

BIOGRAPHICAL SKETCH

NAME Bernard Lerer	POSITION TITLE Professor of Psychiatry Research Scientist
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EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
University of Cape Town, Medical School, Cape Town, South Africa	MbChB	1966-1971	Medicine
Sheba Medical Center, Tel Hashomer, Israel	Internship	1972-1973	Medicine
Hadassah – Hebrew University Medical Center and Herzog Hospital, Jerusalem, Israel	Specialist Boards	1974-1979	Psychiatry Residency
Herzog Hospital, Jerusalem, Israel		1979-1980	Research Fellow
Wayne State University and Lafayette Clinic, Detroit, MI, USA		1982-1984	Post-Doctoral Fellow,

A. Personal Statement

Bernard Lerer is Professor of Psychiatry and Director Hadassah BrainLabs, Center for Psychedelic Research, Biological Psychiatry Laboratory at Hadassah – Hebrew University Medical Center in Jerusalem. He was trained at the University of Cape Town Medical School, Hadassah Medical Center and Herzog Hospital and was a post-doctoral research fellow with Prof. Samuel Gershon at Lafayette Clinic in Detroit. His main research interests are the molecular genetic basis of major psychiatric disorders, pharmacogenetics of psychotropic drugs and the neurochemical mechanisms of antidepressants, mood stabilizers and brain stimulation as a basis for novel drug development. He has received numerous awards, most recently the 2019 Lifetime Achievement Award of the International Society for Affective Disorders (ISAD). He was Founding Editor-in-Chief of the International Journal of Neuropsychopharmacology (1998-2008). Prof. Lerer holds several patents in the areas of psychopharmacology and pharmacogenetics and has mentored more than 100 PhD and MSc students and psychiatrist research trainees.

B. Positions and Honors

Positions

2022-	Founder and Director, Hadassah BrainLabs, Center for Psychedelic Research
2013 -	Founder and Director, <i>Hadassah BrainLabs</i> , National Knowledge Center for Research on Brain Disorders
1990 -	Professor, Department of Psychiatry, Faculty of Medicine, Hebrew University, Jerusalem,
1990 - 2020	Founder and Director, Biological Psychiatry Laboratory, Hadassah Medical Center
2000 - 2002:	Vice Dean for Academic Affairs, Faculty of Medicine, Hebrew University, Jerusalem
1994 - 2002:	Director, National Institute for Psychobiology in Israel
1984 – 1990	Director, Yaacov Herzog Center for Brain and Psychiatry Research and Department of Psychiatry A, Herzog Hospital, Jerusalem, Israel.

Honors.

1984	U.S. Society for Biological Psychiatry, A.E. Bennet Award for Basic Science
1992 - 1994	Chairman, Israel Society of Biological Psychiatry,
1996 - 2000	Vice President, Collegium Internationale Neuro-psychopharmacologicum (CINP)
1996	Fellow, American College of Neuropsychopharmacology (ACNP)
1997 - 2008	Founding Editor in Chief, International Journal of Neuropsychopharmacology
2012	Outstanding Mentor Award, Israel Society for Biological Psychiatry
2014	Werner Kalow Prize in Global Omics and Personalized Medicine
2015	Israel Psychiatric Association, Lifetime Achievement Award
2019	Lifetime Achievement Award, International Society for Affective Disorders (ISAD)

C. Selected Recent Peer-reviewed Publications

PubMed listed publications 398; Citations 35123; h-index 81 (Google Scholar); Data extracted April 26, 202

