Hermona Soreq
Curriculum Vitae

The Alexander Silberman Institute of Life Sciences
Slesinger Chair of Molecular Neuroscience
The Edmond and Lily Safra Center for Brain Science
The Hebrew University of Jerusalem
The Edmond J. Safra Campus
Givat Ram, Jerusalem, Israel 9190401
Tel: +972-2-658 5109, +972-54-8820629
hermona.soreq@mail.huji.ac.il;
Website: < http://elsc.huji.ac.il/soreq/home >

Short Biography

(H-Factor: ISI: H-index = 70, No. of citations without self citations: 16,768

Google Scholar: (includes conference papers) H-index = 88, No. of citations 29,766)

Hermona Soreq was trained at The Hebrew University, Tel Aviv University, The Weizmann Institute of Science and the Rockeffeler University. She joined the faculty of The Hebrew University in 1986, where she holds a University Slesinger Chair in Molecular Neuroscience and is a founding member of the Edmond and Lily Safra Center for Brain Science. Soreq studies the mechanisms controlling acetylcholine functioning; she uses molecular biology and genomics to explore cholinergic signaling, with a recent focus on its short and long non-coding RNA regulators, including microRNAs and transfer rNA fragments. Her work spans both basic and biomedical studies on cholinergic signaling in health and disease, particularly on anxiety-related topics and she is the elected President of the International Organization of Cholinergic Mechanisms. Soreq served as the elected Dean of the Faculty of Science (2005-2008), authored hundreds of publications, including 57 published in *Science*, *Nature*, *PNAS, Neuron* and other high-impact journals and has been the recipient of co-recipient of significant funding from US, European and Israeli National and private foundations including an Advanced ERC Award and an Israeli I-Core Center of Excellence on mass trauma. She is a member of The Hebrew University's Board of Governors and scientific advisory boards for national and international bodies with major interests in life sciences. Her honors include Honorary PhDs from the Universities of Stockholm (1996), Ben-Gurion University (2007), and Erlangen (2008), Teva Founders' Award (2006), The Lise Meitner Alexander von Humboldt Award, Germany (2009), a Miller Fellowship at US UC Berkeley (2009), a Berlin NeuroCure visiting fellowship (2015-2017), a Rappaport prize for bio-medical research (2015), an International Psychoneuroimmunology Award (2016), the ILANIT-Katzir Prize for outstanding research achievements in the Life Sciences (2017), a FEBS keynote lecture award (2020) and an ISN keynote lecture award (2022). She also contributes to the Neuro-Cure Center, Berlin, the ImmunoSensation Center, Bonn and the International Advisory Boards of the UK-Israel Council and BGU's Center of Biotechnology. Notably, 25 of Soreq's trainees are faculty members in Israel (In Jerusalem, Tel Aviv, Haifa, the Galilee and Beer Sheva) and overseas (UC Berkeley, Maryland, Halifax, Ann Arbor, Paris, Tours, Gottingen, London). Others contribute to government and private biotechnology organizations and companies involved in Life Sciences.

MAJOR RESEARCH INTERESTS

MicroRNAs (miRs) and other non-coding RNA regulators of gene expression, including **transfer RNA fragments (tRFs)** rapidly acquire wide recognition as global controllers of multiple features, yet the complex impact of their roles on brain and body functioning is largely unresolved. Soreq combines advanced sequencing technologies with computational neuroscience and transgenic engineering tools to investigate miR and tRF functions in the healthy and diseased brain and body, with a focus on acetylcholine(ACh)-related processes. Her studies found primate-specific "CholinomiR" silencers of multiple genes that compete with each other on suppressing their targets and discovered cholinergic brain-to-body regulation of anxiety and inflammation (Soreq, Trends Neurosci., 2015). In human volunteers, Soreq found cholinergic-associated pulse increases under fear of terror (Shenhar-Tsarfaty et al., PNAS 2015); and identified massive CholinomiRs decline in Alzheimer's brains (Barbash et al., Neurobiol. Disease 2017), which accompanies changes in long non-coding RNAs and points at Statins intervention with the onset of Parkinson's disease (Simchovitz et al., Aging Cell 2020) and modifications in pseudogenes expression (Barbash et al., Transl. Psych 2017). In engineered mice, Soreq studies CholinomiR and CholinotRF responders to stress, epilepsy (Bekenstein et al., PNAS 2017), inflammation (Shaked et al., Immunity 2009) and ischemic stroke; and found liver fattenning, trait anxiety, blood pressure and inflammation under inherited interference with acetylcholinesterase (AChE)-targeting CholinomiRs (Hanin et al., Gut 2018). Recently, Soreq showed CholinomiR differences between brains of men and women with schizophrenia and bipolar disorder (Lobentanzer et al., Cell Rep. 2019 and Simchovitz-Gesher & Soreq, TIPS 2020), and a "changing of the guards" shift of CholinomiRs decline and CholinotRF increases in blood cells from stroke patients (Winek et al., 2020); together, her work leads to precision medicine-driven prevention and/or intervention with diseases involving impaired ACh signaling.

