Roee Gutman Curriculum Vitae

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A. Personal Details

- Full name: Roee Gutman.
- Work: A - Tel-Hai Academic College, M.P. Hagalil Haelyon, 12210, Israel; phone: 972-528422601. B – Laboratory of Integrative Physiology (LIP), MIGAL - Galilee Research Institute, P.O.B. 831, Kiryat Shmona, 11016, Israel. Work phone: 972-4-6953569; Work fax: 972-4-6944980; mobile: 972-52-8422601.
- E-mail address: roeeg@migal.org.il or roeegu@telhai.ac.il.

B. Higher Education

- 1995-1998: B.Sc. in Life Sciences, Faculty of Life Sciences, Tel Aviv University (Israel).
- 1998-2001: M.Sc. in Ecology and Environmental Studies (*Summa cum laude*), Department of Zoology, Faculty of Life Sciences, Tel Aviv University (Israel). Supervisor: Prof. Tamar Dayan.
- 2001-2008 (January): Ph.D. in Animal physiology, Department of Zoology, Faculty of Life Sciences, Tel Aviv University (Israel). Supervisors: Dr. Noga Kronfeld- Schor and Prof. shore Itzhak Choshniak.
- 2007-2009: Post-Doctoral Training in Animal physiology, Department of Pediatrics, Molecular Genetics, Columbia University (USA). Host: Prof. Rudolph L. Leibel.
- 2009-2010 (December): Post-Doctoral Training in Animal physiology, Institute of Biochemistry, Hebrew University (Israel). Host: Prof. Oren Froy.

C. Academic Appointments and Academic Administrative Positions in Institutions of Higher Education

Academic Appointments

- 2002-2007 and 2009-2011: Instructor. Department of Life Sciences, Open University (Israel).
- 2010-2011: Adjunct Lecturer. Department of Nutritional Sciences, Faculty of Sciences and Technology, Tel Hai College (Israel).
- 2011-2012: Lecturer. Departments Animal Science and Nutritional Sciences, Faculty of Sciences and Technology, Tel Hai College (Israel).
- 2012- present: Senior Lecturer. Departments of Animal Science and Nutritional Sciences, Faculty of Sciences and Technology, Tel Hai College (Israel).

Academic Administrative Positions

- 2001-2004: Public program coordinator, Nature Campus, Department of Zoology, Faculty of Life Sciences, Tel Aviv University (Israel).
- 2005-2007 and 2009-2011: Academic consultant, Department of Life Sciences, Open University (Israel).
- 2013- present: Member of the Institutional Animal Care and Use Committee (IACUC), Tel Hai College (Israel).
- 2013- present: Member of Teaching Committee, Department of Animal Science, Faculty of Sciences and Technology, Tel Hai College (Israel).
- 2013- present: Head, Animal physiology curriculum committee, Department of Animal Science, Faculty of Sciences and Technology, Tel Hai College (Israel).
- 2017- present: Head, Department of Animal Science, Faculty of Sciences and Technology, Tel Hai College (Israel).

D. Teaching in academic institutions

- 2002-2007 and 2009-2011: Department of Life Sciences, Open University (Israel).
- 2010- present: Departments of Animal Science and Nutritional Sciences, Faculty of Sciences and Technology, Tel Hai College (Israel).
- Courses taught in the past five years at the Departments of Animal Science and Nutritional Sciences, Faculty of Sciences and Technology, Tel Hai College (Israel):
  1. 2010- present: Circadian rhythm – Physiological aspects – undergraduate and graduate.
  2. 2010-2011: From cell to organism – undergraduate.
  3. 2012- present: 3rd-year seminar – undergraduate.
  4. 2011- present: Vertebrates' Zoology – undergraduate.
  5. 2012- present: Comparative Animal Physiology – undergraduate.
  6. 2013- present: 2nd-year seminar – undergraduate.
  7. 2015- present: Obesity and eating disorders – undergraduate.

E. Supervision of Graduate Students (*= since the last promotion)

Supervision of Graduate Students

1. 2011- 2016: Tel-Hai College, M.Sc. in Biotechnology. Rafi Steckler. Thesis title: “The role of the endogenous circadian rhythm in the propensity to obesity due to metabolic and photic disruption.” Co-advisor, S. Tamir.

