Name: Roee Gutman **Date:** August 2024

CURRICULUM VITAE

1. Personal Details

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2. Higher Education

A. Undergraduate and Graduate Studies

Period of Study	Name of Institution and Department	Degree	Year of Approval of Degree
2001-2008	Department of Zoology, Faculty of Life Sciences, Tel Aviv University, Israel	Ph.D. in Animal Physiology	2008 (January)
1998-2001	Department of Zoology, Faculty of Life Sciences, Tel Aviv University, Israel	M.Sc. in Ecology and Environmental Studies (*Summa cum laude*)	2001
1995-1998	Faculty of Life Sciences, Tel Aviv University, Israel	B.Sc. in Life Sciences	1998

B. Post-Doctoral Studies

Period of Study	Name of Institution, Department and Host	Degree	Year of Completion
2009-2010	Institute of Biochemistry, Hebrew University, Israel Host: Prof. Oren Froy.	Post-Doctoral Training in Animal Physiology – Circadian Physiology	2010 (December)
2007-2009	Department of Pediatrics, Molecular Genetics, Columbia University, USA Host: Prof. Rudolph L. Leibel	Post-Doctoral Training in Animal Physiology – Energy Homeostasis	2009

3. Academic Ranks and Tenure in Institutes of Higher Education

Dates	Name of Institution and Department	Rank/Position
2024-present	Departments of Animal Science and Nutritional Sciences, Faculty of Sciences and Technology, Tel Hai College	Associate Professor
2019-2024	Departments of Animal Science and Nutritional Sciences, Faculty of Sciences and Technology, Tel Hai College	Senior Lecturer with Tenure

2012-2019	Departments of Animal Science and Nutritional Sciences, Faculty of Sciences and Technology, Tel Hai College	Senior Lecturer
2011-2012	Departments of Animal Science and Nutritional Sciences, Faculty of Sciences and Technology, Tel Hai College	Lecturer
2010-2011	Department of Nutritional Sciences, Faculty of Sciences and Technology, Tel Hai College	Adjunct Lecturer
2002-2007 and 2009-2011	Department of Life Sciences, Open University (Israel)	Instructor

4. Offices in Academic Administration (*= since the last promotion, **= since tenure)

- ** 2022- present — Member of the Appeals Committee of the Student Disciplinary Committee, Tel Hai College.
- ** 2017- 2022 — Head, Department of Animal Science, Faculty of Sciences and Technology, Tel Hai College.
- * 2013- present — Head, Animal Physiology Curriculum Committee, Department of Animal Science, Faculty of Sciences and Technology, Tel Hai College.
- * 2013- present — Member of Teaching Committee, Department of Animal Science, Faculty of Sciences and Technology, Tel Hai College.
- * 2013- present — Member of the Institutional Animal Care and Use Committee (IACUC), Tel Hai College.
- 2005-2007; 2009-2011 — Academic consultant, Department of Life Sciences, Open University.
- 2001-2004 — Public program coordinator, Nature Campus, Department of Zoology, Faculty of Life Sciences, Tel Aviv University.

5. Scholarly Positions and Activities Outside the Institution

A. Public or other positions in professional fields.

- 2023-present — Israeli representative in the management committee of the European Cooperation in Science & Technology (COST) action N° CA22109, Entitled "Medicinal plants for animal health care: Translating tradition into modern veterinary medicine."
- 2021-present — Member of a professional committee for awarding research grants on behalf of the Israel Science Foundation (ISF).
- 2017-present — Principal investigator, Laboratory of Integrative Physiology (LIP), Department of Nutrition and Natural Products. MIGAL - Galilee Research Institute, Israel.
- 2017-2022 — Israeli representative in the management committee of the European Cooperation in Science & Technology (COST) action N° CA16205,

entitled "European network on understanding gastrointestinal absorption-related processes."

- 2011- 2017 Researcher, Unit of Integrative Physiology (LIP), Laboratory of Human Health and Nutrition Sciences. MIGAL - Galilee Research Institute, Israel.
- 2012-present Review of research proposals: Agence Nationale de la Recherche (ANR; French), the National Institute for Psychobiology in Israel, the U.S.-Israel Binational Science Foundation (BSF), and the Israel Science Foundation (ISF).
- 2012-present Reviews of manuscripts in the following journals: *Frontiers in Physiology* (topic editor), *Life Sciences*, *Journal of Biological Rhythms*, *Journal of Clinical Endocrinology & Metabolism*, *Chronobiology International*, *International Journal of Obesity*, and *Frontiers in Neuroscience*.

B. Membership in professional organizations

- 2012- present European Biological Rhythms Society
- 2012- present Israeli Society for Research and Treatment of Obesity
- 2010- present Society for Research on Biological Rhythms
- 2005- present The American Physiological Society
- 1999- present The Israel Zoological Society
- 2014- 2021 The Physiological Society
- 2004- 2021 Israel Endocrine Society

6. <u>Participation in Scholarly Conferences</u> (*= since the last promotion, **= since tenure)

