

CURRICULUM VITAE

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 BIRTH DATE & PLACE: August 26, 1957, Jerusalem, Israel
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EDUCATION

Hebrew University of Jerusalem, Israel	B.A.	1983	Mathematics
Hebrew University of Jerusalem, Israel	B.A.	1983	Computer Science
Hebrew University of Jerusalem, Israel	M.Sc.	1986	Bio-Psychology
University of California Los Angeles	Ph.D.	1990	Physiological Psychology
University of California Los Angeles	Post-doc	1993	PsychoNeuroImmunology
University of California Los Angeles	Post-doc	1993	Neuroregulation of Reproduction

PhD dissertation

“Stress, Immunity and Cancer: The Role of Natural Killer Cells”
 Supervisor: John C. Liebeskind

ACADEMIC AND PROFESSIONAL AWARDS

1983 B.A. cum laude, Mathematics & Computer Science, Hebrew U. of Jerusalem, Jerusalem, Israel.
 1986 M.A. cum laude, Psychology, Hebrew University of Jerusalem, Jerusalem, Israel.
 1993 Distinguished Postdoctoral Trainee in Psychoneuroimmunology, RPPNI IV, Colorado, USA.
 1993 Allon Fellowship (submitted by Haifa University), Israel.
 1996 Ader Young Investigator Award, The Fund for Psychoneuroimmunology, California, USA.
 2008 Best Lecturer of the Year, The Student Organization, Tel Aviv University
 2013 Rector Price, Best 100 Teachers, Tel Aviv University

ACADEMIC AND PROFESSIONAL RANKS AND EXPERIENCE

1983-86 Teaching and Research Assistant, Hebrew University of Jerusalem
 1986-90 Teaching and Research Assistant, UCLA
 1990-93 Postdoctoral fellowship, Psychoneuroimmunology Program, Departments of Psychiatry and Anatomy, UCLA
 1991-93 Post-Graduate Researcher, Neuroregulation of Reproduction Program, Brain Research Institute, UCLA
 1991-92 **Lecturer**, Department of Psychology, UCLA
 1993-98 **Senior Lecturer**, Department of Psychology, Tel Aviv University
 1997-99 Steering Committee, European Brain Immune Network (EBIN)
 1998 Organizing “The 1998 Meeting of Psychobiology in Israel”, Tel Aviv University, Israel
 1998-01 Head, Physiological Psychology Area, Department of Psychology, Tel Aviv University
 1998-03 **Associate Professor**, Department of Psychology, Tel Aviv University
 2003- Council member, Psychoneuroimmunology Research Society (PNIRS) - an international society for psychoneuroimmunology
 2003- **Full Professor**, Department of Psychology, Tel Aviv University
 2003-2006 Member of the Biobehavioral and Behavioral Processes 2 (BBBP-2) Study Section, Center for

Scientific Review, National Institute of Health (NIH), Bethesda, Maryland
 2009-2011 Chair, Department of Psychology, Tel Aviv University
 2012-2015 PhD Committee, Sagol School of Neuroscience

MEMBERSHIP IN COMMITTEES AND ADMINISTRATION (Partial)

1994-06 Doctoral Student Committee, Department of Psychology, Tel Aviv University
 1995- Animal Care and Use Committee, Social Science Faculty, Tel Aviv University
 1998-02 Institutional Committee for Animal Care and Use, Tel Aviv University
 2001- Recruitment and Promotions Committee, Department of Psychology, Tel Aviv University
 2001-02 Chair, Faculty Committee of Safety, Faculty of Social Sciences, Tel Aviv University
 2002 Chair, ad hoc recruitment committee, Faculty of Social Sciences, Tel Aviv University
 2003-05 Chair, Doctoral Student Committee, Department of Psychology, Tel Aviv University
 2003-05 Faculty Committee of Doctoral Student, Faculty of Social Sciences, Tel Aviv University
 2005-09 Social Sciences Faculty Committee for Recruitment and Promotions, Tel Aviv University
 2006-09 Institutional Committee for Animal Care and Use, Tel Aviv University
 2013-2015 Tel Aviv University Presidential Committee for restructuring the university and promoting academic excellence
 2013-2019 Social Sciences Faculty Committee for Recruitment and Promotions, Tel Aviv University
 2019-2022 A member of VATA”T – Israel Council for Higher Education, Committee for Planning and Financing