The major recent landmarks of the Soreq group in the cholinergic field involve:

1. **MiR-132 regulation of cholinergic signaling:** Soreq found miR-132 suppression of AChE levels and activities, controlling neuro-immune signaling from brain to body (Shaked et al., Immunity 2009; Barbash et al., Evol & Mol Biol, 2014), with a pronounced impact on liver hyperlipidemia (Hanin et al., Gut 2018).
2. **CholinomiRs-mediated suppression of stress reactions:** miR-211 was identified as attenuator of epileptic seizures (Bekenstein et al., PNAS 2017) and its sequence homologue miR-204 was associated with stereotypic behavior (Moshitzky et al., Biomolecules 2020); human carriers of a single nucleotide polymorphism (SNP) that modifies miR-608-binding site in AChE mRNA showed elevated brain AChE, blood pressure and inflammation but not PTSD (Hanin et al., Hum Mol Gen 2014; Lin et al., Trans Psych 2016); whereas the AChE-targeting miR-125b was shown to be schizophrenia-modulated in a sex-dependent manner (Lobentanzer et al., Cell Reports 2019).
3. **CholinomiRs-associated changes in stroke, cardiac and inflammatory bowel disease:** Together with clinician collaborators, Soreq observed serum AChE changes that predict recovery and survival from ischemic stroke (BenAssayag et al., Mol Med 2010); drastic miR-132 increases in inflamed, but not non-inflamed intestinal biopsies (Maharshak et al., Inflam Bowel Dis 2013), and risk of non-survival in cardiac patients with low AChE levels (Arbel et al., Mol Med 2014). Surprisingly, in stroke patients' blood cholinomiRs are exchanged with cholino-targeted transfer RNA fragments (Winek et al., PNAS 2020).
4. **Finding cholinergic-mediated RNA metabolism impairments in neurodegenerating brains:** Soreq found the decline in Alzheimer's cholinergic neurons and Parkinson's disease brains to be accompanied by RNA metabolism-related brain damages in human donors and cholinergic-deprived mice (Berson et al., EMBO Mol Med 2012; Barbash et al., Neurobiol. Disease 2017, Hanan et al., EMBO Mol Med 2020).
5. **Implicating cholinergic mechanisms to our stress-related daily life:** The impact of stress-induced processes on our daily life in 2021 Israel is notably increasing the risk of disease; in a collaborative Big-Data study with clinical experts, Soreq and colleagues combined machine learning with patient serum tests (Shenhar-Tsarfaty et al., PNAS 2015) which linked anxiety and metabolism regulating miRs (Meydan et al., Trends Mol Med 2016). **Soreq thus raised research discussion of cholinergic-regulating small RNAs at both the basic and biomedical aspects.**

Table of Contents

I. PERSONAL INFORMATION: 1
II. EDUCATION: 1
III. ACADEMIC POSITIONS: 1
IV. OTHER CAMPUS APPOINTMENTS 1
V. AWARDS AND HONORS 1
VI. INTERNATIONAL PLENARY LECTURES (Past 3 years) 1
VII. SERVICE 3
VIII. STUDENTS AND POSTDOCTORAL ASSOCIATES TRAINED 3
IX. COURSES TAUGHT (Past 5 years) 6
X. LIST OF PUBLICATIONS 7