A. Active Participation

Conferences in Israel

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
** 2023	ILANIT / FISEB Conference	Eilat, Israel	Obesity in mice is postponed under a photic cycle oscillating at a period length similar to or shorter than their endogenous circadian rhythm period length	
** 2020	The 6th Darwin Day Symposium	Haifa, Israel	Is colonizing Mars the solution to human obesity?	
** 2019	Obesity 2019 The annual convention of The Israel Association for the Study of Obesity	Tel-Aviv, Israel	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	
** 2019	21st Annual Meeting of New Research of the	Tel-Hai, Israel	Bees-meal and cuticle-poor Black-Soldier-Fly-meal used as a sole source of protein, show casein-matching body weight and body	

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
	Galilee and its Surroundings		protein gain as well as casein-matching body protein retention efficiency in C57BL/6 mice	
2016	Humboldt Colloquium	Tel Aviv, Israel	Holding mice at an environmental photic cycle that matches their endogenous circadian rhythm period length prevents diet induced obesity	
2014	Timelines in biology	Rehovot, Israel	Chronic synchronization of the environmental photoperiod length to the endogenous circadian period length prevents diet induced obesity	
2012	International Congress of Zoological. The 21st Meeting	Haifa, Israel	Leptin ontogeny, neuronal wiring, and long-term energy homeostasis in the obesity resistant long-lived αMUPA mouse	
2011	The 9th Preventive Nutrition – Unified Forces Convention and Exhibition	Tel Aviv, Israel	Carbohydrate and proteins in the life circle. Effects of chronic weight perturbation on energy homeostasis and brain structure in mice	
2006	The Zoological Society of Israel. The 43rd Meeting	Raanana, Israel	Two strategies for coping with food shortage in desert golden spiny mice	
2003	The Zoological Society of Israel. The 40th Meeting	Tel Aviv, Israel	Hormonal, behavioral and biochemical mechanisms in adaptation of the golden spiny mouse (*Acomys* russatus) to variations in food availability	
2002	Israel Society for Ecology & Environmental Quality Sciences (ISEEQS). The 32nd Annual Meeting	Tel Aviv, Israel	Road kills and under-road pass utilization by animals – a preliminary survey	
2002	The Zoological Society of Israel. The 39th Meeting	Tel Aviv, Israel	Road kills and under-road pass utilization by animals – a preliminary survey	
2001	The Zoological Society of Israel. The 38th Meeting	Haifa, Israel	Moon-struck spiny mice: the influence of moon cycle on diurnal and nocturnal foraging behavior	
2001	Israel Society for Ecology & Environmental	Tel Aviv, Israel	Foraging behaviour of *Acomys russatus* in absence of its competitor *Acomys cahirinus*: The role of exploitation competition and	

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
	Quality Sciences (ISEEQS). The 31st Annual Meeting.		interference competition in competitive exclusion	
2000	The Zoological Society of Israel. The 37th Meeting	Beer Sheva, Israel	Foraging behavior of *Acomys russatus* in absence of its competitor *Acomys cahirinus*: The role of exploitation competition and interference competition in competitive exclusion	
1999	The Zoological Society of Israel. The 36th Meeting	Tel Aviv, Israel	Influence of habitat structure and food quality on foraging behavior of spiny mice (genus *Acomys*)	

Conferences held abroad

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
* 2024	ICABSSD 2024	Central University of Jammu, India and Virtual Meeting	High-fat diet-induced obesity in mice is secondary to the dietary-induced deceleration in their endogenous circadian rhythm period length	
** 2023	INSECTA 2023	Magdeburg, Germany	Cuticle-reduced Black-Soldier-Fly-meal shows casein-resembling nutritional efficiencies and an appropriate dietary-indispensable amino acids score in mice	
** 2022	American Physiological Society – Comparative Physiology	San Diego, USA	High-fat diet-induced obesity in mice is secondary to the dietary-induced deceleration in their endogenous circadian rhythm period length	
** 2022	XVII European Biological Rhythms Society Congress	Zurich, Switzerland	Obesity in mice is postponed under a photic cycle oscillating at a period length similar to	

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
			or shorter than their endogenous circadian rhythm period length	
** 2021	The LXXXV Cold Spring Harbor Symposium on Quantitative Biology – Biological timekeeping	Virtual Meeting	Extent and onset of high-fat-diet-induced obesity in mice is attenuated under an environmental photic cycle oscillating at a period length that resembles or is faster than their *tau*	
** 2020	European Federation of Animal Science	Virtual Meeting	Cuticle-poor black soldier fly meal shows casein-matching body protein retention efficiency in mice	
** 2019	31st Annual Meeting of the Society for Light Treatment and Biological Rhythms (SLTBR)	Chicago, U.S.A	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	
2018	Insecta 2018	Giessen, Germany	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	
2018	2018 Society for Research on Biological Rhythms Biennial	Amelia Island, Florida, USA	The metabolic cost of daily entrainment under high fat diet in mice	
2017	XV European Biological Rhythms Society Congress	Amsterdam, Netherlands	Holding mice at an environmental photic cycle that matches their	