2. 2011- 2016: Tel-Hai College, M.Sc. in Biotechnology. Mariel Alejandra Pinsky. Thesis title: "The role of leptin ontogeny in long-term energy homeostasis in the transgenic αMUPA mouse." Tel Hai College. Co-advisor, S. Tamir.
3. * 2013- 2016: Tel-Hai College, M.Sc. in Nutritional Sciences (*Summa cum laude*). Daniel Ben-Yaakov. Thesis title: "The role of leptin ontogeny in long-term energy homeostasis in the transgenic αMUPA mouse. Tel Hai College.
4. * 2013- 2018: Tel-Hai College, M.Sc. in Nutritional Sciences. Orit Gur Ari. Thesis title: "Energy homeostasis in Thalassemia major patients."
5. * 2015 – 2020: Tel-Hai College, M.Sc. in Nutritional Sciences. Anat Neumann: Thesis title: "The role the endogenous circadian period length as a risk factor for obesity."
6. * 2015 – present: Tel-Hai College, M.Sc. in Biotechnology. Eli Anavi. Thesis title: "Cholesterol adsorption by clays."
7. * 2015 – present: Tel-Hai College, M.Sc. in Biotechnology. Matan Fialko. Thesis title: "Insects as a protein source, production, and characterization of high-nutritional protein flour." Co-advisor, A. Jones-Levy.
8. * 2015 –2018: Tel-Hai College, M.Sc. in Biotechnology. Sari Peretz. Thesis title: "Fetal red blood cells in Sickle cell anemia and Sickle beta-thalassemia patients. The effect of Hydroxyurea treatment". Co-advisors, A. Koren, and C. Levin (Ha'Emek Medical Center).
9. * 2016 – present: Tel-Hai College, M.Sc. in Biotechnology. Kamiliya Hason. Thesis title: "Novel analytical methods to define organoleptic quality standards and health security in Israeli food products: olive oil." Co-advisor, O. Benjamin.
10. * 2016 – present: Tel-Hai College, M.Sc. in Biotechnology. Chen Rybko. Thesis title: "New organoleptic analytical methods to define milk quality for different somatic cells count using the electronic tongue and nose." Co-advisor, M. Shlisel.
11. * 2018 – present: Tel-Hai College, M.Sc. in Biotechnology. Keren Levi. Thesis title: "The efficacy of biocomposites as food additives for blood cholesterol and obesity management". Co-advisor, G. Ritwo.
12. * 2018 – present: Tel-Hai College, M.Sc. in Biotechnology. Florin Fares. Thesis title: "The effect of light regime on productivity of dairy cattle". Co-advisor, A. Asher.
13. * 2019 – present: Tel-Hai College, M.Sc. in Biotechnology. Jonathan Rassabi. Thesis title: "Health benefits and organoleptic quality evaluation of dairy products made of milk sorted out based on fatty acid composition, by near-IR sensors". Co-advisor, O. Benjamin.

14. * 2019 – present: Tel-Hai College, M.Sc. in Biotechnology. Lidor Zohar. Thesis title: “Production of tailor-made dietary fibers using newly evolved enzymes and evaluation of their glycemic index". Co-advisor, I. Yadid.
15. * 2020 – present: Tel-Hai College, M.Sc. in Biotechnology. Joyce Maroun. Thesis title: “Black soldier fly larva as a protein source".

Supervision of Post-doctoral Students (*= since the last promotion)

1. * 2017 – 2019: Atallah Abbas, Ph.D. Research title: Revealing the Mechanisms of Action by Which Sepiolite-Chitosan Biocomposite Attenuates the Development of Obesity and Hypercholesterolemia in Mice Fed a High-Fat Diet. A two-year fellowship grant from the Ministry of Science, Technology and Space, State of Israel.
2. * 2018 – present: Dalia Niv. Ph.D. Revealing the Mechanisms of Action by Which Sepiolite-Chitosan Biocomposite Attenuates the Development of Hypercholesterolemia in APO-E Mice Fed a High-Fat Diet.

F. Research Grants (*= since the last promotion)

1. * 2014-2015: "Honeybee pupae as a source for food for the future: scientific, economic and technological feasibility". From the Research Authority, Tel Hai College/Migal – Galilee Research Institute. 30,000 NIS (8,000 US$). In Collaboration with Dr. Jean-Jacques Martinez (PI), Dr. Doron Lavi (Co-PI) (Tel-Hai College), Dr. Adi Jonas (Tel-Hai College), and Dr. Ofir Benjamin (Tel-Hai College).
2. * 2014: “The Endogenous Circadian Period Length as a Novel Risk Factor for Obesity and Metabolic Syndrome”. From the German-Israel Foundation for Scientific Research and Development grant. 28,000 euro (36,000 US$). See publication no. 18.
3. * 2014-2016: “Development of biocomposite-based dietary supplement for reduction of oil and fats absorption“. PI. From The Israeli Ministry of Industry, Trade & Labor KAMIN grant (with Giora Rytwo). 708,560 NIS (182,319 US$)
4. * 2016-2019: “The efficacy of biocomposites as food supplements for attenuating hypercholesterolemia”. PI. From The Israeli Ministry of Science, Technology and Space. 499,998 NIS (130,856 US$).
5. * 2017: “Development of technological process for manufacturing insect-based protein-rich meal”. From the Research Authority, Migal – Galilee Research Institute. 50,000 NIS (10,746 US$). In Collaboration with Dr. Adi Jonas (PI) (Tel-Hai College).