PROFESSIONAL AFFILIATIONS

Psychoneuroimmunology Research Society (PNIRS)
 Israel Society for Neurosciences
 International Society for Neuroimmunomodulation (ISNIM)
 European Brain Immune Network (EBIN)
 The group for Perioperative Care of Cancer Patients

JOURNAL REFEREE (partial list)

Annals of Surgery, Annals of Surgical oncology, Archives of General Psychiatry; Anesthesiology;
 Behavioral Neuroscience; Brain, Behavior, and Immunity; Brain Research; British Journal of cancer;
 Cancer; Cancer Research; Cancers; Clinical & Experimental Metastasis; International Journal of Cancer;
 Journal of Immunology, Journal of the National Cancer Institute, Nature Review Cancer; Nature Review
 Clinical oncology, NeuroImmunoModulation, PLOS ONE, Physiology and Behavior;
 Psychoneuroendocrinology; Psychosomatic Medicine, Stress, The Journal of Neuroscience, and others
 journals.

MEMBERSHIP IN EDITORIAL BOARD

Bain, Behavior, and Immunity – 2003-07, 2017-2021

GRANT REVIEWER FOR (partial list)

- NIH (National Institute of Health), Regular Member (2003-2006), Center for Scientific Review, Biobehavioral and Behavioral Processes 2 (BBBP-2) Study Section, Bethesda, Maryland.
- Israel Science Foundation (ISF)
- Israel Ministry of Health
- Israel-USA binational Science Foundation (BSF)
- The National Institute for Psychobiology in Israel
- Dutch Cancer Society
- Belgian Foundation against Cancer
- Science Foundation of Ireland
- Gateway for Cancer Research
- Emerson Collective Cancer Research Fund

GRANTS AWARDED (partial list)

University of California, Psychoneuroimmunology program. “Brain mechanisms in mediating stress effects on natural killer cell activity and tumor growth” **P.I.**, \$15,000. October 1990 - September 1991.

Oncology Nursing Foundation/Purdue Frederick Research Grant. “Post Operative Pain and the Incidence of Tumor Metastasis” **Co P.I.**, \$5,000. March 1990 - March 1991.

University of California, Psychoneuroimmunology program. “The impact of stress and pain on natural killer cell activity and tumor development” **P.I.**, \$14,635. August 1991 - July 1992.

Oncology Nursing Society Research Award. “Perisurgical pain and the metastatic process in rats: Estrous effects” **Co P.I.**, \$10,000. May 1993 - May 1994.

Tel-Aviv University, Research and Development. “Psychoneuroimmunology Laboratory” **P.I.**, Seed Money, \$40,000. November 1993.

Tel-Aviv University, Research Foundation 1994. “The role of pain in surgery-induced immune suppression and metastatic spread: Can pain kill ?” **P.I.**, \$4,000. June 1994 - June 1995.

Tel-Aviv University, Research Foundation 1995. “Estrous cycle and neuroendocrine immune interactions” **P.I.**, \$5,000. June 1995 - June 1996.

Israel Ministry of Health. “Improving the prognosis of patient with breast cancer: Animal studies of the time of surgery in relation to the estrous cycle and levels of sex hormones” **P.I.**, \$26,000. February 1995 - February 1997.

NIH, Theodore and Vada Stanley Foundation Research Award. “Experimental animal approach to the study of prenatal factors in schizophrenia: Long-term effects on the central nervous system of X-irradiation in utero” **Co I.**, \$100,000. August 1994 - August 1996.

Adam Supper Center for Brain Research. “The role of adrenergic brain mechanisms in modulating natural killer cell activity and susceptibility to tumor metastasis” **P.I.**, \$5,000. March 1996 - March 1997.

NIH, NCI, RO1 CA73056-01. “Estrous Cycle and Neuroendocrine-Immune Interactions” **P.I.**, \$406,405. August 1996 - July 1999; No cost extension until 8/2000.

Research Authority, Tel Aviv University. “Suppression of NK activity by adrenaline and its modulation by the menstrual cycle” **P.I.**, \$9,000. October 1999 - September 2000.