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
			endogenous circadian rhythm period length prevents diet induced obesity	
2015	Gordon Research Conference. Chronobiology	Girona, Spain	Holding mice at an environmental photic cycle that matches their endogenous circadian rhythm period length prevents diet induced obesity	
2014	**Physiological Society**	**Newcastle, United Kingdom**	**Holding mice at an environmental photic cycle that matches their endogenous circadian rhythm period length prevents diet induced obesity**	***Abstract won the Physiological Society Travel Award to attend the meeting.***
2013	**International Union of Physiological Societies. Annual Meeting**	**Birmingham, United Kingdom**	**Long-lived and obesity resistant mice exhibit 24 h locomotor circadian rhythms at young and old age**	***Abstract won the American Physiological Society Travel Award to attend the Congress.***
2013	Experimental Biology	Boston, USA	Long-lived and obesity resistant mice exhibit 24 h locomotor circadian rhythms at young and old age	
2006	The Endocrine Society. The 88th Annual Meeting	Boston, USA	The golden spiny mouse (Acomys russatus) – a novel animal model for diet-induced obesity	
2005	The 24th International Summer School on Brain Research	Amsterdam, The Netherlands	The golden spiny mouse (Acomys russatus) – a novel animal model for diet-induced obesity	
2004	**The 1st Integrated Symposium on the Physiology and**	**Rhodes, Greece**	**Torpor – like and leptin response as adaptation of the golden spiny**	***The lecture was selected to be presented at a***

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
	Pharmacology of Thermal Biology and Temperature Regulation		**mouse (*Acomys Russatus*) to variation in food availability**	***student competition session***
2004	The Endocrine Society. The 86th Annual Meeting	New Orleans, USA	Leptin response as adaptation of the golden spiny mouse (*Acomys Russatus*) to variation in food availability	
2002	The European Ecological Congress. The IX Meeting	Lund, Sweden	Coexistence of competing spiny mouse species: on foraging tradeoffs and temporal partitioning	
2001	American Society of Mammologists. The 81st Annual Meeting	Missoula, Montana, USA	Temporal partitioning between competing spiny mouse species: the role of exploitation competition and interference competition	

B. Organization of Conferences or Sessions (= since tenure)**

Date	Name of Conference	Place of Conference	Subject of Conference	Role
** 2019	21st Annual Meeting of New Research of the Galilee and its Surroundings	Tel-Hai, Israel	Research of the Galilee and its surroundings	Member of the organizing scientific committee and chairman of the session

7. <u>Invited Lectures\ Colloquium Talks</u> (= since tenure)**

Date	Place of Lecture	Name of Forum	Presentation/Comments
** 2022	Buguggiate, Italy	2nd International Digital Vivarium Forum	High-fat diet-induced obesity in mice is secondary to the dietary-induced elongation in their endogenous circadian rhythm period length

8. Research Grants

A. Grants Awarded (*= since the last promotion, **= since tenure)

Role in Research	Co-Researchers	Topic	Funded by/ Amount	Year
** Co-PI	Prof. Janin Henkel-Oberländer	The role of circadian disruption due to deviation of the endogenous circadian rhythm period length from the environmental illumination cycle: revealing potential hepatic and muscle's targets in a mice model of high-fat diet-induced obesity	Joint Grants Committee of Tel Hai College and the Faculty of Life Sciences: Food, Nutrition and Health at Bayreuth University NIS 133,320 (33,000 EURO)	2024-2025
** PI	Part of an Israeli consortium aimed to develop the technologies for a circular economy based on the black soldier fly larvae.	Improving the quality of black soldier fly larvae-based meals by reducing the amount of fiber in meals, thus increasing the amount and digestibility of the protein in the meal.	Israel Innovation Authority. Ministry of Economy and Industry/NIS 441,200. Publication F.1.	2022-2024
** Co-PI	Prof. Soliman Khatib (PI) and Dr. Sanaa Musa (MIGAL)	Synthesis of natural lipids which attenuate atherosclerosis via improving HDL functions	Migal – Galilee Research Institute/ NIS 200,000 (US$59,000)	2022-2024
** PI		Is high-fat-diet-induced obesity related to the gap between period lengths of the endogenous circadian rhythm and the environmental photic cycle?	Israel Science Foundation/NIS 1,400,000 (US$ 431,014). Publications B.1 and B.4.	2021-2026
** PI	Prof. Rachel Amir (MIGAL)	The efficacy of two Broomrape species, Phelipanche egyptiana, and Orobanche cumana, as dietary protein substitutes and antioxidant sources	Research Authority, Migal – Galilee Research Institute/NIS 80,000 (US$ 25,500)	2021

Role in Research	Co-Researchers	Topic	Funded by/ Amount	Year
** PI	Dr. Ofir Benjamin (Tel-Hai College)	Evaluating the nutritional benefits of cow-milkfat with a high level of unsaturated fat at attenuating arteriosclerosis in ApoE knockout mice	Research Authority, Tel Hai College/Migal – Galilee Research Institute/ NIS 40,000 (US$ 11,400)	2020-2021
** Co-PI	Dr. Liora Shaltiel–Harpaz (PI, North R&D), Dr. Adi Jones–Levi (Tel-Hai College), Dr. Avshalom Hurvitz, and Dr. Tamar Tzemach (Tel-Hai College)	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/ NIS 450,000 (US$ 125,000). Publications B.3 and F. 1.	2019-2022
Co-PI	Dr. Aviv Asher (PI, North R&D)	"Night milk": Dairy milk and milk products naturally enriched with Melatonin	Ministry of Agriculture and Rural Development/ NIS 900,000 (US$ 248,089). Publication B.2, and D. 1.	2018-2020
Co-PI	Dr. Adi Jonas (PI, Tel-Hai College).	Development of a technological process for manufacturing insect-based protein-rich meal	Research Authority, Migal – Galilee Research Institute. NIS 30,000 (US$ 8438). Publications B.3 and F. 1.	2018
Co-PI	Dr. Ofir Benjamin (PI, Tel Hai College), Rona Schaffer (Wingate Institute), Dr. Gabriel Leitner (Veterinary Institute), and Dr. Uzi Merin (Veterinary Institute)	Evaluation of health benefits and organoleptic quality of dairy products made from milk sorted out by near-IR sensor based on fatty acid composition	Israeli Ministry of Health and the Israeli Dairy Board/ NIS 170,000 (US$ 48,000).	2017-2019
Co-PI	Dr. Adi Jonas (PI, Tel-Hai College).	Development of a technological process for manufacturing insect-based protein-rich meal	Research Authority, Migal – Galilee Research Institute/NIS 50,000 (US$ 10,746). Publications B.3 and F. 1.	2017