6. * 2017 - 2019: “Evaluation of health benefits and organoleptic quality of dairy products made from milk sorted out by near-IR sensor based on fatty acid composition”. From the Israeli Ministry of Health and the Israeli Dairy Board. Co-PI. 170,000 NIS (48,000 US$). In Collaboration with Dr. Ofir Benjamin (PI, Tel Hai College), Rona Schaffer (Wingate Institute), Dr. Gabriel Leitner (Veterinary Institute), and Dr. Uzi Merin (Veterinary Institute).
7. * 2018: “Development of technological process for manufacturing insect-based protein-rich meal”. Research Authority, Migal – Galilee Research Institute. 30,000 NIS (8438 US$). In Collaboration with Dr. Adi Jonas (PI) (Tel-Hai College).
8. * 2018-2020: "Night milk": Dairy milk and milk products naturally enriched with Melatonin". Ministry of Agriculture and Rural Development. Co-PI. 900,000 NIS (248,089 US$). In Collaboration with Dr. Aviv Asher (PI, Mop Tzafon).
9. * 2019-2022: "Development of protocols for alternative protein production, to feed men and fish, based on *Hermita illusence* the Black Soldier Fly larvae, fed on agricultural wastes of the upper Galilee". Ministry of Agriculture and Rural Development. 450,000 NIS (125,000 US$). In Collaboration with Liora Shaltiel – Harpaz (PI), Adi Jones – Levi, Avshalom Hurvitz, and Tamar Tzemach.
10. * 2020-2021: "Evaluating the nutritional benefits of cow-milkfat with a high level of unsaturated fat at attenuating arteriosclerosis in ApoE knock-out mice." 40,000 NIS (11,400 US$). From the Research Authority, Tel Hai College/Migal – Galilee Research Institute. In Collaboration with Dr. Ofir Benjamin (Tel-Hai College).

G. <u>Awards and Fellowships (*= since the last promotion)</u>

1. 1996 – 1998: Israel Ministry of Education Scholarship for Students.
2. 1997: Edith and Henry Everett Scholarship for Outstanding Students.
3. 1999: Mevo'ot Hermon Regional Council Scholarship for Students.
4. 2002: Tel Aviv University, Department of Zoology, Adesman Scholarship for Outstanding M.Sc. students.
5. 2003: Tel Aviv University, Faculty of Life Sciences, Faculty Award for Excellence in Teaching and Studies.
6. 2003: UJA Federation of New York, Salim and Rachel Banin Scholarship for Excellence in Studies.
7. 2004: Minerva Foundation (Germany), Short-Term Research Grant.

8. 2005 – 2008: Council for Higher Education (Israel), Lev-Zion Triennial Scholarship for Outstanding Ph.D. Students.
9. * 2013: American Physiological Society. Travel Award to attend the XXXVII International Congress of Physiological Sciences, Birmingham, UK.
10. * 2014: Physiological Society. Travel Award to attend the Physiological Society meeting, Newcastle, UK.
11. * 2014: Tel-Hai College, Faculty of Life Sciences, Department of Animal Science, Department Award for Excellence in Teaching.

H. Active Participation in Conferences (*= since the last promotion)

1. 1999: The Zoological Society of Israel. The 36th Meeting. Influence of habitat structure and food quality on foraging behavior of spiny mice (genus *Acomys*). Tel Aviv, Israel.
2. 2000: The Zoological Society of Israel. The 37th Meeting. Foraging behavior of *Acomys russatus* in absence of its competitor *Acomys cahirinus*: The role of exploitation competition and interference competition in competitive exclusion. Beer Sheva, Israel.
3. 2001: Israel Society for Ecology & Environmental Quality Sciences (ISEEQS). The 31st Annual Meeting. Foraging behaviour of *Acomys russatus* in absence of its competitor *Acomys cahirinus*: The role of exploitation competition and interference competition in competitive exclusion. Tel Aviv, Israel.
4. 2001: American Society of Mammalogists. The 81st Annual Meeting. Temporal partitioning between competing spiny mouse species: the role of exploitation competition and interference competition. Missoula, Montana, USA.
5. 2001: The Zoological Society of Israel. The 38th Meeting. Moon-struck spiny mice: the influence of moon cycle on diurnal and nocturnal foraging behavior. Haifa, Israel.
6. 2002: The European Ecological Congress. The IX Meeting. Coexistence of competing spiny mouse species: on foraging tradeoffs and temporal partitioning. Lund, Sweden.
7. 2002: The Zoological Society of Israel. The 39th Meeting. Road kills and under-road pass utilization by animals – a preliminary survey. Tel Aviv, Israel.
8. 2002: Israel Society for Ecology & Environmental Quality Sciences (ISEEQS). The 32nd Annual Meeting. Road kills and under-road pass utilization by animals – a preliminary survey. Tel Aviv, Israel.