Adam Supper Center for Brain Research. “A novel neurodevelopmental model of schizophrenia: the long-term effects of in-utero exposure to cytokines on cognitive, physiological, and histological correlates of schizophrenia in rats” **P.I.** (with Prof. I. Weiner), \$7,000. March 2000 - March 2001.

Israeli Science Foundation (ISF). “Suppression of Natural Killer cell activity by surgery: from cellular mechanisms to clinical implications” **P.I.**, approximately \$140,000. October 2000 - September 2004.

NIH, NCI, 2RO1 CA73056-04A1. “Mechanisms and prevention of surgery-induced metastasis” **P.I.**, \$675,000. June 2001 - May 2006.

BSF, 2005331. “Stress, Surgery, Immune-Suppression and Cancer Progression” **P.I.**, Approximately \$35,000 annually. Oct 2006 - Sep 2010.

NIH, NCI, 1RO1 CA125456-01A1. “Psychoneuroimmunology-Immunotherapy Interactions” **P.I.**, \$959,336.60 (including 8% university overhead). Sep. 2007 - August 2012.

Israeli Science Foundation (ISF) 1406/10. “Reducing neuroendocrine and immune perturbations and improving survival-related indices in colorectal cancer patients by controlling excessive perioperative stress responses” **P.I.**, approximately \$350,000. October 2011 - September 2016.

BSF, 2011454. “Stress reduces the efficacy of immunostimulation” **P.I.**, Approximately \$37,000 annually. Oct 2012 - Sep 2016.

NIH, NCI, 1R01CA172138-01A1. “Stress undermines immune stimulation: mechanisms & biological Significance” **P.I.**, \$999,943 (including 8% university overhead). Aug 2013 - May 2018, no-cost extension to May 2019.

NIH, NCI, a Leidos Biomedical Research managed award 13XS084. “A pilot study assessing the short-term effects of counteracting excess perioperative catecholamine and prostaglandin levels, on immune, endocrine, and pro-metastatic serum and histological indices: towards a large scale clinical trial” **P.I.**, \$49,943 (including 8% university overhead). Oct 2013 - Sep 2015.

TAU R&D grant "Vaccination under stress: New insights on molecular, immunological, and neuroendocrine effects of stress on the efficacy of vaccination" **Co-P.Is.** Shamgar Ben-Eliyahu and Natalia Freund, \$110,000 April 2018- March 2019.

IMS (Israel Ministry of Science) "Preventing post-surgical pancreatic cancer recurrence: A new indication for etodolac and propranolol during the peri-operative period" **P.I.**, 500,000 NIS 1.2018-12.2020.

SPARK Tel-Aviv “Pilot clinical studies for preventing postoperative cancer recurrence” **Co-P.I. with Dr. Zmora**, \$200,000 11.2018- 10.2020 pending on ongoing satisfactory progression.

Emerson Collective Cancer Research RFA “Can we induce a state of latency in established metastases? Promoting regression of micro-metastases following primary tumor excision” **P.I.**, \$200,000 1.2019-12.2020.

Israeli Science Foundation (ISF) “The effects of stress and surgery on exit from dormancy of cancer metastases” **P.I.**, ~\$550,000 October 2019 - September 2024.

PARTICIPATION IN SCIENTIFIC MEETINGS (partial list)

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| 1986-92 | Annual Meetings of the Society for Neuroscience, USA |
| 1989-92 | Winter Conference on Brain Research, 22th to 25th Annual meetings, USA |
| 1990 | Research Perspectives in Psychoneuroimmunology II, Rochester, New York |
| 1991 | The Application of Nonlinear Dynamic to the Immune System and to Immune Regulation in Health and Disease, Lake Arrowhead, California |
| 1991 | Third International Congress of the International Society for Neuroimmunomodulation. (AIDS), Irvine, California |
| 1991 | Research Perspectives in Psychoneuroimmunology III, Columbus, Ohio |