Role in Research	Co-Researchers	Topic	Funded by/ Amount	Year
PI		The efficacy of biocomposites as food supplements for attenuating hypercholesterolemia	Israeli Ministry of Science, Technology and Space/NIS 499,998 (US$ 130,856). Publications B.6, D. 5, D. 6, D, 7, and D. 9.	2016-2019
PI	Prof. Giora Rytwo (MIGAL)	Development of biocomposite-based dietary supplement for reduction of oil and fats absorption	Israeli Ministry of Industry, Trade & Labor KAMIN grant/NIS 708,560 NIS (US$ 182,319). Publications B.6, D. 5, D. 6, D, 7, and D. 9.	2014-2016
PI		The endogenous circadian period length as a novel risk factor for obesity and metabolic syndrome	German-Israel Foundation for Scientific Research and Development/EUR 28,000 (US$ 36,000). Publications B.1, B.4, B.8, B.12, D. 3, D. 4, and D. 8.	2014
Co-PI	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)	Honeybee pupae as a source for food for the future: scientific, economic and technological feasibility	Research Authority, Tel Hai College/Migal – Galilee Research Institute/ NIS 30,000 (US$ 8,000)	2014-2015

B. Submission of Research Proposals – Pending

Role in Research	Co-Researchers	Topic	Funded by	Year
PI	Itamr Yadid (MIGAL) and Omry Koren (Bar-Ilan University)	Development of inulosucrases enzymes for the production of fructo-oligosaccharide dietary fibers and evaluating their effect on gut microbiome – the first step towards personalized fiber nutrition	Ministry of Science and Technology	2024

Co-PI	Figa Magzal (PI), Andriea Sapir Schoman, and Soliman Khatib (MIGAL)	Innovative processed foods as a solution to climate change: a health profile	Ministry of Science and Technology	2024

C. Submission of Research Proposals – Not Funded

Role in Research	Co-Researchers	Funded by	Topic	Year	Score
Co-PI	Figa Magzal (PI), Andriea Sapir Schoman, and Soliman Khatib (MIGAL)	Ministry of Agriculture	Innovative processed foods as a solution to climate change: a health profile	2003	
Co-PI	Dr. Orr Shachr (PI), Prof. Rachel Amir, and Dr. Karen Jackson (MIGAL)	BARN-NIFA	Ginger root and pomegranate extract for neuropathic pain	2022	
Co-PI	Dr, Federica Farabegolie, ANFACO, Spain (PI)	EU-PRIMA	New food-based strategies for promoting the consumption of healthy and sustainable proteins for the future Mediterranean population	2022	
Co-PI	Dr. Federica Farabegolie, ANFACO, Spain (PI)	EU-PRIMA	Rediscovering and introducing new Brassica vegetables in the Mediterranean diet as functional foods	2021	10.4 out of 12.5
PI	Dr. Gabriel Litner (ARO)	Ministry of Health	Evaluating the nutritional benefits of natural existing cow milk fat with a relatively lower level of saturated fatty acids at attenuating arteriosclerosis and nonalcoholic fatty liver disease in APO-E knockout mice	2020	
PI		ISF	Is high-fat-diet-induced obesity related to the gap between period lengths of the endogenous circadian rhythm and the environmental photic cycle?	2020	
Co-PI	Dr. Michail Maniadakis, FORTH, Greece (PI)	EU-PRIMA	Cuisine méditerranéenne traditionnelle instantanée: promotion de saines habitudes alimentaires	2020	

Co-PI	Dr. Maria Kapsokefalou, AUA, Greece (PI).	EU-PRIMA	Infrastructures to optimize, understand, trace and exploit the importance of food processing on the nutritional profiles of traditional and innovative Mediterranean foods	2020	

9. <u>Scholarships, Awards and Prizes</u> (*= since the last promotion)

A. Awards Received After Completion of Ph.D.

1. 2014 Tel-Hai College, Faculty of Life Sciences, Department of Animal Science, Department Award for Excellence in Teaching.
2. 2014 Physiological Society. Travel Award to attend the Physiological Society meeting, Newcastle, UK.
3. 2013 American Physiological Society. Travel Award to attend the XXXVII International Congress of Physiological Sciences, Birmingham, UK.