9. 2003: The Zoological Society of Israel. The 40th Meeting. Hormonal, behavioral and biochemical mechanisms in adaptation of the golden spiny mouse (*Acomys* russatus) to variations in food availability. Tel Aviv, Israel.
10. 2004: The Endocrine Society. The 86th Annual Meeting. Leptin response as adaptation of the golden spiny mouse (*Acomys Russatus*) to variation in food availability. New Orleans, USA.
11. 2004: The 1st Integrated Symposium on the Physiology and Pharmacology of Thermal Biology and Temperature Regulation. Torpor – like and leptin response as adaptation of the golden spiny mouse (*Acomys Russatus*) to variation in food availability. Rhodes, Greece. The lecture was selected to be presented at a student competition session.
12. 2005: The 24th International Summer School on Brain Research. The golden spiny mouse (Acomys russatus) – a novel animal model for diet-induced obesity. Amsterdam, The Netherlands.
13. 2006: The Endocrine Society. The 88th Annual Meeting. The golden spiny mouse (Acomys russatus) – a novel animal model for diet-induced obesity. Boston, USA.
14. 2006: The Israel Society for Physiology and Pharmacology. The Annual Meeting. Tel-Aviv, Israel. Leptin resistance in diet-induced obese golden spiny mice (*Acomys russatus*). The lecture was selected to be presented at a student competition session.
15. 2006: The Zoological Society of Israel. The 43rd Meeting. Two strategies for coping with food shortage in desert golden spiny mice. Raanana, Israel.
16. 2011: The 9th Preventive Nutrition – Unified Forces Convention and Exhibition. Carbohydrate & Proteins in the life circle. Effects of Chronic Weight Perturbation on Energy Homeostasis and Brain Structure in Mice. Tel Aviv, Israel.
17. * 2012: The International Congress of Zoological. The 21st Meeting. Leptin ontogeny, neuronal wiring, and long-term energy homeostasis in the obesity resistant long-lived αMUPA mouse. Haifa, Israel.
18. * 2013: Experimental Biology. Long-lived and Obesity Resistant Mice Exhibit 24 h Locomotor Circadian Rhythms at Young and Old Age Boston, USA.
19. * 2013: International Union of Physiological Societies. Annual Meeting. Long-lived and Obesity Resistant Mice Exhibit 24 h Locomotor Circadian Rhythms at Young and Old Age. Birmingham, United Kingdom. Abstract won the American Physiological Society Travel Award to attend the Congress.

20. * 2014: Physiological Society. Holding Mice at an Environmental Photic Cycle that Matches their Endogenous Circadian Rhythm Period Length Prevents Diet Induced Obesity. New Castel, United Kingdom. Abstract won the Physiological Society Travel Award to attend the meeting.
21. * 2014: Timelines in biology. Chronic Synchronization of the Environmental Photoperiod Length to the Endogenous Circadian Period Length Prevents Diet Induced Obesity. Rehovot, Israel.
22. * 2015: Gordon Research Conference. Chronobiology. Holding Mice at an Environmental Photic Cycle that Matches their Endogenous Circadian Rhythm Period Length Prevents Diet Induced Obesity. Girona, Spain.
23. * 2015: 5th Galilee Biomedical Conference. Sepiolite Clay Attenuates the Development of Obesity and Prevents Hypercholesterolemia and Hyperlipidemia in Mice Fed a High-Fat High-Cholesterol Diet. Tel Hai, Israel.
24. * 2016: Humboldt Colloquium. Holding Mice at an Environmental Photic Cycle that Matches their Endogenous Circadian Rhythm Period Length Prevents Diet Induced Obesity. Tel Aviv, Israel.
25. * 2017: XV European Biological Rhythms Society Congress. Holding mice at an environmental photic cycle that matches their endogenous circadian rhythm period length prevents diet induced obesity. Amsterdam, Netherlands.
26. * 2018: 2018 Society for Research on Biological Rhythms Biennial The metabolic cost of daily entrainment under high fat diet in mice. Amelia Island, Florida, USA.
27. * 2018: Insecta 2018. Bees-meal and cuticle-poor Black-Soldier-Fly-meal, used as a sole source of protein, show casein-matching body weight and body protein gain as well as casein-matching body protein retention efficiency in C57BL/6 mice. Giessen, Germany.
28. * 2019: 21st Annual Meeting of New Research of the Galillee and its Surroundings. Bees-meal and cuticle-poor Black-Soldier-Fly-meal, used as a sole source of protein, show casein-matching body weight and body protein gain as well as casein-matching body protein retention efficiency in C57BL/6 mice. Tel-Hai, Israel.
29. * 2019: Obesity 2019 The annual convention of The Israel Association for the Study of Obesity. αMUPA mice show lower body weight under regular diet, but higher incrementation in body weight under high-fat diet that is abolished by postnatal administration of leptin antagonist. Tel-Aviv, Israel.

30. * 2019: 31st Annual Meeting of the Society for Light Treatment and Biological Rhythms (SLTBR). Extent and onset of high-fat-diet-induced obesity in mice is attenuated under an environmental photic cycle that resembles their endogenous circadian rhythm period length. Chicago, U.S.A.
31. * 2020: The 6th Darwin Day symposium. Is colonizing Mars the solution to human obesity? Haifa, Israel.

I. Non-Academic Activity & Positions (*= since the last promotion at MIGAL)

- 2011- 2017: Researcher. Unit of Integrative Physiology (LIP), Laboratory of Human Health and Nutrition Sciences. MIGAL - Galilee Research Institute (Israel).
- *2017 - present: Principal Investigator. Laboratory of Integrative Physiology (LIP). MIGAL - Galilee Research Institute (Israel).