- 1992 2nd International Conference on Alcohol, Drug of Abuse and immunomodulation
(AIDS), Tucson, Arizona
- 1993 Research Perspectives in Psychoneuroimmunology IV, Boulder, Colorado
- 1993 Israel Society for Neuroscience, 2nd Annual Meeting, Eilat, Israel
- 1994 Winter Conference on Brain Research, 27th Annual meeting, Workshop organizer,
Snowbird, Utah
- 1994 Mind/Body Interactions and Disease, The Psychoneuroimmunological Aspects of Health
and Disease Meeting, Invited Speaker, NIH, Bethesda, Maryland
- 1994 24th Annual Meetings of the Society for Neuroscience, Miami, Florida
- 1994 Research Perspectives in Psychoneuroimmunology V, Key Biscane, Florida
- 1995 Israel Society for Biological Psychiatry, Invited Speaker, Herzeliya, Israel
- 1996 40th OHOLO Conference, Invited Speaker, Zichron Ya'akov, Israel
- 1996 Research Perspectives in Psychoneuroimmunology VI, Santa Monica, California
- 1996 International Society for Neuro-Immuno-Modulation, Third International Congress,
NIH, Bethesda, Meriland
- 1996 III. International Symposium "Psychoneuroimmunology", Invited Speaker, Leipzig,
Germany
- 1997 Research Perspectives in Psychoneuroimmunology VII, Boulder, Colorado
- 1998 Research Perspectives in Psychoneuroimmunology VIII, Bristol, UK
- 1998 The 1998 Meeting of Psychobiology in Israel, meeting organizer, Tel Aviv University,
Israel
- 1998 Spring Conference on Immuno Modulation, Vail, Colorado, USA
- 1998 10th International Conference on Cancer Nursing, Invited Speaker, Jerusalem, Israel
- 1999 Research Perspectives in Psychoneuroimmunology IX, Galvestone, Texas
- 1999 International Society for Neuro-Immuno-Modulation, Fourth International Congress,
Lugano, Switzerland
- 2000 Research Perspectives in Psychoneuroimmunology X, Cape Fear, N. Carolina
- 2000 Global Health Promotion Minority Research Program, Invited Speaker, Baltimore, Maryland
- 2001 Research Perspectives in Psychoneuroimmunology XI, Utrecht, The Netherlands
- 2001 Israel Society for Physiology and Pharmacology, Ma'ale Hachamisha, Israel
- 2002 Biological Mechanisms of Psychosocial Effects on Disease, Invited Speaker, NIH/NCI,
Bethesda, Maryland, USA
- 2002 Research Perspectives in Psychoneuroimmunology XII, Madison, Wisconsin
- 2002 Institute of Advanced Studies, The Hebrew University of Jerusalem, Invited Speaker,
Jerusalem, Israel
- 2003 Research Perspectives in Psychoneuroimmunology XIII, Amelia Island, Florida
- 2003 Complementary and Alternative Medicine, Invited Speaker, UC Irvine, Irvine, California
- 2004 Exploring the integration of psychoneuroimmunology and tumor immunology in cancer
control research, Invited Speaker, NIH/NCI, Bethesda, Maryland, USA
- 2004 Research Perspectives in Psychoneuroimmunology XIV, Titisee, Germany
- 2004 Academy of Behavioral Medical Research (ABMR), Invited Speaker, Teton village, WY,
USA
- 2005 Research Perspectives in Psychoneuroimmunology XV, Bolder, Colorado, USA
- 2005 German Brain-endocrine-Immne-Network, Invited Speake, Bayreuth, Germany
- 2006 Frontiers in Cancer Prevention Research (AACR), Invited Speake, Boston, USA