HERMONA SOREQ

I. **PERSONAL INFORMATION:**

FAMILY Spouse (Tuvi) and 3 sons

II. EDUCATION:

1979	Rockefeller University	Fogarty Fellow	Molecular Cell Biology
1976	The Weizmann Institute of Science	PhD	Biochemistry
1970	Tel Aviv University	MSc	Biochemistry, Chemistry teaching
1967	The Hebrew University of Jerusalem	BSc	Biochemistry & Microbiology

III. ACADEMIC POSITIONS:

2010-	The Edmond and Lily Safra Center for Brain Sciences (ELSC), founding member
2005 - 2008	Elected Dean, Faculty of Mathematics and Natural Sciences, The Hebrew University
2005 - 2017	Non-Resident Research Professor, The Bio-Design Institute, Arizona State University
2000 -2005	Head, The Eric Roland Center for Neurodegenerative Diseases, The Hebrew University
1995 - 1999	Head, the Alexander Silberman Institute of Life Sciences, The Hebrew University
1992 -1995	Head, Dept. of Biological Chemistry, The Hebrew University
1989 - On	Professor of Molecular Neuroscience, Department of Biological Chemistry, The Hebrew University of Jerusalem
1986 - 1988	Associate Professor of Molecular Neuroscience, The Hebrew University of Jerusalem.
1983 – 1986	Associate Professor, Neurobiology Department, Weizmann Institute
1979 - 1983	Senior Scientist, Neurobiology Department, Weizmann Institute
1977 – 1979	Fogarty Fellow, Department of Molecular Cell Biology, The Rockefeller University.

IV. OTHER CAMPUS APPOINTMENTS

The Hebrew University's Board of Governors
member, 2011-2021

BOARDS OF DIRECTORS

2011-2018	The Hebrew University of Jerusalem
2008-2021	Yissum, The Hebrew University's Technology Transfer Company

HEBREW UNIVERSITY COMMITTEES (Past 5 years)

2014-2018	Executive Committee, Committee for Academic Policy
2011-2014	Israel Institute for Advanced Studies (IAS)
2010-2017	Chair, Appointment Committee for Tenure Positions in the Experimental Sciences
2008-2019	Academic Committee of The Center for Rationality and Interactive Decision Theory, The Faculty of Social Sciences

V. AWARDS AND HONORS

2022	Marthe Vogt Prize, the International Society of Neurochemistry
2017	ILANIT-Katzir Prize for 2017 for exceptional achievements in the Life Sciences
2016	PsychoNeuroInflammation Society (PNIRS) award
2015	•Fellow, NeuroCure Charité - Universitätsmedizin Berlin Cluster
	•The Rappaport Prize for Bio-Medical Research, Israel
2013-2019	•Advanced ERC Research Award and two ERC Proof of Concept awards
	•Israeli National Center of Excellence (I-Core) on Trauma, member of leadership team
2010	Guest scholar (July-Sept.), Humboldt University's Brain and Mind Institute, Berlin
2009	•The Lise Meitner Alexander von Humboldt Foundation Award, Germany
	•Guest Researcher, (June-Sept.) Max Planck Institute for Microbiology, Berlin
	•Miller Fellowship, University of California, Berkeley
1999, 2008	Kay Prize for Innovative research, The Hebrew University
2007	•Doctor of Philosophy *honoris causa* in Medicine, Friedrich-Alexander-University Erlangen-Nűremberg
	•Doctor of Philosophy *honoris causa* in Neuroscience, Beer-Sheva University of the Negev
2006	Teva's Founders Award in Molecular Medicine
2005	Landau Prize for Biomedical Research
2001	Honorary Professorship, The Maimonides University, Buenos Aires
2000	Research Prize by the Israeli Minister of Health
1996	Doctor of Philosophy *honoris causa* in Chemistry, University of Stockholm, Sweden
1995	Visiting Professor, College de France, Paris
1992	U.S. Army Science Award of excellence, Miami
1990-	The Charlotte Slesinger Chair on Molecular Neuroscience, The Hebrew University of Jerusalem
1986 - 1989	Berman Fellowship, The Hebrew University
1985	Chancellor's Distinguished Lectureship, The University of California, Berkeley
1982	Honorary Medal, The European Society for Neurochemistry, Katania
1980 - 1983	Charles Revson Career Development Chair, The Weizmann Institute