J. Attached Documents

K. Publications

1. M. Sc. Thesis:

   "Foraging Behavior of Spiny Mice: A Model for Testing the Role of Competition, Predation Risk and Habitat Structure". Department of Zoology, Faculty of Life Sciences, Tel Aviv University (Israel). Supervisor: Prof. Tamar Dayan. 2002. Summa cum laude.
2. Ph.D. Dissertation:

   "Body Mass Control in the Golden Spiny Mouse – Physiological and Behavioral Aspects ". Department of Zoology, Faculty of Life Sciences, Tel Aviv University (Israel). Supervisors: Dr. Noga Kronfeld-Schor and Prof. Itzhak Choshniak. 2008.
3. Books:
4. Edited book:
5. Articles in refereed journals (*= since the last promotion, IF and ranking according to JCR, No. of citations according to Google Scholar)

   Published:

   1. Gutman, M., A. Perevolotsky, R. Yonatan, and **R. Gutman**. Grazing as a management tool for prevention of fire in open areas: Ramat Hanadiv Park (1990-1999). Ecology and Environment 6: 239-248, 2001.
   2. **Gutman, R.**, and T. Dayan. Temporal partitioning: An experiment with two species of spiny mouse. Ecology, 86(1): 164-173, 2005. Impact Factor of 4.285. Category Name,

ECOLOGY, Q1 (27\165). No. of citations, 92. Available at: http://www.esajournals.org/doi/pdf/10.1890/03-0369.

3. **Gutman, R.**, I. Choshniak, and N. Kronfeld-Schor. Defending body mass during food restriction in Acomys russatus – a desert rodent that does not store food. American Journal of Physiology – Regulatory, Integrative and Comparative Physiology, 290 (4): R881-R891, 2006. Impact Factor of 3.156. Category Name, PHYSIOLOGY, Q2 (19\73). No. of citations, 72. Available at: http://ajpregu.physiology.org/content/ajpregu/290/4/R881.full.pdf.
4. **Gutman, R.**, D. Yosha, I. Choshniak, and N. Kronfeld-Schor. Two strategies for coping with food shortage in desert golden spiny mice. Physiology & Behavior, 90(1): 95-102, 2007. Impact Factor of 2.635. No. of citations, 68. Category Name PSYCHOLOGY, BIOLOGICAL, Q2 (4\14). Available at: http://www.sciencedirect.com/science/article/pii/S0031938406003805.
5. **Gutman, R.**, R. Keren, I. Choshniak, and N. Kronfeld-Schor. Effect of food availability and leptin on the physiology and hypothalamic gene expression in a desert rodent that does not hoard food, the golden spiny mouse. American Journal of Physiology – Regulatory, Integrative and Comparative Physiology, 295: R2015-R2023, 2008. Impact Factor of 3.156. Category Name, PHYSIOLOGY, Q2 (19\73). No. of citations, 17. Available at: http://ajpregu.physiology.org/content/ajpregu/295/6/R2015.full.pdf.
6. Stratigopoulos G., C. A. LeDuc, N. Matsuoka, **R. Gutman**, R. Rausch, S. A. Robertson, M. G. Myers Jr, W. K. Chung, SC. Chua Jr, and R. L. Leibel. Functional consequences of the human leptin receptor (LEPR) Q223R transversion. Obesity, 17(1):126-35, 2009. Impact Factor of 3.614. Category Name, NUTRITION & DIETETICS, Q1 (19\87). No. of citations, 40. Available at: http://onlinelibrary.wiley.com/doi/10.1038/oby.2008.489/epdf.
7. Froy, O., H. Sherman, G. Bhargava, N. Chapnik, R. Cohen, **R. Gutman**, N. Kronfeld-Schor, and R. Miskin. Spontaneous caloric restriction associated with increased leptin levels in obesity-resistant alpha MUPA mice. International journal of obesity, 35: 226-235, 2011. International journal of obesity, 2011, 35: 226-235. Impact Factor of 4.514. Category Name, NUTRITION & DIETETICS, Q1 (12\87). No. of citations, 16. Available at: http://www.nature.com/ijo/journal/v35/n2/pdf/ijo2010125a.pdf.