B. Awards Received Before Completion of Ph.D.

4. 2005-2008 Council for Higher Education (Israel), Lev-Zion Triennial Scholarship for Outstanding Ph.D. Students.
5. 2004 Minerva Foundation (Germany), Short-Term Research Grant.
6. 2003 UJA Federation of New York, Salim and Rachel Banin Scholarship for Excellence in Studies.
7. 2003 Tel Aviv University, Faculty of Life Sciences, Faculty Award for Excellence in Teaching and Studies.
8. 2002 Tel Aviv University, Department of Zoology, Adesman Scholarship for Outstanding M.Sc. students.
9. 1999 Mevo'ot Hermon Regional Council Scholarship for Students.
10. 1997 Edith and Henry Everett Scholarship for Outstanding Students.
11. 1996-1998 Israel Ministry of Education Scholarship for Students.

10. <u>Teaching</u>

A. Courses Taught in Recent Years

Year	Name of Course	Type of Course	Degree	Number of Students
2022-present	3rd-year seminar	Seminar, mandatory	Undergraduate	Ca. 20
2015-present	Obesity and eating disorders	Lecture and workshop, mandatory	Undergraduate	Ca. 70
2013-present	2nd-year seminar	Seminar, mandatory	Undergraduate	Ca. 20

2012-present	Comparative animal physiology	Lecture and laboratory, mandatory	Undergraduate	Ca. 40
2011-present	Vertebrates' zoology	Lecture and laboratory, mandatory.	Undergraduate	Ca. 50
2010-2011	From cell to organism	Lecture and laboratory, mandatory.	Undergraduate	Ca. 80
2010-present	Circadian rhythm – Physiological aspects	Elective	Undergraduate and graduate	Ca. 25

B. Supervision of Graduate Students (*= since the last promotion, **= since tenure)

1. M.Sc Students (# = all or part of the research was performed in my lab)

Name of Student	**Title of Thesis**	**Degree**	**Date of Completion / in Progress**	**Students' Achievements**
** # Saar Peretz	Development of a low-cuticle flour from the level 5 black soldier fly larve as an alternative source of protein	M.Sc. in Biotechnology	In progress, started at October 2023	
** # Reuven Brodi	Is the deviation between the endogenous circadian rhythm period length and the environmental 24-h photic cycle a risk factor for obesity?	M.Sc. in Biotechnology	In progress, started at October 2023	
** Guy Reuveni (Co-advisor, A. Asher)	Optimization of soil conservation and species diversity grazing interfaces through a timed and adaptive grazing management in fast rotation of grazing cattle	M.Sc. in Biotechnology	In progress, started at October 2023	
** Shira Segal (Co-advisor, I. Yadid)	Effect of enzymatically produced froctooligosaccharides on the gut microbiome of mice	M.Sc. in Biotechnology	In progress, started at October 2023	
** Noa Matias (Co-advisor, F. Magzal and A.	Examining the short-term and long-term effects of consuming innovative, ultra-processed plant-based food products versus minimally processed equivalent ingredients on metabolic	M.Sc. in Biotechnology	In progress, started at October 2023	

Name of Student	Title of Thesis	Degree	Date of Completion / in Progress	Students' Achievements
Szuchman-Sapir)	phenotype and behavioral outcomes in vivo.			
** # Eli Anavi	Effectiveness of a dietary supplement containing chitosan and sepiolite as a means of increasing weight loss and to lower blood cholesterol levels by absorbing lipids, sterols and bile salts in the digestive tract	M.Sc. in Biotechnology	2023	
** # Joyce Maroun	Black soldier fly larva as a protein source	M.Sc. in Biotechnology	2023	
** Tovi Ben Mordechay (Co-advisor, I. Opatovski)	Testing the effect of rearing Hermetia illucens on diets composed from agricultural waste on the life cycle and nutritional composition of the larvae	M.Sc. in Biotechnology	2023	
** # Lidor Zohar (Co-advisor, I. Yadid)	Production of tailor-made dietary fibers using newly evolved enzymes and evaluation of their glycemic index	M.Sc. in Biotechnology	2022	
** # Jonathan Rassabi (Co-advisor, O. Benjamin)	Health benefits and organoleptic quality evaluation of dairy products made of milk sorted out based on fatty acid composition, by near-IR sensors	M.Sc. in Biotechnology	2022	
** # Florin Fares (Co-advisor, A. Asher)	The effect of light regime on productivity of dairy cattle	M.Sc. in Biotechnology	2022	
** # Keren Levi (Co-advisor, G. Ritwo)	Examination of the use of biocomposite as a dietary supplement, based on sepiolite, chitosan, and acetic acid, to reduce hypercholesterolemia	M.Sc. in Biotechnology	2021	

Name of Student	Title of Thesis	Degree	Date of Completion / in Progress	Students' Achievements
Chen Rybko (Co-advisor, M. Shlisel)	Monitoring udder infections in dairy cows using an electronic nose device	M.Sc. in Biotechnology	2021	
Sari Peretz (Co-advisors, A. Koren and C. Levin, Ha'Emek Medical Center)	Fetal red blood cells in Sickle cell anemia and Sickle beta-thalassemia patients. The effect of Hydroxyurea treatment	M.Sc. in Biotechnology	2021	
Matan Fialko (Co-advisor, A. Jones-Levy)	Insects as a protein source, production, and characterization of high-nutritional protein flour Insects as a source of protein in human and monogastric animals' nutrition: development of a protein rich meal production process for Hermetia illucens larvae and Apis mellifera brood, and evaluation of its nutritional qualities using mice model	M.Sc. in Biotechnology	2021	
# Anat Neumann	The role of the endogenous circadian period length as a risk factor for obesity	M.Sc. in Nutritional Sciences	2015 – 2020	
# Orit Gur Ari	Energy homeostasis in Thalassemia major patients	M.Sc. in Nutritional Sciences	2013- 2018	
# Daniel Ben-Yaakov	The role of leptin ontogeny in long-term energy homeostasis in the transgenic αMUPA mouse	M.Sc. in Nutritional Sciences	2013- 2016	*Summa cum laude*
# Mariel Alejandra Pinsky (Co-	The role of leptin ontogeny in long-term energy homeostasis in the transgenic αMUPA mouse	M.Sc. in Biotechnology	2011- 2016	