VI. INTERNATIONAL PLENARY LECTURES (Past 3 years)

2022

Marthe Vogt Lecture - ISN-APSN Meeting, Kyoto Japan (August)

2021

EMBL in Israel 2021 at The Weizmann Institute of Science, Rehovot, Israel (December)
Symposium at Menarini Foundation 2021, Fiesole, Italy (October)
45th FEBS Congress, Ljubljana Slovenia 2021- IUBMB Lecture (July)
Seeking non-coding RNA regulators of acetylcholine functioning
The israeli Society of Biological Psychiatry, Kfar Blum Israel 2021 (March)
Integrative transcriptomics reveal sexually dimorphic microRNA control of the cholinergic/neurokine interface in schizophrenia and bipolar disorder
15th International Conference on Alzheimer's and Parkinson's Diseases (AD/PDTM2021), Barcelona Spain (March)
Investigating Alzheimer's Disease-related roles of transfer RNA fragments in human brain nuclei

2020

"Argentine Society for Research in Neuroscience" (SAN) Virtual Monthly Conference, Plenary Lecturer – VIRTUAL MEETING
Non-coding RNAs and cholinergic pathways in health and brain disease
3rd International Conference on Applied Biochemistry and Biotechnology (ABB 2020), Tokyo, Japan (August) - VIRTUAL MEETING
Eighth Annual Broad-ISF Symposium - Keynote lecture, Cambridge MA, USA (June) - VIRTUAL MEETING
AAT-AD/PD™ Focus Meeting 2020, Vienna (April) - VIRTUAL MEETING
NEAT1 is over-expressed in Parkinson's disease substantia nigra and confers drug-inducible neuroprotection from oxidative stress
2nd Annual South Texas Alzheimer Conference, San Antonio USA (February)
Cellular and molecular acetylcholine networks in Alzheimer's disease
Seminar in University College Dublin (UCD), Dublin Ireland (February)
The role of non-coding RNA in stress-related disorders
The 8th international meeting of the Integrated Brain and Behavior Research Center (IBBRC), Haifa Israel (February)
Exploring non-coding RNA regulators of acetylcholine functioning
Sino-Israel Symposium on Precision Medicine, Shanghai, China (January)
Cellular and molecular acetylcholine networks in health and disease
The ISFN 2020 Annual Meeting and The Satellite Humboldt Kolleg Joint Israel-German Symposium, Eilat (January)
Integrative transcriptomics reveal sexually dimorphic microRNA control of the cholinergic/neurokine interface in schizophrenia and bipolar disorder

2019

16th International Symposium on Cholinergic Mechanisms (ISCM-XVI), Rehovot (December)
Carving the molecular landscape of cholinergic regulators in health and disease
37th Annual Meeting of Indian Academy of Neurosciences (IAN), New Delhi (November)
Non-coding RNAs and Traumatic memories
8th International Conference on Biomedical Engineering and Biotechnology, Seoul, Republic of Korea (October)
Key note Lecture: Exploring non-coding RNA regulators of acetylcholine functioning
IIS-ISCR Special Conference - The Cutting Edge of Immunology, Cancer and Immunoncology Research Tel Aviv (September)
Sex-related perturbations in schizophrenia and bipolar disorder brains reflect microRNA-mediated cholinergic/neurokine interactions
50 Years of Psychoneuroendocrinology Milan (August)
Non-coding RNAs and traumatic memories
Mass General Hospital, Boston (August)
From neurodegeneration-related RNA metabolism impairments to modified brain lipids
International Society for Autonomic Neuroscience (ISAN) (July) USA
Carving the molecular landscape of cholinergic signalling in anxiety and metabolic stresses
6th Venusberg Meeting on Neuroinflammation, Bonn Germany (May)
Cholinergic regulation of brain inflammation
14th International Conference on Alzheimer's and Parkinson's Diseases Portugal (March)
NEAT1 protects nuclear paraspeckles in Substantia nigra neurons of Parkinson's patient brains via simvastatin-inducible LRRK2-mediated signaling
85th Annual Meeting of the German Society for Experimental and Clinical Pharmacology and Toxicology (DGPT) and 21st Annual Meeting of the Association of the Clinical Pharmacology (VKliPha) with contribution of the AGAH Germany (February)
Non-coding RNAs in neurodegenerative disease