8. Sherman, H., **R. Gutman**, N. Chapnik, J. Meylan, J. le-Coutre, and O. Froy. Caffeine alters circadian rhythms and expression of disease and metabolic markers. International Journal of Biochemistry & Cell Biology. 43: 829-838, 2011. Impact Factor of 3.144. Category Name, BIOCHEMISTRY & MOLECULAR BIOLOGY, Q2 (132\298). No. of citations, 26. Available at: http://www.sciencedirect.com/science/article/pii/S1357272511000641.
9. **Gutman, R.**, Y. Genzer, N. Chapnik, R. Miskin, and O. Froy. Long-lived αMUPA mice exhibit 24 h locomotor activity circadian rhythms. Experimental Gerontology. 46: 606-609, 2011. Impact Factor of 3.080. Category Name, GERIATRICS & GERONTOLOGY, Q2 (24\53). No. of citations, 41. Available at: http://www.sciencedirect.com/science/article/pii/S0531556511000659#.
10. Ravussin, Y.*, **R.*** **Gutman**, S. Diano, M. Shanabrough, E. Borok, B. Sarman, A. Lehmann, C.A. LeDuc, M. Rosenbaum, T.L. Horvath, and R. L. Leibel. Effects of Chronic Weight Perturbation on Energy Homeostasis and Brain Structure in Mice. American Journal of Physiology – Regulatory, Integrative and Comparative Physiology, 300 (6): R1352-62, 2011. * The authors contributed equally to this work. Impact Factor of 3.156. Category Name, PHYSIOLOGY, Q2 (19\73). No. of citations, 54. Available ahead of print at: http://ajpregu.physiology.org/content/ajpregu/300/6/R1352.full.pdf.
11. Sherman, H., I. Fromin, **R. Gutman**, N. Chapnik, A. Lorentz, J. Meylan, J. le-Coutre, and O. Froy. Long-term restricted feeding alters circadian expression and reduces the level of inflammatory and disease markers in various mouse tissues. Journal of Cellular and Molecular Medicine, 15 (12): 2745-2759, 2011. Impact Factor of 4.658 Category Name, MEDICINE, RESEARCH & EXPERIMENTAL, Q1 (31\136). No. of citations, 79. Available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1582-4934.2010.01160.x/pdf
12. **Gutman, R.**, T. Dayan, I. Schubert, O. Levy, and N. Kronfeld-Schor. The effect of the lunar cycle on stress hormone levels and foraging ecology of nocturnally and diurnally active spiny mice. PLOS one, 6(8): e23446, 2011. Impact Factor of 2.776. Category Name, Multi-Disciplinary Science, Q2 (24\69). No. of citations, 22. Available at: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0023446.
13. Sherman, H., **R. Gutman**, N. Chapnik, A. Lorentz, J. Meylan, J. le-Coutre, and O. Froy. All-trans retinoic acid modifies the expression of clock and disease marker genes.

Journal of Nutritional Biochemistry, 23: 209-217, 2012. Impact Factor of 4.490. Category Name, Nutrition and Dietetics, , Q1 (13\87). No. of citations, 14. Available at: http://www.ncbi.nlm.nih.gov/pubmed/21497500.

14. Ravussin, Y., O. Koren, A. Spor, C. A. LeDuc, **R. Gutman**, J. Stombaugh, R. Knight, R. Ley, and R. L. Leibel. Responses of gut microbiota to weight loss in lean and obese mice. Obesity, 20 (4): 738-747, 2012. Impact Factor of 3.969. Category Name, NUTRITION & DIETETICS, Q1 (19\87). No. of citations, 342. Available at: http://onlinelibrary.wiley.com/doi/10.1038/oby.2011.111/epdf.
15. **Gutman, R.**, M. Barnea, L. Haviv, N. Chapnik, and O. Froy. Peroxisome proliferator-activated receptor α (PPARα) activation advances locomotor activity and feeding daily rhythms in mice. International Journal of Obesity, 36: 1131-1134, 2012. Impact Factor of 4.514. Category Name, NUTRITION & DIETETICS, Q1 (12\87). No. of citations, 12. Available at: http://www.nature.com/ijo/journal/v36/n8/full/ijo2011215a.html.
16. * Barnea, M., L. Haviv, **R. Gutman**, N. Chapnik, Z. Madar, and O. Froy. Metformin affects circadian clock and metabolic rhythms in a tissue-specific manner. BBA - Molecular Basis of Disease, 1822 (11): 1796-1806, 2012. Impact Factor of 4.328. Category Name, BIOPHYSICS, Q1 (13\73). No. of citations, 63. Available at: http://www.sciencedirect.com/science/article/pii/S0925443912001913#.
17. * Ravussin, Y., **R. Gutman**, C.A. LeDuc, and R. L. Leibel. Estimating Energy Expenditure in mice using an Energy Balance Technique. International Journal of Obesity, 37: 399-403, 2013. Impact Factor of 4.514. Category Name, NUTRITION & DIETETICS, Q1 (12\87). No. of citations, 45. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3697837/pdf/nihms470375.pdf.
18. * Steckler, R, A. Shabtay-Yanai, M. Pinsky, M. Rauch, S. Tamir, and **R. Gutman**. Long-lived αMUPA mice show reduced sexual dimorphism in lifespan, and in energy and circadian homeostasis related parameters. The Journals of Gerontology Series: Biological Sciences. 71(4): 451-460, 2016. Impact Factor of 5.476. Category Name, GERIATRICS & GERONTOLOGY, Q1 (4\49). No. of citations, 2. Available at: http://biomedgerontology.oxfordjournals.org/cgi/reprint/glv019?%20ijkey=Yv9UkeCyHeRV1aH&keytype=ref.
19. * Efrat, R., G. Shalev, **R. Gutman**, and N. Sapir. Does saline water consumption affect feeding and body condition of a staging, long distance migrating passerine. Journal of

Avian Biology. 47: 378-385, 2016. Impact Factor of 2.232. Category Name, ORENTOLOGY, Q1 (3/25). No. of citations, 1. Available at: http://onlinelibrary.wiley.com/doi/10.1111/jav.00770/pdf

