

Ofira Einstein
Dean, Vice Rector, Full Professor
Ariel University
The Faculty of Health Sciences
Department of Physical Therapy

Research interests

Neuroimmunology, Neuroprotection, Neuroregeneration
Neurobiology of exercise training
The impact of exercise training on autoimmune neuroinflammation
Biology of neural stem cells
Cell therapy for neurological diseases

Qualifications

PhD, Philosophy Doctor in Neurobiology
Award Date: 1 Jul 2006
Bachelor, Bachelor of Physical Therapy, Tel Aviv University
Award Date: 1 Jul 1998

Employment

Vice Rector

Vice Rector
Ariel University
1 Oct 2024 → present

Dean

Dean
The Faculty of Health Sciences
Ariel University
1 Oct 2022 → present

Full Professor

Full Professor
Department of Physical Therapy
Ariel University
7 Aug 2018 → present

Dean

Dean
The Faculty of Health Sciences
Ariel University
1 Oct 2022 → 30 Sep 2025

Department Head

Head
Department of Physical Therapy
Ariel University
1 Oct 2020 → 30 Sep 2022

Department Head

Head
Department of Physical Therapy
Ariel University
1 Oct 2020 → 30 Sep 2023

Research outputs

Systemic microbial antigen administration ameliorates experimental autoimmune encephalomyelitis via MHC-II downregulation in the CNS and secondary lymphoid organs

Boziki, M., Theotokis, P., Kesidou, E., Karafoulidou, E., Salamotas, I., Chatziefstratiadou, A., Touloumi, O., Papadakos, K., Sgouras, D., Einstein, O., Kountouras, J. & Grigoriadis, N., 1 Apr 2026, In: Journal of Neuropathology and Experimental Neurology. 85, 4, p. 309-330 22 p.

Systemic LPS Administration Stimulates the Activation of Non-Neuronal Cells in an Experimental Model of Spinal Muscular Atrophy

Karafoulidou, E., Kesidou, E., Theotokis, P., Konstantinou, C., Nella, M. K., Michailidou, I., Touloumi, O., Polyzoidou, E., Salamotas, I., Einstein, O., Chatziosotiriou, A., Boziki, M. K. & Grigoriadis, N., May 2024, In: Cells. 13, 9, 785.

High-intensity interval training attenuates development of autoimmune encephalomyelitis solely by systemic immunomodulation

Goldberg, Y., Segal, S., Hamdi, L., Nabat, H., Fainstein, N., Mediouni, E., Asis, Y., Theotokis, P., Salamotas, I., Grigoriadis, N., Katz, A., Ben-Hur, T. & Einstein, O., Dec 2023, In: Scientific Reports. 13, 1, 16513.

The effect of supraphysiological dose of nandrolone decanoate administration on the inflammatory, neurotrophin and behavioral response in adult and old male mice

Zamir, A., Ben Zeev, T., Levi, C., Einstein, O., Ratamess, N. A., van Praag, H. & Hoffman, J. R., Nov 2023, In: Hormones and Behavior. 156, 105444.

The Diversity of Astrocyte Activation during Multiple Sclerosis: Potential Cellular Targets for Novel Disease Modifying Therapeutics

Barmpagiannos, K., Theotokis, P., Petratos, S., Pagnin, M., Einstein, O., Kesidou, E., Boziki, M., Artemiadis, A., Bakirtzis, C. & Grigoriadis, N., Jun 2023, In: Healthcare (Switzerland). 11, 11, 1585.

רדמה (רותם): מירגוב די לע היפרתויזיפ מידומילה תינכות תכרעהל וולאש לש תונמיהמה תקידבו תירבעל מוגרת, תיתוברת המאתה היפרתויזיפ רוניח]

היפרתויזיפל תע-בתכ, 25, 3, p. 4-33 30 p. א. ויטשניא, ת. בקעי, ס. הקריב-ודלוט-לקנרפ, 2023, In: 25, 3, p. 4-33 30 p.

Microbial pathogens induce neurodegeneration in Alzheimer's disease mice: protection by microglial regulation

Ganz, T., Fainstein, N., Elad, A., Lachish, M., Goldfarb, S., Einstein, O. & Ben-Hur, T., Dec 2022, In: Journal of Neuroinflammation. 19, 1, 5.

Exercise training alters autoimmune cell invasion into the brain in autoimmune encephalomyelitis

Hamdi, L., Nabat, H., Goldberg, Y., Fainstein, N., Segal, S., Mediouni, E., Asis, Y., Touloumi, O., Grigoriadis, N., Katz, A., Ben-Hur, T. & Einstein, O., Nov 2022, In: Annals of Clinical and Translational Neurology. 9, 11, p. 1792-1806 15 p.