- 2007 Annual Meeting of the Cancer Biology Research Center of TAU, Maalot, Israel
- 2007 Research Perspectives in Psychoneuroimmunology XVII, Arcachon, France. Symposium Organizer "PNI in the peri-operative context".
- 2008 Research Perspectives in Psychoneuroimmunology XVIII, Madison, Wisconsin. Chair-Person.
- 2009 Research Perspectives in Psychoneuroimmunology XIX, Breckenridge, Colorado.
- 2010 Research Perspectives in Psychoneuroimmunology XX, Dublin, Ireland.
- 2011 Research Perspectives in Psychoneuroimmunology XXI, Invited Speake, Chicago, USA.
- 2012 Research Perspectives in Psychoneuroimmunology XXII, San Diego, USA.
- 2013 Research Perspectives in Psychoneuroimmunology XXIII, Stockholm, Sweden.
- 2014 2nd Global Conference on Perioperative & Pain Medicine and the Cancer Patient, Invited Speaker, Melbourne, Australia.
- 2014 Research Perspectives in Psychoneuroimmunology XXIV, Philadelphia, USA.
- 2014 41st Annual meeting of the Argentine Society of Anesthesiology, Invited Speaker, Buenos Aires, Argentina.
- 2015 Research Perspectives in Psychoneuroimmunology XXV, Seattle, USA.
- 2015 3rd Global Conference on Perioperative & Pain Medicine and the Cancer Patient, Invited Speaker, Amsterdam, the Netherlands.
- 2016 Israel Society for Biological Psychiatry, Invited Speaker, Hagoshrim, Israel
- 2016 Research Perspectives in Psychoneuroimmunology XXVI, Briton, England.
- 2016 4th Global Conference on Perioperative & Pain Medicine and the Cancer Patient, Invited Speaker, London, England.
- 2017 Research Perspectives in Psychoneuroimmunology XXVII, Galveston, USA.
- 2017 2nd Global Insight Conference on Breast Cancer, Invited Speaker, Rome, Italy.
- 2017 Global Conference on Perioperative Care of the Cancer Patient, 5th Anniversary Celebration, Invited Speaker, MD Andersen Cancer Center, Houston, USA.
- 2018 ISBP meeting, Invited Speaker, Kefar Bloum, Israel
- 2018 CBRC meeting, Invited Speaker, Maalot, Israel
- 2018 Research Perspectives in Psychoneuroimmunology XXVIII, Miami, USA.
- 2019 Global Conference on Perioperative Care of the Cancer Patient, Invited Speaker, Shanghai, China.
- 2019 Research Perspectives in Psychoneuroimmunology XXIX, Berlin, Germany.
- 2020 Research Perspectives in Psychoneuroimmunology XXX, Keynote Speaker (Norman Cousins Award), Los-Angeles, USA.

M.A. STUDENTS (Primary thesis advisor only)

- 94-97: Guy Shakhar - Thesis: In vivo β -adrenergic stimulation suppresses NK activity and compromises resistance to tumor metastasis in rats
- 95-01: Shneor Haim - Thesis: Levels of sex hormones in 4 and 5-days cycling Fischer 344 rats and their simulation in ovariectomized rats
- 95- : Yitzhak Golan - Thesis: Conditioned enhancement of NK activity and resistance to tumor metastasis
- 97-99: Keren David - Thesis: Timing within the menstrual cycle, sex, and the use of oral contraceptives determine adrenergic suppression of NK activity
- 97-02: Ilan Yakar - Thesis: Prostaglandin E2 suppresses NK activity and promotes tumor metastasis in rats
- 98-01: Tal Wiseman - Thesis: Models for spontaneous tumor metastasis and their sensitivity to NK activity
- 99-02: Naphtali Abudarham - Thesis: "Protecting cellular immunity against suppression by stress hormones and surgery"