20. * Garrido, M., Hochman Adler, V., Pnini, M., Abramsky, Z., Krasnov, B. R., **Gutman, R.**, Kronfeld-Schor, N., and H. Hawlena. Time budget, oxygen consumption and body mass responses to parasites in juvenile and adult wild rodents. Parasites & Vectors, 9: 120, 2016. Impact Factor of 3.031. Category Name, TROPICAL MEDICINE, Q1 (8\37). No. of citations, 11. Available at: http://parasitesandvectors.biomedcentral.com/articles/10.1186/s13071-016-1407-7.
21. * Aharon Gutman, M and **R. Gutman**. Will our voices be heard? An inside view of an environmental public struggle at the Israeli Northern Periphery. Israeli Sociology, 2: 196, 2017. (In Hebrew). Available at: http://www.socis.tau.ac.il/index.php/issues/93-volume-18-no-2
22. * Pinsky M., M. Rauch, A. Abbas, A. Sharabi-Nov, S. Tamir, and **R. Gutman**. Long-lived Weight-Reduced αMUPA Mice Show Higher and Longer Maternal-Dependent Postnatal Leptin Surge. PLoS ONE 12(11): e0188658. 2017. Impact Factor of 2.776. Category Name, Multi-Disciplinary Science, Q2 (24\69). No. of citations, 7. Available at: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0188658
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24. * **Gutman R.**, M. Rauch, A. Neuman, H. Khamaisi, A. Jonas-Levi, Y. Konovalovae and G. Rytwo. Sepiolite Clay Attenuates the Development of Hypercholesterolemia and Obesity in Mice Fed a High-Fat, High-Cholesterol Diet. Journal of Medicinal Food 20 (3) 289-296. 2020. Impact Factor of 2.02. Category Name, FOOD SCIENCE AND TECHNOLOGY, Q2 (60\135). No. of citations, 1. Available at: https://www.liebertpub.com/doi/pdfplus/10.1089/jmf.2019.0030.

25. * Binyamin D., Werbner N., Nuriel-Ohayon M., Uzan A., Mor H., Abbas A., Ziv O., Teperino R., **Gutman R.**, and O. Koren. The aging mouse microbiome has obesogenic characteristics. 2020. Genome Medicine. Accepted for publication. Impact Factor of 10.63. Category Name, Genetics and Heredity, Q1 (9\177). Available at: https://genomemedicine.biomedcentral.com/articles/10.1186/s13073-020-00784-9

6. Patents
   1. *** Gutman, R**. and G. Rytwo. (2017) US provisional patent application number No 62/588,664 "Acicular clays and biocomposites based thereon for use in treatment of metabolic syndrome and related disorders" filed November 20, 2017.
7. Chapters in Edited book:
   1. Dayan, T., **R. Gutman** and Y. Mandelik. Biological diversity indicators. In: Feitelson E. (ed.). Sustainable Development Indicators in Israel. Jerusalem institute for Israel Studies. 2004.
   2. Gutman, M., R. Yonatan, and **R. Gutman**. Cattle grazing for wildfire prevention at Ramat Hanadiv (1990-2005). In: Perevolotsky, A. (ed.). Conserving and Managing Mediterranean Ecosystem: The Ramat Hanadiv Case Study and Beyond. Ramat Hanadiv. Zichron Ya'akov. 2013.
8. Refereed conference proceedings (*= since the last promotion):
   1. **Gutman, R**., M. E. Jones, and T. Dayan. Influence of habitat structure and food quality on foraging behavior of spiny mice (genus Acomys). Israel Journal of Zoology 46(2): 161, 2000.
   2. **Gutman, R.**, and T. Dayan. Foraging behaviour of Acomys russatus in absence of its competitor Acomys cahirinus: The role of exploitation competition and interference competition in competitive exclusion. Israel Journal of Zoology 47:183, 2001.
   3. **Gutman, R.**, and T. Dayan. Moon-struck spiny mice: the influence of moon cycle on diurnal and nocturnal foraging behavior. Israel Journal of Zoology 48(2): 170, 2002.
   4. **Gutman, R.**, I. Sinai, E. Sadot, and Y. Shkedy. Road kills and under-road pass utilization by animals – a preliminary survey. Israel Journal of Zoology 49(2): 79-80, 2003.
   5. **Gutman, R.**, I. Choshniak, and N. Kronfeld–Schor. Hormonal, behavioral and biochemical mechanisms in adaptation of the golden spiny mouse (Acomys russatus) to variations in food availability. Israel Journal of Zoology 50(1): 109, 2004.