2018

Wellcome Trust India Alliance – EMBO symposium on "Memory Formation: RNA based regulatory mechanisms" New Delhi, India (October) *Non-coding RNAs and Traumatic memories*
31st ECNP Congress, Barcelona, Spain (October)
Single nucleotide polymorphisms co-modulating anxiety and metabolic disorders
NIDDK ANS meeting - Autonomic Nervous System: Role in the Regulation of Peripheral Metabolism and Pathophysiology of Metabolic Disease, Bethesda, USA (September)
MicroRNAs in Cholinergic Signaling, Fatty Liver Disease, and Metabolic Risk
Ageing BIRAX conference at Kings College, London, England (September)
Aging-related changes in acetylcholine signaling implicate non-coding RNA regulators
UK-ISR Conference on Precision Ageing and Medicine at King's College London (September)
Short non-coding whole blood RNAs from ischemic stroke patients reflect a circadian-dependent context
Seminar in Cambridge, England (June)
The complexity and evolutionary advantages of cholinergic regulating microRNAs
ELSC Conference - What Makes Us Human: From Genes to Cognition, The Hebrew University, Jerusalem Israel (June)
Carving the cholinergic landscape in the human brain
Neurizons 2018 fire . wire . inspire, Gottingen, Germany (May-June)
The impact of non-coding RNAs on cholinergic reactions to trauma
'The Neurobiology of PTSD – a challenge to be met' Wilton Park, England (April-May) *Non-coding RNAs and Traumatic memories*

The joint CIFAR-Jacobs-Foundation-Conference "Reconciling Genes and Contexts" 2018 at Schloss Marbach, Germany (April)
One-day symposium: 'Neuroinflammation meets cholinergic inflammatory pathway', University of Heidelberg, Germany (April)
Role of microRNAs in the regulation of cholinergic processes
EMBO *Workshop* - Noncoding RNAs in embryonic development and cell differentiation, Weizmann Institure, Rehovot, Israel (April)
The promises and challenges of neuronal microRNAs
AAT-AD/PD Focus Meeting 2018, Torino, Italy (March)
Identifying disease-related Circular RNAs (circRNAS) in the Parkinson's disease brain
EMBO Wokshop "Noncoding RNAs in Embryonic Development and Cell Differentiation" Israel (April)
The promises and challenges of neuronal microRNAs
European Crohn's and Colitis Organisation (ECCO) Austria (February)
Stress-induced controllers of intestinal inflammatory reactions

VII. SERVICE

INTERNATIONAL SOCIETIES AND COMMITTEES (Past 5 years) –

2018, 2019	•Member, CIFAR's International Assessment Panel (IAP) (Canada)
	•Member, the International Advisory Committee of the 12th Symposium on Catecholamines and Other Neurotransmitters in Stress (held in Slovakia)
	•European Research Council (ERC) Panel Member, the Consolidator Grant 2018 - Neuroscience Panel
2017-2019	•World Congress of Psychiatric Genetics, Program Committee World Congress (2019)
	•Member, Academic Board of MIGAL (Galilee Research Institute)
2017-	Member, Academia Europaea
2015-2019	International Society for Neurochemistry (ISN) Council Member
2014	•FEBS International Scientific Committee for the 2016-2017 FEBS Conferences
	•European Research Council (ERC) Panel Member in Neurosciences and Neural Disorders for the Consolidator Grant 2014
	•Chair, US-Israel Binational Science Foundation's Transformative Science Program
	•German Research Foundation (DFG) Grant Review Panel member in Emerging roles of non-coding RNAs
2014-2019	Austrian K-Project Panel member, Competence Centers of Excellence Grant (COMET)
2013-2014	Israel Science Foundation (ISF) Committee
2013-	•Chair, International Advisory Board for the International Symposia on Cholinergic Mechanisms
	•Elected International member of German Research Foundation; Immunosensation Center of Excellence, Bonn
2011-2014	Israel Science Foundation (ISF) Review Committees for the Regular and the Legacy Heritage Biomedical Science Grants (Chair)
2011-2015	Federation European Biochemical Societies (FEBS) Fellowship Committee