Fndc5/irisin is regulated by myogenesis stage, irisin, muscle type and training

Lavi, G., Horwitz, A., Einstein, O., Zipori, R., Gross, O. & Birk, R., Oct 2022, In: American Journal of Translational Research. 14, 10, p. 7063-7079 17 p.

Physical exercise therapy for autoimmune neuroinflammation: Application of knowledge from animal models to patient care

Einstein, O., Katz, A. & Ben-Hur, T., Apr 2022, In: Autoimmunity Reviews. 21, 4, 103033.

Parametric handheld optical probe (HOPE) for biological tissue characterization in the near-infrared spectral range

Davidov, D., Shemesh, D., Einstein, O. & Abookasis, D., 15 Sep 2021, In: Optics Communications. 495, 127076.

High-Intensity Exercise Training Protects the Brain Against Autoimmune Neuroinflammation: Regulation of Microglial Redox and Pro-inflammatory Functions

Zaychik, Y., Fainstein, N., Touloumi, O., Goldberg, Y., Hamdi, L., Segal, S., Nabat, H., Zoidou, S., Grigoriadis, N., Katz, A., Ben-Hur, T. & Einstein, O., 23 Feb 2021, In: Frontiers in Cellular Neuroscience. 15, 640724.

Continuous and interval training attenuate encephalomyelitis by separate immunomodulatory mechanisms

Goldberg, Y., Fainstein, N., Zaychik, Y., Hamdi, L., Segal, S., Nabat, H., Touloumi, O., Zoidou, S., Grigoriadis, N., Hoffman, J. R., Katz, A., Ben-Hur, T. & Einstein, O., Jan 2021, In: Annals of Clinical and Translational Neurology. 8, 1, p. 190-200 11 p.

Exercise intensity-dependent immunomodulatory effects on encephalomyelitis

Fainstein, N., Tyk, R., Touloumi, O., Lagoudaki, R., Goldberg, Y., Agranyoni, O., Navon-Venezia, S., Katz, A., Grigoriadis, N., Ben-Hur, T. & Einstein, O., 1 Sep 2019, In: Annals of Clinical and Translational Neurology. 6, 9, p. 1647-1658 12 p.

The association of visually-assessed quality of movement during jump-landing with ankle dorsiflexion range-of-motion and hip abductor muscle strength among healthy female athletes

Rabin, A., Einstein, O. & Kozol, Z., May 2018, In: Physical Therapy in Sport. 31, p. 35-41 7 p.

Agreement between visual assessment and 2-dimensional analysis during jump landing among healthy female athletes

Rabin, A., Einstein, O. & Kozol, Z., Apr 2018, In: Journal of Athletic Training. 53, 4, p. 386-394 9 p.

Human Stem Cell-Derived Neural Precursors for Treatment of Autoimmune Diseases of the Central Nervous System

Aharonowiz, M. (Inventor), Einstein, O. (Inventor), Reubinoff, B. (Inventor) & Ben-Hur, T. (Inventor), 22 Mar 2018, Patent No. US 2018/0080007 A1

Exercise training attenuates experimental autoimmune encephalomyelitis by peripheral immunomodulation rather than direct neuroprotection

Einstein, O., Fainstein, N., Touloumi, O., Lagoudaki, R., Hanya, E., Grigoriadis, N., Katz, A. & Ben-Hur, T., Jan 2018, In: Experimental Neurology. 299, p. 56-64 9 p.

Beacke Physical Activity Questionnaire וְלֹאֲשֶׁה תּוֹעֲמָאָב תִּינוּפוֹ תּוֹלִיעַפֶּל תּוֹמְרוֹ תַּעִיבֵק

Jacob, T. & Einstein, O., Aug 2017, In: היפרתויזיפל תע-בתכ. 19, 2, p. 3-13 11 p.

Evaluating the effectiveness of a health promotion intervention program among physiotherapy undergraduate students

Korn, L., Ben-Ami, N., Azmon, M., Einstein, O. & Lotan, M., 19 Jul 2017, In: Medical Science Monitor. 23, p. 3518-3527 10 p.

Academic achievement, perceived stress, admission data, and sociodemographic background among therapy students in Israel

Jacob, T. & Einstein, O., 1 Jun 2017, In: Journal of Allied Health. 46, 2, p. 72-78 7 p.

Expression level of miRNAs on chromosome 14q32.31 region correlates with tumor aggressiveness and survival of glioblastoma patients

Shahar, T., Granit, A., Zrihan, D., Canello, T., Charbit, H., Einstein, O., Rozovski, U., Elgavish, S., Ram, Z., Siegal, T. & Lavon, I., 1 Dec 2016, In: Journal of Neuro-Oncology. 130, 3, p. 413-422 10 p.