Name of Student	Title of Thesis	Degree	Date of Completion / in Progress	Students' Achievements
advisor, S. Tamir)				
# Rafi Steckler (Co-advisor, S. Tamir)	The role of the endogenous circadian rhythm in the propensity to obesity due to metabolic and photic disruption.	M.Sc. in Biotechnology	2011- 2016	

2. Post-Doctoral Students (*= since the last promotion, **= since tenure)

Name of Student	Title of Research Project	Degree	Date of Completion / in Progress	Students' Achievements
** Dr. Dhanananajay Kumar	Is high-fat-diet-induced obesity related to the gap between period lengths of the endogenous circadian rhythm and the environmental photic cycle?	Postdoc	2023	Associate Professor, The Central University of Jammu, India
** Dr. Dalia Niv	Revealing the mechanisms of action by which sepiolite-chitosan biocomposite attenuates the development of hypercholesterolemia in APO-E mice fed a high-fat diet	Postdoc	2022	
Dr. Atallah Abbas	Revealing the mechanisms of action by which sepiolite-chitosan biocomposite attenuates the development of obesity and hypercholesterolemia in mice fed a high-fat diet	Postdoc	2019	

11. <u>Miscellaneous</u>

- 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.

12. Professional Experience

- **Supervision of final research projects of Tel Hai students** (*= since the last promotion, **= since tenure)

1. ** David Frenkel (2022-2023). The effect of a high-fat diet on mice's period length and structure of the endogenous circadian rhythm.
2. ** Lior Zlotnik (2018-2019). The effect of biocomposite supplementation to a high fat diet on the development of Nonalcoholic fatty liver disease.
3. Moran Zrihan (2017-2018). The effect of biocomposite supplementation to a high fat diet on the development of Nonalcoholic fatty liver disease.
4. 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.
5. 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.
6. Nir Alhorn (2015-2016). The role of the endogenous circadian clock period length in diet induced obesity.
7. Rachel Lozan (2015-2016). Energy balance in mice under different light regimes.
8. Nofar Fadid (20150-2016). The effect of adding clay and biocomposite to high fat diet on mice weight gaining, food intake and body composition.
9. Ela Kaftzel (2015-2016): The effect of adding clay and biocomposite to high fat diet on mice fecal sterols and hydrophobic material.
10. 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.
11. Annat Neuman (2014-2015). Adding clay to a high fat high cholesterol diet attenuates weight gaining and improves seral lipid's profile.
12. Einav Dombak. 2013-2014. Sexual dimorphism in diet induced obesity in αMUPA and FVB/N mice.
13. Alexzander Zuev. 2012-2013. Developing the software Periodizer. In collaboration with Prof. Yizhar Lavner (Tel Hai).
14. Yael Hasson (2012-2013). Exploring the role link between leptin concentration and fat's histological structure in αMUPA and FVB/N mice.
15. Efrat Davidovich (2012-2013). Exploring the link between postnatal leptin concentration and fat's histological structure in αMUPA female mice.
16. Bat Chan Ackerman (2011-2012). Leptin's ontogeny and body weight at adulthood in male and female αMUPA and FBV/N mice.
17. Naama Tal (2011-2012). Exploring the existence of a sexual dimorphic circadian clock in mouse strains.

PUBLICATIONS

H-index, 18; Citations 1446.

A. Ph.D. Dissertation

Body mass control in the golden spiny mouse – Physiological and behavioral aspects. (2008, 116 pages, Hebrew). Department of Zoology, Faculty of Life Sciences, Tel Aviv University (Israel). Supervisors: Dr. Noga Kronfeld-Schor and Prof. Itzhak Choshniak.

B. Articles in Refereed Journals (*= since the last promotion, **= since tenure, IF and ranking according to JCR, No. of citations according to Google Scholar)