6. *** Gutman, R**. and O. Froy. Long-lived and obesity resistant mice exhibit 24 h locomotor circadian rhythms at young and old age. Proceedings of The Physiological Society. 37th Congress of IUPS (Birmingham, UK), 2013. Available at: http://www.physoc.org/proceedings/abstract/Proc%2037th%20IUPSPCA283
7. * Rytwo, G., R. Lavi, Y. Konovalova1, and **R. Gutman**. Adsorption of olive oil on clay minerals and nanocomposites. Proceedings of 51st Annual Meeting of the Clay Minerals Society, (College Station, Texas, USA), 2014. Available at: https://cms2014.tamu.edu/files/ProgramAbstracts_CMS2014_LowResolution.pdf
8. * Steckler, R, H. Choen, S. Tamir, and **R. Gutman.** Holding Mice at an Environmental Photic Cycle that Matches their Endogenous Circadian Rhythm Period Length Prevents Diet-Induced Obesity. Obesity. (New Castel, United Kingdom). Proceedings of The Physiological Society. 32. PC20. 2014. Available at: http://www.physoc.org/proceedings/abstract/Proc%20Physiol%20Soc%2032PC020
9. * **Gutman, R.**, M. Rauch, A. Neuman, H. Khamaisi, A. Jonas-Levi, and G. Rytwo. Sepiolite Clay Attenuates the Development of Obesity and Prevents Hypercholesterolemia and Hyperlipidemia in Mice Fed a High-Fat High-Cholesterol Diet. 5th Galilee Biomedical Conference, Tel Hai, Israel, 2015.
10. * Rytwo, G., A. Sitruk, R. Lavi, H. Khamaisi, and **Gutman, R**. De-emulsification of oil emulsions by clays and nanocomposites, 5th Galilee Biomedical Conference, Tel Hai, Israel, 2015.
11. * Rytwo, G., A. Sitruk, R. Lavi, H. Khamaisi, and **Gutman, R**. De-emulsification of oil emulsions by clays and nanocomposites, EU COST-HINT Scientific Workshop and Review Meeting, Milan, 2015 http://www.cost-hint.cnrs.fr/index.php/news-and-events/25-meeting-milan-2015.

9. Other articles (in collections or non-refereed journals)
10. Articles in preparation:
    1. Steckler, R., H. Y. Cohen, S. Tamir, and **R. Gutman**. Holding Mice at an Environmental Photic Cycle that Matches their Endogenous Circadian Rhythm Period Length Prevents Diet-Induced Obesity.
    2. Fialko, M., J. J. Martinez, A. Jonas, and R. **Gutman**. Reducing cuticle levels in Black-Soldier-Fly-meal improves body-protein gain efficiencies to that of the recommended diet for mice growth.

L. Miscellaneous

- Public or other positions in professional fields.
  - Israeli representative in the management committee of the European Cooperation in Science & Technology (COST) action N° CA16205 Titled "EUROPEAN NETWORK ON UNDERSTANDING GASTROINTESTINAL ABSORPTION-RELATED PROCESSES". 2017- present.
  - Membership in professional organizations: The Israel Zoological Society (1999-2014), Israel Endocrine Society (2004- present), The American Physiological Society (2005-present), Society for Research on Biological Rhythms (2010- present), European Biological Rhythms Society (2012- present), Israeli Society for Research and Treatment of Obesity (2012- present), The Physiological Society (2014- present).
- Special contribution to the college or the community.
  - Giving open-to-the-public lectures or hands-on exhibitions at the National and International Science Day.
  - Supervision of final research projects of Tel Hai students (*= since the last promotion):
    1. Naama Tal (2011-2012). Exploring the existence of a sexual dimorphic circadian clock in mouse strains.
    2. Bat Chan Ackerman (2011-2012). Leptin's ontogeny and body weight at adulthood in male and female αMUPA and FBV/N mice.
    3. * Efrat Davidovich (2012-2013). Exploring the link between postnatal leptin concentration and fat's histological structure in αMUPA female mice.
    4. * Yael Hasson (2012-2013). Exploring the role link between leptin concentration and fat's histological structure in αMUPA and FVB/N mice.
    5. * Alexzander Zuev. 2012-2013. Developing the software Periodizer. In collaboration with Prof. Yizhar Lavner (Tel Hai).
    6. * Einav Dombak. 2013-2014. Sexual dimorphism in diet induced obesity in αMUPA and FVB/N mice.
    7. * Annat Neuman (2014-2015). Adding clay to a high fat high cholesterol diet attenuates weight gaining and improves seral lipid's profile.
    8. * Hadar Frank (2014-2015). Adding clay to a high fat high cholesterol diet attenuates weight gaining and improves seral lipid's profile. In collaboration with Dr. Adi Jonas.

9. * Ela Kaftzel (2015-2016): The effect of adding clay and biocomposite to high fat diet on mice fecal sterols and hydrophobic material.
10. * Nofar Fadid (20150-2016). The effect of adding clay and biocomposite to high fat diet on mice weight gaining, food intake and body composition.
11. * Rachel Lozan (2015-2016). Energy balance in mice under different light regimes.
12. * Nir Alhorn (2015-2016). The role of the endogenous circadian clock period length in diet induced obesity.
13. * Shani Riba (2015-2016). The correlation between date of arrival of Eurasian red warbler the Hula nature reserve and polymorphism in the CLOCK gene and other physiological parameters. In collaboration with Dr. Yoni Vortman, Yaron Dekel, and Dani Bercovich.
14. * Mor Zavaro (2016-2017). The effect of the difference between the endogenous circadian clock period length and the environmental clock on weight control in mice.
15. * Moran Zrihan (2017-2018). The effect of biocomposite supplementation to a high fat diet on the development of Non-alcoholic fatty liver disease.
16. * Lior Zlotnik (2018-present). The effect of biocomposite supplementation to a high fat diet on the development of Non-alcoholic fatty liver disease.

- Review of research proposals: Agence nationale de la recherche (ANR) ,French; the National Institute for Psychobiology in Israel; BSF.
- Reviews of manuscripts in Journals such as: Life Sciences ,Journal of Biological Rhythms, The Journal of Clinical Endocrinology & Metabolism, Chronobiology International.