- 00-03: May Gurwitz - Thesis: Natural killer (NK) cell activity and serotonergic reuptake sites in the Flinders Sensitive Line (FSL) rat, and the effect of the antidepressant paroxetine
- 00-03: Anat Adoni - Thesis: A role for NK cells in the resorption mechanism of rats: an animal model for RM
- 01-03: Yossef Shwartz - Thesis: Immunostimulation by Th1 cytokines: Reducing the promotion of metastasis by surgery and stress in F344 rats
- 01-03: Tal Balaban - Thesis: Studies on the effects of pharmacological and surgical intervention on the activity of natural killer cells
- 01-03: Dan Nimrodov - Thesis: The in vitro and ex vivo effects of stress hormones on NK cells activity
- 02-04: Michal Arad - Thesis: Assessing the role of NK cells in few resorption mechanisms: immunologic, sex hormones and stress
- 02-05: Shir Atzil - Thesis: Deteriorating erythrocytes promote cancer metastasis and progression in the context of blood transfusion
- 03-05: Noa Abiri - Thesis: The effects of social confrontation stress on resistance to tumor metastasis and its attenuation by β -blockade and by diazepam
- 03-06: Keren Greenfeld - Thesis: Immune suppression while awaiting surgery and following it: Dissociations between plasma cytokine levels, their induced production, and NK cell cytotoxicity
- 03-06: Roi Avraham - Thesis: Integration of pre-operative immunostimulation with postoperative prevention of surgery-induced immune suppression
- 03-07: Inbal Bartal - Thesis: Immune perturbations in patients along the perioperative period: Alterations in cell surface markers and leukocyte subtypes before and after surgery
- 04-06: Marganit Benish - Thesis: Toward a clinical perioperative use of β -adrenergic blockers and COX2 inhibitors: Attenuating postoperative suppression of NK activity and promotion of tumor metastasis by surgery
- 05-11: Shelly Inbar - Thesis: Do Stress Responses Promote Leukemia Progression? An Animal Study Suggesting a Role for Epinephrine and Prostaglandin-E₂ Through Reduced NK Activity
- 05-07: Ben Levi - Thesis: Sex differences in NK cells responses to an adrenergic challenge
- 06-08: Ariella Glasner - Thesis: Combined administration of a β -adrenergic antagonist and a COX-2 inhibitor increases survival rates in two models of spontaneous post-operative metastasis in mice: Potential mediating mechanisms and clinical ramifications
- 06-08: Yael Kalderon - Thesis: Peri-operative consumption of omega-3 fatty acid (ω -3FA) improved post-operative recurrence-free survival rates in rodents: potential mediation by enhanced NK activity and improved resistance to metastatic progression
- 06-08: Hadas Meiboom - Thesis: Continuous stress attenuate the efficacy of IL-12 immunostimulation
- 06-09: Shaily Shemer - Thesis: Changes in IL-12 serum levels following surgery and social confrontation in rats
- 07-09: Luba Sominski - Thesis: Multiple stress-related mechanisms mediate in vivo suppression of IL-12 serum levels in rats
- 07-09: Liat Sorski - Thesis: The outcomes of an amalgamated use of COX-2 inhibitor Etodolac, beta-blocker propranolol and immunostimulant CpG, in attenuating the surface-hepatic metastases in an experimental metastases model in mice
- 08-11: Ofir Hazut - Thesis: The effect of β -adrenergic blockade and COX-2 inhibition on healing of colon, muscle, and skin in rats undergoing colonic anastomosis

- 08-11: Pini matzner - Thesis: Robustness of the immune system in healthy young students to thirty hrs sleep deprivation with psychological stress
- 09-11: Lee shaashua - Thesis: In vivo suppression of baseline plasma levels of IL-12 by stress I: The impact of various stress paradigms, stress hormones, and sex differences
- 09-10: Michal Resnik - Thesis: Neuroendocrine suppression of IL-12 plasma levels in vivo: the role of stress hormones in immune down-regulation in rats
- 10 -13 Yana Tishler - Thesis: Comparing the efficacy of acute versus repeated administration of a β -adrenergic antagonist and a cyclooxygenase-2 inhibitor: Attempting to improve survival rates in mice undergoing surgery for the removal of a primary tumor in a model of spontaneous metastasis
- 10 -13 Gili Etzion - Thesis: PGE2 suppresses NK activity in vivo directly and through adrenal hormones: Effects that cannot be reflected by ex-vivo assessment of NK cytotoxicity
- 11-14 Maya Horowitz - Thesis: Exploiting the critical perioperative period to improve long-term cancer outcomes
- 11-14 Neta Gotlieb - Thesis: The misleading nature of in vitro and ex vivo findings in studying the impact of stress hormones on NK cell cytotoxicity
- 12-15 Eli Elbaz - Thesis: Regenerated functional adrenal tissue in rats following standard complete adrenalectomy
- 14-16 Rita Haldhar - Thesis: Peri-operative blockade of COX2 and β -adrenoceptors in breast cancer patients: Effects on PBMCs transcriptome and serum cytokine levels
- 14-17 Hagar Lavon - Thesis: Dexmedetomidine promotes cancer metastasis in various animal models: Perioperative considerations and potential clinical implications
- 16-18 Elad Sandbank - Thesis: Deleterious effects of stress on CpG-C immune stimulation: Hypothermia and other mediating mechanisms
- 16-18 Orli Moskovitz - Thesis: Systemic perioperative CpG-C treatment as a prophylactic perioperative approach against liver metastases
- 17-19 Sharon Scarlat
- 17-19 Talia Levin
- 18-20 Anabel Eckerling
- 19-21 Esther Scheuer

