. Amiyaal Ilany)	10/2020 – 9/2023 Currently a PhD student at Tel Aviv University
Matteo Pederboni	<i>Female dominance over males and sex ratio in rock hyraxes</i> (Co-supervised with Prof. Charlotte Hemelrijk @ University of Groningen)	2/2020 - 6/2021
Kelly Pollard	<i>Glucocorticoids, longevity, and sociality in Arabian babblers</i> (Co-supervised with Dr. Oded Keynan)	1/2020 – 11/2022
Ariel Yael	<i>Sex and intrauterine position effect on the hypothalamic-pituitary-adrenal and gonadal axes in fetal nutria (<i>Myocastor coypus</i>) brains. Psagot honours student</i>	10/2019 – 5/2022 Currently a PhD student at Tel Aviv University
Hen Naor	<i>Wild gerbil risk-taking behaviour</i>	10/2018 – Currently an environmental consultant in the private sector
Maya Levhar	<i>The association between exposure to green environment and anxiety and depression in pregnant women: mediation by cortisol and testosterone</i> (Co-supervised with Prof. Aron Weller and Dr. Keren Agay-Shay)	10/2018 - 1/2021 Currently working at the IVF laboratory in Rabin Hospital
Gal Frydman	<i>Is rock hyrax (<i>Procavia capensis</i>) communication distance related to ultrasonic frequencies?</i> (Co-supervised with Prof. Eli Geffen)	10/2018 - 10/2020 Currently a PhD student at the University of Haifa
Nataly Navon	<i>Characterizing the immune response of transition dairy cows exposed to heat stress</i> (Co-supervised with Dr. Maya Zachut)	10/2016 - 10/2018 Currently a veterinary student at the Hebrew University
Shani Sarid	<i>Sex differences in the effect of testosterone on risk-taking behavior in <i>Gerbillus nanus</i></i>	10/2015 - 9/2019 Currently a PhD student at Tel Aviv

		University
Anat Shenbloom	<i>Hormonal and Environmental Influences on Birth Outcomes</i> (Co-supervised with Prof. Aron Weller and Dr. Keren Agay-Shay)	10/2015 - 10/2017 Currently a PhD student at Tel Aviv University
Talia Josephson	<i>Bats as synthetic vectors for decentralized antiviral vaccination</i> (Co-supervised with Dr. Ido Bachelet)	10/2014 - 9/2017 Working in Dr. Bachelet's start-up
Mustafa Asfur	<i>The effect of testosterone on reproductive success and survival in free-living Baluchistan gerbils (Gerbillus nanus)</i>	10/2013 - 2/2020 Currently teaching at Michmoret College
Inbar Shnitzer	<i>Aspects of sociality, motherhood and testosterone in female rock hyrax (Procavia capensis)</i>	10/2013 - 3/2019 Currently a manager at the Open Landscape Institute
Ruth Fishman	<i>The association between sex ratio, maternal and fetal steroids and intrauterine position in the nutria (Myocastor coypus)</i> (Co-supervised with Drs. Uri Shanas and Yoni Vortman)	10/2013 - 2/2016 Continued as a PhD student in the lab
Liat Arnon	<i>The relationship between pregnant women's hair testosterone and pregnancy outcome</i> (Co-supervised with Prof. Aron Weller)	2/2013 - 8/2015 Currently a researcher at the Endocrinology Unit in Sheeba Medical Centre
<b>Pre-graduate veterinary</b>		
Gal Sasson		10/2025 -
Stav Asulin	<i>Evaluating rock hyrax sperm: collection and quantification</i> (Co-supervised with Dr. Tal Raz)	10/2015 – 5/2021
Efrat Koresh	<i>Elevating rock hyrax testosterone levels using silastic tube implants</i>	6/2013 - 10/2014