Member, European Molecular Biology Organization (EMBO), Human Genome Organization (HUGO), Federations of American and Israeli Societies for Experimental Biology (FASEB, FISEB), American Societies for Neuroscience & for Pharmaceutical & Experimental Therapeutics, Society of Controlled Release, Oligonucleotide Therapeutics Society (OTS), Society of Neuroscience, International Society of Neurochemistry (ISN), International Society of Psychoneuroendocrinology (ISPNE).

NATIONAL COMMITTEES (Past 5 years)

2020 -	Senior Academic Advisor to the Azrieli Fellows Program
2016-2018	Israel Science Foundation Committee for Institutional Equipment in Life Sciences, Chairperson
2018-	Azrieli Faculty Newly Recruited Faculty Awards, Chairperson of the life sciences awards committee
2016	Israel Science Foundation Professional Course Committee
2015-	Azrieli College of Engineering, Board of Trustees
2015--	Adam's Fellowship Committee
2015	Tel Aviv University Life Sciences Review
2015	The National Institute for Biotechnology in the Negev, Ben Gurion University, Scientific Advisory Board, Head
2014	The Late President Peres' Committee for PhD Fellowships of Excellence in Neuroscience
2010-2011	National Council for Higher Learning, Steering Committee for Centers of Excellence
2010-2014	Life Sciences Committee of the Clore Scholars Programme, Chairperson
2009-2014	Technion's Academic Development Committee

VIII. STUDENTS AND POSTDOCTORAL ASSOCIATES TRAINED

STUDENTS AND POST-DOCTORAL FELLOWS

A. M.Sc. Students

1. **Or Yakov** (The Hebrew University), 2019-
2. **Naomi Niederhoffer**, (Canadian new immigrant, The Hebrew University), 2017-2019, Knockout of miR-132 in cholinergic neurons.
3. **Rotem Maoz** (The Hebrew University), 2016-2017 Systems approach to Alzheimer's disease.
4. **Rivka Zangen**, (The Hebrew University) 2016- 2019 miRNA regulators of pain in mice and men.
5. **Eden Oz** (The Hebrew University) 2015-2017.
6. **Rotem Haviv** (The Hebrew University) 2015-2017.
7. **Lyndon Friedson** (Israel Institute of Technology) Cholinergic transcript alterations in Alzheimer's disease, 2014-.
8. **Yael Goll**, (The Hebrew University), 2010-. *PhD student Eli Geffen's lab, Tel Aviv Univeristy.*
9. **Yochai Wolf** (The Hebrew University), 2008-2010. *PhD student at Stephen Jung's lab, the Weizmann Institute.*
10. **Tal Bruck**, (The Hebrew University), 2006-2008. *PhD student at Nissim Benvenisty's lab, HUJ*
11. **Ran Avni**, (The Hebrew University), 2005-2007. *Biotechnology Company.*
12. **Boris Bryk**, (The Hebrew University), Haselkorn Fellowship, 2002 – 2003; Dean's Award, 2002-2003. *Biotechnology Co., Germany.*