Published

1. * Basheer L., D. Niv, A. Cohen, **R. Gutman**, Y. Hacham, and R. Amir. Egyptian Broomrape (Phelipanche aegyptiaca), from a foe to a friend? Evidences for high nutritional value and suitability for food consumption. Future Foods. Impact Factor of 7.2. Category Name, Food Science, Q1 (37/391). Available at: https://doi.org/10.1016/j.fufo.2024.100413
2. * Ben-Mordechai T, **R. Gutman**, L. Shaltiel-Harpaz, and I. Opatovsky. How to reduce waste using black soldier fly larvae and produce a high-quality product. 2024. Journal of Insects as Food and Feed. Impact Factor of 5.1. Category Name, Entomology, Q1 (4\100). Available at: 10.1163/23524588-00001039
3. ** **Gutman R.**, J. S. Pendergast, W. Nakamura, and S. Kojima. Editorial: Circadian Desynchrony: Consequences, Mechanisms, and Open Issues. *Frontiers in Physiology* 14, 1177643. 2023. Impact Factor of 4. Category Name, Physiology, Q2 (23/84). Available at: https://doi.org/10.3389/fphys.2023.1177643.
4. ** Asher A., M Fialko, F. Fares, U. Moallem, S. Yaacoby, and **R. Gutman**. The effect of short-wavelength white LED illumination throughout the night on the milk fatty acid profile of high-yielding dairy cows. *Biology*. 2022, 11, 1799. Impact Factor of 4.2. Category Name, Biology, Q1 (25/111). Available at: https://doi.org/10.3390/biology11121799.
5. ** Opatovsky I., T. Vitenberg, A. Jonas-Levi, and **R. Gutman**. Does consumption of baker's yeast (*Saccharomyces cerevisiae*) by black soldier fly larvae (*Hermetia illucens*) affect their fatty acid composition?. *Journal of Insect Science*, 21 (3): 5, 1-5. 2021. Impact Factor of 2.2. Category Name, Entomology, Q1 (24/100). No. of citations, 6. Available at: https://doi.org/10.1093/jisesa/ieab031.
6. ** Steckler, R, S. Tamir, and **R. Gutman**. Mice held at an environmental photic cycle oscillating at their tau-like period length do not show the high-fat diet-induced obesity that develops under the 24-hour photic cycle. *Chronobiology International* 38 (4) 598-612. 2021. Impact Factor of 2.8. Category Name, Biology, Q2 (39\79). No. of citations, 3. Available at: https://doi.org/10.1080/07420528.2020.1869029. This work was first published as a conference proceeding, see D8.
7. ** 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. *Genome Medicine* 12:87. 2020. Impact Factor of 12.3. Category Name, Genetics and Heredity, Q1 (5/171). No. of citations, 32. Available at: https://doi.org/10.1186/s13073-020-00784-9.
8. ** **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 2.4. Category Name, Food Science and Technology, Q3 (94/142). No. of citations, 6. Available at: https://doi.org/10.1089/jmf.2019.0030. This paper was first published as a conference proceeding, see D7.

9. ** Zecharia D., M. Rauch, A. Sharabi-Nov, S. Tamir, and **R. Gutman**. Postnatal administration of leptin antagonist mitigates susceptibility to obesity under high-fat diet in αMUPA male mice. American Journal of Physiology-Endocrinology and Metabolism. 2019. Impact Factor of 5.1. Category Name, Physiology, Q1 (1\79). No. of citations, 3. Available at: https://doi.org/10.1152/ajpendo.00099.2019. This paper was also published as a conference proceeding, see D2.
10. 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 3.7. Category Name, Multi-Disciplinary Science, Q2 (36/73). No. of citations, 10. Available at: https://doi.org/10.1371/journal.pone.0188658.
11. 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: https://www.israeli-sociology.sites.tau.ac.il/%D7%99%D7%97-2.
12. 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 3.2. Category Name, Parasitology, Q1 (9\37). No. of citations, 19. Available at: https://doi.org/10.1186/s13071-016-1407-7
13. 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 1.7. Category Name, Ornithology, Q1 (7/29). No. of citations, 1. Available at: https://doi.org/10.1111/jav.00770
14. 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 *The Journals of Gerontology Series: Biological Sciences*, 71(4): 451-460, 2016. Impact Factor of 5.1. Category Name, Gerontology, Q1 (7/37). No. of citations, 11. Available at: https://doi.org/10.1093/gerona/glv019
15. 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 4.9. Category Name, Endocrinology and Metabolism, Q2 (39/145). No. of citations, 68. Available at: https://doi.org/10.1038/ijo.2012.105
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. *Biochimica et Biophysica Acta (BBA) Molecular Basis of Disease*, 1822 (11): 1796-1806, 2012. Impact Factor of 6.2. Category Name, Biophysics, Q1 (7/70). No. of citations, 89. Available at: https://doi.org/10.1016/j.bbadis.2012.08.005
17. **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 4.9. Category Name, Endocrinology and Metabolism , Q2 (39/145). No. of citations, 23. Available at: https://doi.org/10.1038/ijo.2011.215

18. 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 6.9. Category Name, Nutrition and Dietetics, Q1 (12\88). No. of citations, 462. Available at: https://doi.org/10.1038/oby.2011.111
19. 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 5.3 Category Name, Medicine, Research and Experimental, Q1 (47\136). No. of citations, 126. Available at: https://doi.org/10.1111/j.1582-4934.2010.01160.x
20. **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 3.7. Category Name, Multi-Disciplinary Science, Q2 (36/73). No. of citations, 37. Available at: https://doi.org/10.1371/journal.pone.0023446. Part of this work was first published as a conference proceeding, see D.10.
21. **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 3.9. Category Name, Geriatrics and Gerontology, Q2 (27\54). No. of citations, 51. Available at: https://doi.org/10.1016/j.exger.2011.02.015. This work was first published as a conference proceeding, see D11.
22. 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 4. Category Name, Biochemistry and Molecular Biology, Q2 (119\285). No. of citations, 41. Available at: https://doi.org/10.1016/j.biocel.2011.02.008
23. 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 5.6. Category Name, Nutrition and Dietetics, Q1 (21\88). No. of citations, 18. Available at: https://doi.org/10.1016/j.jnutbio.2010.11.017
24. 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 3.2. Category Name, Physiology, Q2 (39\79). No. of citations, 66. Available at: https://doi.org/10.1152/ajpregu.00429.2010
25. 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. Impact Factor of 4.9. Category Name, Endocrinology and Metabolism , Q2 (39/145). No. of citations, 20. Available at: https://doi.org/10.1038/ijo.2010.125