Ph.D. STUDENTS (Primary dissertation advisor)

- 97-02: Guy Shakhbar - Dissertation: Neuroendocrine modulation of NK activity
- 99-05: Keren David - Dissertation: Increase NK cell number and activity in women with recurrent miscarriage: A psychoNeuroImmunological perspective
- 01-06: Rivka Melamed - Dissertation: Surgery as a risk factor for NK activity: mediating mechanisms and the use of β -blockers and prostaglandins synthesis inhibitors as prophylactic measures
- 05-10 Yael Goldfarb - Dissertation: The protective effects of type-C CpG oligodeoxynucleotides against promotion of metastasis by physiological and psychological stress
- 06-11 Marganit Benish - Dissertation: Characterization of the marginating pulmonary leukocyte population and their NK cytotoxicity in rats and mice
- 07-12 Ben Levi - Dissertation: Sexual dimorphism in the response to stress hormones, and the deleterious effects of stress on the efficacy of immunostimulatory agents
- 09-15 Liat Sorski - Dissertation: The protective effects of CpG-C immune stimulation, β -

adrenergic blockade, and COX2 inhibition in arresting surgically-induced stress responses and in reducing colorectal cancer metastasis: A potential role for marginating-hepatic NK cells

- 11-16 Lee Shaashua - Dissertation: The dual effects of stress and primary tumor excision on cancer metastasis: metastatic regression and dormancy, and metastatic progression
- 11-17 Amit Benbenishty - Dissertation: Brian Metastases: The impact of stress, surgery, and immune-stimulation
- 11-17 Pini Matzner - Dissertation: Deleterious effects of stress and stress hormones on the efficacy of TLR-4 and TLR-9 immunostimulatory agents
- 2016- Itay Ricon - Dissertation: Psychological and pharmacological perioperative stress-reducing interventions in breast cancer patients: Reducing prometastatic molecular biomarkers in excised primary tumors
- 2016- Tsipi Hanalis-Miller - Dissertation: An individually tailored perioperative psychological intervention in breast cancer patients: Psychological, physiological, and oncological outcomes
- 2016- Rita Haldar - Dissertation: Postoperative regression and dormancy of tumor metastases: mediating mechanisms and biological significance
- 2018 - Elad Sandbank
- 2019 - Estherina Trachtenberg

POST DOCTORAL TRAINEES (M.D. & Ph.D.)

- 97-98: Dr. Yuri Levinson (Anesthesiologist) - Basic Research Training: The effects of hypothermia on NK activity and resistance to tumor metastasis in rats: mediating mechanisms
- 98-99: Dr. Doron Mazeh (Psychiatrist) - Basic Research Training: Natural killer cell activity in schizophrenics: The impact of serum factors, medication, and smoking
- 99-00: Dr. Shahar Bar-Yosef (Anesthesiologist) - Basic Research training: Attenuation of the tumor-promoting effect of surgery by spinal blockade in rats
- 03-04: Dr. Genadi Smirnof (Anesthesiologist) - Basic Research training: The impact of blood transfusion on resistance to metastasis: mediating mechanisms
- 04-04: Dr. Gitit Attali - Post doctoral training: NK activity with MADB106 LTR
- 08-09: Dr. Barak Benjamin (Surgeon) - Basic Research training: Effects of β -blockers and prostaglandins synthesis inhibitors on colon healing in rats
- 15-16: Dr. Ben-Tzvi (Surgeon) - Basic Research training: Effects of β -blockers and prostaglandins synthesis inhibitors on colon healing in rats
- 19-20: Dr Avital Fisher (PhD) - Epidemiology and clinical manipulations of the use of anti-(M.D., stress and anti-inflammatory interventions in cancer patients

PUBLICATIONS

Publication statistics based on Google Scholar - 112 publications (February 2020):

	Total	Since 2015
Citations	9,166	3,014
H-index	49	30
i10-index	96	65

Publication statistics based on Web of Science Core Collection - 112 publications (February 2020): Total of 5,689 citations by 3,122 citing articles; H-index of 41