Stress Among Bachelor Physical Therapy Students in Israel during Clinical Practice and Its Association with Academic Achievements– Results of a Longitudinal Study

Jacob, T. & Einstein, O., 2016, In: The Internet Journal of Allied Health Sciences and Practice. 14, 1, 9.

The role of CNS TLR2 activation in mediating innate versus adaptive neuroinflammation

Luz, A., Fainstein, N., Einstein, O. & Ben-Hur, T., 1 Nov 2015, In: Experimental Neurology. 273, p. 234-242 9 p.

Aggregation of MBP in chronic demyelination

Frid, K., Einstein, O., Friedman-Levi, Y., Binyamin, O., Ben-Hur, T. & Gabizon, R., Jul 2015, In: Annals of Clinical and Translational Neurology. 2, 7, p. 711-721 11 p.

Erratum: Presymptomatic treatment with acetylcholinesterase antisense oligonucleotides prolongs survival in ALS (G93A-SOD1) mice (BioMed Research International)

Gotkine, M., Rozenstein, L., Einstein, O., Abramsky, O., Argov, Z. & Rosenmann, H., 2015, In: BioMed Research International. 2015, 651934.

לאירא תטיסרבינואבש היפרתוויזיפל הקלחמב ושאר ראותל מידומילה תינכתב תינפוג תוליעפו תואירב מדיק

א., ויטשניא, ג., יומצע & ג., ימע רב, 2014, In: היפרתוויזיפל תע-בתכ. 16, 3, p. 28-33 6 p.

Time limited immunomodulatory functions of transplanted neural precursor cells

Fainstein, N., Einstein, O., Cohen, M. E., Brill, L., Lavon, I. & Ben-Hur, T., Feb 2013, In: GLIA. 61, 2, p. 140-149 10 p.

Presymptomatic treatment with acetylcholinesterase antisense oligonucleotides prolongs survival in ALS (G93A-SOD1) mice

Marc, G., Leah, R., Ofira, E., Oded, A., Zohar, A. & Hanna, R., 2013, In: BioMed Research International. 2013, 845345.

(Stem) cell based therapy for neurological disorders

Einstein, O. & Ben-Hur, T., 3 Dec 2010, *Stem Cell-Based Tissue Repair*. p. 203-234 32 p.

The thyroid hormone, triiodothyronine, enhances fluoxetine-induced neurogenesis in rats: Possible role in antidepressant-augmenting properties

Eitan, R., Landshut, G., Lifschytz, T., Einstein, O., Ben-Hur, T. & Lerer, B., Jun 2010, In: International Journal of Neuropsychopharmacology. 13, 5, p. 553-561 9 p.

Gliomas display a microRNA expression profile reminiscent of neural precursor cells

Lavon, I., Zrihan, D., Granit, A., Einstein, O., Fainstein, N., Cohen, M. A., Cohen, M. A., Zelikovitch, B., Shoshan, Y., Spektor, S., Reubinoff, B. E., Felig, Y., Gerlitz, O., Ben-Hur, T., Smith, Y. & Siegal, T., May 2010, In: Neuro-Oncology. 12, 5, p. 422-433 12 p.

הריקס: מהיניבש המו תויגולוריונ תולחמ, עזג יאת תלתשה

Einstein, O. & Ben-Hur, T., 2010, In: היפרתוויזיפל תע-בתכ. 12, 3, p. 12-19

Transplanted neural precursors enhance host brain-derived myelin regeneration

Einstein, O., Friedman-Levi, Y., Grigoriadis, N. & Ben-Hur, T., 16 Dec 2009, In: Journal of Neuroscience. 29, 50, p. 15694-15702 9 p.

Human Stem Cell-Derived Neural Precursors for Treatment of Autoimmune Diseases of the Central Nervous System

Aharonowiz, M. (Inventor), Einstein, O. (Inventor), Reubinoff, B. (Inventor) & Ben-Hur, T. (Inventor), 7 May 2009, Patent No. WO 2009/057111 A2

Neural precursor cells inhibit multiple inflammatory signals

Fainstein, N., Vaknin, I., Einstein, O., Zisman, P., Sasson, S. Z. B., Baniyash, M. & Ben-Hur, T., 29 Oct 2008, In: Molecular and Cellular Neuroscience. 39, 3, p. 335-341 7 p.

Neuroprotective effect of transplanted human embryonic stem cell-derived neural precursors in an animal model of multiple sclerosis

Aharonowiz, M., Einstein, O., Fainstein, N., Lassmann, H., Reubinoff, B. & Ben-Hur, T., 5 Sep 2008, In: PLOS ONE. 3, 9, e3145.

The changing face of neural stem cell therapy in neurologic diseases

Einstein, O. & Ben-Hur, T., Apr 2008, In: Archives of Neurology. 65, 4, p. 452-456 5 p.