26. 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 6.9. Category Name, Nutrition and Dietetics, Q1 (12\88). No. of citations, 48. Available at: https://doi.org/10.1038/oby.2008.489
27. **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 3.2. Category Name, Physiology, Q2 (39\79). No. of citations, 20. Available at: https://doi.org/10.1152/ajpregu.00105.2008
28. **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 2.9. No. of citations, 87. Category Name Psychology, Biological, Q2 (5\14). Available at: https://doi.org/10.1016/j.physbeh.2006.08.033
29. **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 3.2. Category Name, Physiology, Q2 (39\79). No. of citations, 88. Available at: https://doi.org/10.1152/ajpregu.00156.2005. Part of this work was first published as a conference proceeding, see D12.
30. **Gutman, R.**, and T. Dayan. Temporal partitioning: An experiment with two species of spiny mouse. *Ecology*, 86(1): 164-173, 2005. Impact Factor of 4.8. Category Name, Ecology, Q1 (36\169). No. of citations, 106. Available at: https://doi.org/10.1890/03-0369. This work was first published as a conference proceeding, see D10 and D11.
31. 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.

Accepted

C. Articles or Chapters in Scientific Books (which are not Conference Proceedings)

Published

1. 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.
2. 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.

D. <u>Articles in Conference Proceedings</u> (*= since the last promotion, **= since tenure)

<u>Published Abstracts</u>

1. ** Asher, A., **R. Gutman**, U. Moallem, F. Fares, M. Cohen-Zinder, and A. Shabtay. O18 The dark side of the light: the effect of led illumination on feed efficiency, production and welfare of livestock. *Animal-Science Proceedings*, 14(4), 558-559, 2023. Part of this work was also published in a refereed journal; see B2.
2. ****Gurman R**. Postnatal administration of leptin antagonist mitigates susceptibility to obesity under high-fat diet in αMUPA male mice. Proceedings of the Experimental Biology 2020 meeting. *The FASEB Journal*, 34(1) 2020. Available at: https://doi.org/10.1096/fasebj.2020.34.s1.05027. Part of this work was also published in a refereed journal; see B7.
3. **Gurman R**, and A. Neuman. 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. Chronobiology - 31st Annual Meeting, Chicago, IL, June 20-22, 2019. *Neuropsychobiology*, 78(3), 162, 2019. Available at: https://doi.org/10.1159/000501249.
4. **Gurman R**, and A. Neuman. The metabolic cost of daily entrainment under high fat diet in mice. Chronobiology: Society for Light Treatment and Biological Rhythms, 30th Annual Meeting, Groningen (The Netherlands), June 21–24, 2018. *Neuropsychobiology*, 76(1), 2018. Available at: https://doi.org/10.1159/000489584 .
5. 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. Available at: http://dx.doi.org/10.13140/RG.2.2.15149.92645.
6. 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.
7. **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. Part of this work was also published in a refereed Journal; see B6.
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: https://www.physoc.org/abstracts/holding-mice-at-an-environmental-photic-cycle-that-matches-their-endogenous-circadian-rhythm-period-length-prevents-diet-induced-obesity/. This work was also published in a refereed journal; see B4.
9. 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: http://dx.doi.org/10.13140/RG.2.1.4926.0240

10. **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: https://www.physoc.org/abstracts/long-lived-and-obesity-resistant-mice-exhibit-24-h-locomotor-circadian-rhythms-at-young-and-old-age/. This work was also published in a refereed journal; see B19.
11. **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 Experimental Biology 2013 meeting. *The FASEB Journal*, 27(S1), 1205.3, 2013. Available at: https://doi.org/10.1096/fasebj.27.1_supplement.1205.3. This work was also published in a refereed journal; see B19.
12. **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. This work was also published in a refereed journal; see B27.
13. **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.
14. **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. This work was also published in a refereed journal; see B18 and B28.
15. **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. This work was also published in a refereed journal; see B28.
16. **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.

E. Other Publications

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 the treatment of metabolic syndrome and related disorders" filed November 20, 2017.

F. Submitted Publications

Articles Submitted to Refereed Journals

1. N. Saleev, J. Bartman, D Getselter, **R. Gutman**, A. Mcarco, and Evan Elliott. Forebrain neuronal Smc3 regulates body weight and metabolic health partially through regulation of hypothalamic Melanocortin 4 receptor. The Journal of Neuroscience. Submitted for publication.
2. Niv D., E. Anavi, L. Yaval, A. Abbas, G. Rytwo, and **R. Gutman**. Sepiolite–chitosan–acetic acid biocomposite attenuates the development of obesity and nonalcoholic fatty liver disease in mice fed a high-fat diet. *Heliyon*. 2024. Submitted for publication.

3. Neumann A, and **R. Gutman**. Obesity in mice is postponed under a photic cycle oscillating at a period similar to or shorter than their endogenous circadian rhythm period length. *The FASEB Journal*. 2023. Major revision.