- Shavit, Y., Martin, F.C., Yirmiya, R., **Ben-Eliyahu, S.**, Terman, G.W. Weiner, H., Gale, R.P., & Liebeskind, J.C. (1987). Effect of a single administration of morphine or footshock stress on natural killer cell cytotoxicity. Brain, Behavior, and Immunity, 1, 318-328.
- Yirmiya, R., Shavit, Y., **Ben-Eliyahu, S.**, Martin, F.C., Weiner, H., & Liebeskind, J.C. (1989). Natural killer cell activity in vasopressin-deficient rats (Brattleboro strain). Brain Research, 479, 16-23.
- Morgan, M.M., Sohn, J., Lohof, A.M., **Ben-Eliyahu, S.**, & Liebeskind, J.C. (1989). Characterization of stimulation-produced analgesia from the nucleus tractus solitarius in the rat. Brain Research, 486, 175-180.
- Ben-Eliyahu, S.**, Yirmiya, R., Shavit, Y., & Liebeskind, J.C. (1990). Stress-induced suppression of natural killer cell cytotoxicity in the rat: A naltrexone-insensitive paradigm. Behavioral Neuroscience, 104, 235-238.
- Yirmiya, R., **Ben-Eliyahu, S.**, Shavit, Y., Marek, P., & Liebeskind, J.C. (1990). Stimulation of the hypothalamic paraventricular nucleus (PVN) produces analgesia not mediated by vasopressin or opioids. Brain Research, 537, 169-174.
- Ben-Eliyahu, S.**, Yirmiya, R., Liebeskind, J.C., Taylor, A.N., and Gale, R. P. (1991). Stress increases metastatic spread of a mammary tumor in rats: Evidence for mediation by the immune system. Brain, Behavior, and Immunity, 5, 193-205.
- Marek, P., **Ben-Eliyahu, S.**, Gold, M., and Liebeskind, J.C. (1991). Excitatory amino acid antagonists (kynurenic acid and MK-801) attenuated the development of morphine tolerance in the rat. Brain Research, 547, 77-81.
- Yirmiya, R., Shavit, Y., **Ben-Eliyahu, S.**, Gale, R. P., Liebeskind, J. C., Taylor, A. N. & Weiner, H. (1991). Modulation of immunity and neoplasia by neuropeptides released by stressors. In McCubbin, J. A., Kaufmann, P. G., Nemeroff, C. B. (eds.), Stress Neuropeptides and Systemic Diseases, pp.261-286. Academic Press: San-Diego
- Marek, P., **Ben-Eliyahu, S.**, Vaccarino, A., and Liebeskind, J.C. (1991). Delayed application of MK-801 attenuates development of morphine tolerance in rats. Brain Research, 558, 163-165.
- Marek, P., Page, G., **Ben-Eliyahu, S.**, and Liebeskind, J.C. (1991). N-methyl-d-aspartic acid (NMDA) receptor antagonist MK-801 blocks non-opioid stress-induced analgesia. I. Comparison of opiate receptor-deficient and opiate receptor-rich strains of mice. Brain Research, 551, 293-296.
- Yirmiya, R., **Ben-Eliyahu, S.**, & Taylor, A. N. (1992). Alcohol and cancer: Biochemical and immunological mechanisms. In Yirmiya, R., Taylor, A.N. (eds.), Alcohol, Immunity, and Cancer, pp. 257-286. CRC Press: Boca Raton, Florida.
- Ben-Eliyahu, S.**, and Page, G.G. (1992). In vivo assessment of natural killer cell activity in rats. Progress in NeuroEndocrineImmunology, 5, 199-214.
- Yirmiya, R., **Ben-Eliyahu, S.**, Gale, R. P., Shavit, Y., Liebeskind, J.C., and Taylor, A.N. (1992). Ethanol increases tumor progression in rats: possible involvement of natural killer cells. Brain, Behavior, and Immunity, 6, 74-86.
- Ben-Eliyahu, S.**, Marek, P., Vaccarino, A., Mogil, J.S., Sternberg, W.F., and Liebeskind, J.C. (1992).

The NMDA receptor antagonist MK-801 prevents long-lasting non-associative morphine tolerance in the rat. Brain Research, *575*, 304-308.

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