Fatal neurological disease in scrapie-infected mice induced for experimental autoimmune encephalomyelitis

Friedman-Levi, Y., Ovadia, H., Hoftberger, R., Einstein, O., Abramsky, O., Budka, H. & Gabizon, R., Sep 2007, In: Journal of Virology. 81, 18, p. 9942-9949 8 p.

Corrigendum to "Transplanted neural precursor cells reduce brain inflammation to attenuate chronic experimental autoimmune encephalomyelitis" [Exp. Neurol. 198 (2006) 275-284] (DOI:10.1016/j.expneurol.2005.11.007)
Einstein, O., Grigoriadis, N., Mizrachi-Kol, R., Reinhartz, E., Polyzoidou, E., Lavon, I., Milonas, I., Karussis, D., Abramsky, O. & Ben-Hur, T., May 2007, In: Experimental Neurology. 205, 1, p. 294 1 p.

Neural precursors attenuate autoimmune encephalomyelitis by peripheral immunosuppression
Einstein, O., Fainstein, N., Vaknin, I., Mizrachi-Kol, R., Reinhartz, E., Grigoriadis, N., Lavon, I., Baniyash, M., Lassmann, H. & Ben-Hur, T., Mar 2007, In: Annals of Neurology. 61, 3, p. 209-218 10 p.

Serial in vivo MR tracking of magnetically labeled neural spheres transplanted in chronic EAE mice
Ben-Hur, T., Van Heeswijk, R. B., Einstein, O., Aharonowiz, M., Xue, R., Frost, E. E., Mori, S., Reubinoff, B. E. & Bulte, J. W. M., Jan 2007, In: Magnetic Resonance in Medicine. 57, 1, p. 164-171 8 p.

תויביטרנגדוריון תולחמב עוג יאת תלתשה: נאכ רבכ דיתעה
ויטשניא, א. & רוה-נב, ת., 2007, In: לקידמ. 12, p. 68-71 4 p.

Transplanted neural precursor cells reduce brain inflammation to attenuate chronic experimental autoimmune encephalomyelitis
Einstein, O., Grigoriadis, N., Mizrachi-Kol, R., Reinhartz, E., Polyzoidou, E., Lavon, I., Milonas, I., Karussis, D., Abramsky, O. & Ben-Hur, T., Apr 2006, In: Experimental Neurology. 198, 2, p. 275-284 10 p.

Survival of neural precursor cells in growth factor-poor environment: Implications for transplantation in chronic disease
Einstein, O., Ben-Menachem-Tzidon, O., Mizrachi-Kol, R., Reinhartz, E., Grigoriadis, N. & Ben-Hur, T., Mar 2006, In: GLIA. 53, 4, p. 449-455 7 p.

Stem cell therapy for myelin diseases
Ben-Hur, T., Einstein, O. & Bulte, J. W. M., Feb 2005, In: Current Drug Targets. 6, 1, p. 3-19 17 p.

Cell transplantation for diseases of myelin.
Einstein, O. & Ben-Hur, T., 2004, *Stem Cell and Gene-Based therapy: Frontiers in Regenerative Medicine*. . p. 75-96

Intraventricular transplantation of neural precursor cell spheres attenuates acute experimental allergic encephalomyelitis
Einstein, O., Karussis, D., Grigoriadis, N., Mizrachi-Kol, R., Reinhartz, E., Abramsky, O. & Ben-Hur, T., Dec 2003, In: Molecular and Cellular Neuroscience. 24, 4, p. 1074-1082 9 p.

Effects of proinflammatory cytokines on the growth, fate, and motility of multipotential neural precursor cells
Ben-Hur, T., Ben-Menachem, O., Furer, V., Einstein, O., Mizrachi-Kol, R. & Grigoriadis, N., Nov 2003, In: Molecular and Cellular Neuroscience. 24, 3, p. 623-631 9 p.

MR microscopy of magnetically labeled neurospheres transplanted into the Lewis EAE rat brain
Bulte, J. W. M., Ben-Hur, T., Miller, B. R., Mizrachi-Kol, R., Einstein, O., Reinhartz, E., Zywicke, H. A., Douglas, T. & Frank, J. A., 1 Jul 2003, In: Magnetic Resonance in Medicine. 50, 1, p. 201-205 5 p.

Transplanted multipotential neural precursor cells migrate into the inflamed white matter in response to experimental autoimmune encephalomyelitis
Ben-Hur, T., Einstein, O., Mizrachi-Kol, R., Ben-Menachem, O., Reinhartz, E., Karussis, D. & Abramsky, O., 1 Jan 2003, In: GLIA. 41, 1, p. 73-80 8 p.