- Shahar O, Botvinnik A, Esh-Zuntz N, Brownstien M, Wolf R, Lotan A, Wolf G, Lerer B, Lifschytz T. Role of 5-HT_{2A}, 5-HT_{2C}, 5-HT_{1A} and TAAR1 Receptors in the Head Twitch Response Induced by 5-Hydroxytryptophan and Psilocybin: Translational Implications. *Int J Mol Sci*. 2022 Nov 16;23(22):14148
- Wolf G, Singh S, Blakolmer K, Lerer L, Lifschytz T, Heresco-Levy U, Lotan A, Lerer B. Could psychedelic drugs have a role in the treatment of schizophrenia? Rationale and strategy for safe implementation. *Mol Psychiatry*. 2023 Jan;28(1):44-58
- Moskovich D, Finkelshtein Y, Alfandari A, Rosemarin A, Lifschytz T, Weisz A, Mondal S, Ungati H, Katzav A, Kidron D, Mugesh G, Ellis M, Lerer B, Ashur-Fabian O. Targeting the DIO3 enzyme using first-in-class inhibitors effectively suppresses tumor growth: a new paradigm in ovarian cancer treatment. *Oncogene*. 2021 Sep 23. doi: 10.1038/s41388-021-02020-z. Online ahead of print.
- Taliaz D, Spinrad A, Barzilay R, Barnett-Itzhaki Z, Averbuch D, Teltsh O, Schurr R, Darki-Morag S, Lerer B. Optimizing prediction of response to antidepressant medications using machine learning and integrated genetic, clinical, and demographic data. *Translational Psychiatry*. 2021 Jul 8;11(1):381. doi: 10.1038/s41398-021-01488-3.
- Moskovich D, Alfandari A, Finkelshtein Y, Weisz A, Katzav A, Kidron D, Edelstein E, Veroslavski D, Perets R, Arbib N, Kadan Y, Fishman A, Lerer B, Ellis M, Ashur-Fabian O. DIO3, the thyroid hormone inactivating enzyme, promotes tumorigenesis and metabolic reprogramming in high grade serous ovarian cancer. *Cancer Letters* 2021 Mar 31;501:224-233. doi: 10.1016/j.canlet.2020.11.011.
- Krol FJ, Hagin M, Vieta E, Harazi R, Lotan A, Strous RD, **Lerer B**, Popovic D. Placebo-To be or not to be? Are there really alternatives to placebo-controlled trials? *European Neuropsychopharmacology* 2020 Mar;32:1-11. doi: 10.1016/j.euroneuro.2019.12.117. Epub 2020 Jan 17.
- Alkelai A, Greenbaum L, Heinzen EL, Baugh EH, Teitelbaum A, Zhu X, Strous RD, Tatarsky P, Zai CC, Tiwari AK, Tampakeras M, Freeman N, Müller DJ, Voineskos AN, Lieberman JA, Delaney SL, Meltzer HY, Remington G, Kennedy JL, Pulver AE, Peabody EP, Levy DL, **Lerer B**.: New insights into tardive dyskinesia genetics: Implementation of whole-exome sequencing approach. *Progress in Neuropsychopharmacology and Biological Psychiatry*. 2019 May 30;94:109659.
- Ben-Ari H, Lifschytz T, Wolf G, Rigbi A, Blumenfeld-Katzir T, Merzel TK, Koroukhov N, Lotan A, **Lerer B**. White matter lesions, cerebral inflammation and cognitive function in a mouse model of cerebral hypoperfusion. *Brain Research* 2019 May 15;1711:193-201. doi: 10.1016/j.brainres.2019.01.017. Epub 2019 Jan 16
- Wolf G, Lifschytz T, Ben-Ari H, Tatarsky P, Kreisel Merzel T, Lotan A, **Lerer B**: Effect of chronic unpredictable stress on mice with developmental under-expression of the Ahi1 gene: Behavioral manifestations and neurobiological correlates. *Translational Psychiatry*. 2018 Jul 2;8(1):124. doi: 10.1038/s41398-018-0171-1.
- Lotan A, Lifschytz T, Wolf G, Keller S, Ben-Ari H, Tatarsky P, Pillar N, Oved K, Sharabany J, Merzel T.K., Matsumoto T, Yamawaki Y, Mernick B, Avidan E, Yamawaki S, Weller A, Shomron N, **Lerer B**.: Differential effects of chronic stress in young-adult and old female mice: cognitive-behavioral manifestations and neurobiological correlates. *Molecular Psychiatry* 2017 Dec 19. doi: 10.1038/mp.2017.237. [Epub ahead of print]
- Wolf G, Lotan A, Lifschytz T, Ben-Ari H, Kreisel Merzel T, Tatarsky P, Valitzky M, Mernick B, Avidan E, Koroukhov N, **Lerer B**. Differentially severe cognitive effects of compromised cerebral blood flow in aged mice: Association with myelin degradation and microglia activation. *Frontiers in Aging Neuroscience* 2017 Jun 16;9:191. doi: 10.3389/fnagi.2017.00191. eCollection 2017.
- Eitan R, Fontaine D, Benoît M, Giordana C, Darmon N, Israel Z, Linesky E, Arkadir D, Ben-Naim S, Iserlles M, Bergman H, Hulse N, Abdelghani M, McGuffin P, Farmer A, DeLea P, Ashkan K, **Lerer B**.: One year double blind study of high vs low frequency subcallosal cingulate stimulation for depression. *Journal of Psychiatric Research*. 2018 Jan;96:124-134. doi: 10.1016/j.jpsychires.2017.09.026. Epub 2017 Oct 3.
- Lotan A, Lifschytz T, Mernick B, Lory O, Levi E, Ben-Shimol E, Goelman G, **Lerer B**.: Alterations in expression of a neurodevelopmental gene exert long-lasting effects on cognitive-emotional phenotypes and functional brain networks: Translational evidence from the stress-resilient Ahi1 knockout mouse. *Molecular Psychiatry*. 22:884-899, 2017 doi: 10.1038/mp.2016.29. [Epub 29 March 2016]
- Lotan A, Lifschytz T, Slonimsky A, Broner E.C., Greenbaum L, Abedat S, Fellig Y, Cohen H, Lory O, Goelman G, **Lerer B**.: Neural mechanisms underlying stress resilience in Ahi1 knockout mice: Relevance to neuropsychiatric disorders. *Molecular Psychiatry*. 19:243-252, 2014 [Epub 17 Sep 2013]