13. **Alastaire Grant**, (BSc University College, London), 1999-2001. UK Friends of HUJ fellowship, 1999-2001. *Ph.D. student, University College, London.*
14. **Danijel AlBajari**, 1997 – 2000. Boehringer-Ingleheim Fellowship, 1998-2000.
15. **Nelly Gluzman**, 1997-2000.
16. **Nadav Livny**, 1998-1999.
17. **Nilli Galyam**, 1997-1999. Pollack Award, 1998. Wolf Award, 1999. *Faculty member, Tel Hai College.*
18. **Ronit Zamir**, 1986-1988.
19. **Adi Avni**, 1983-1984. Feinberg Graduate School Special Award, 1984. *Professor of Biology, Tel Aviv University*
20. **Margit Burmeister**, 1982-1984 (Co-supervisor: J. Schlesinger). Minerva Fellowship. *Professor of Genetics, Ann Arbor, MI*
21. **Anat Safran**, 1981-1983. Feinberg Graduate School Award, 1983.
22. **Ruti Parvari**, 1980-1983 (Co-supervisor:I. Silman). Feinberg Graduate School Award, 1982. *Assoc. Prof. of Genetics, Ben-Gurion University.*
23. **Daniel Eliyahu**, 1980-1982.

B. Ph.D. Students (Faculty members highlighted in color)

1. **Shani Vaknine** (The Hebrew University), 2018- Identifying cholinergic-related dementia in Parkinson's disease patients.
2. **Nimrod Madrer (**The Hebrew University), 2017- Exploring inter-related impacts of single nucleotide polymorphisms on aging- and sex-related cholinergic differences.
3. **Sima Dubnov** (The Hebrew University) 2019-
4. **Yonat Tzur** (The Hebrew University) **2015-** - The primate-specific miR-608 hyper-activates cholinergic brain reactions in humanized female mice while maintaining balanced inflammation
5. **Bettina Nadorp** (Ulm University**), 2014-2018** CholinomiR regulators of cholinergic signaling**.** Post-doctoral fellow, U of Toronto, Canada.
6. **Nadav Yayon (**The Hebrew University**), 2012-2020.** Synaptic complexity of cholinergic functioning.
7. **Uriya Bekenstein, 2008-2017** (The Hebrew University), MicroRNA-211-meidated epilepsy and cholinergic dis-regulation in Alzheimer's disease**.** *Patents in Biotechnology company.*
8. **Geula Hanin,** (The Hebrew University) **2009-2017** MicroRNA-312 as a metabolic amplifier**.** Kay prize, 2015. Newton *Post-doctoral fellowship, Cambridge UK.*
9. **Nir Waiskopf, 2012-** (The Hebrew University) (Co-supervisor: Uri Banin, Chemistry). **2009-2016.** Einstein Pre-doctoral fellowship, 2013-.
10. **Shahar Barbash**, **2009-2015** (HUJ, Computational Neuroscience (ICNC)). Teva Pre-doctoral fellowship, 2013-2014, Rothschild Post-doctoral fellowship, 2015-2018, Rockefeller University, NY, USA.
11. **Mor Hanan**, 2007- (HUJ, Co-supervisor: Sebastian Kadener) The Eric Roland Interdisciplinary Program in Neurodegenerative Diseases Scholarship, 2010. Teva Neuroscience pre-doctoral fellowship, 2016. ELSC post-doctoral fellowship, 2018-2019.
12. **Amit Berson,** 2004-2011. Dean's Fellowship, 2004; Eshkol Fellowship, 2007, Cornelli Travel Award for the 9th International Conference on ADPD, 2009. *Post-doctoral fellow, University of Pennsylvania*
13. **Shani Ben-Arie,** 2004-2010. Dean's Fellowship, 2004; Wolf Fellowship, 2005; Meidan Fellowship, 2007. *Bioinformatics Company. 2017- Post-doctoral fellow, Weizmann Institute.*
14. **Keren Ailon-Ofek,** 2004-2013. Biotechnology Fellowship, 2004. Meidan Fellowship, 2010-2012. Medical equipment company.
15. **Gabi Zimmerman**, 2004-2010. Computational Neuroscience Fellowship. *Tel HaShomer Ventures*.
16. **Ari Meerson,** MSc (Weizmann Institute), 2004-2008. *Post-Doctoral Fellow, NIH, Phoenix Arizona. Researcher at MIGAL, lecturer in Tel Hai College.*
17. **Adi Geffen-Gilboa**, 2002-2011. Eshkol Fellowship, 2007, 2011, FEBS. *Post-doctoral Fellow, Univ. of Bonn; Harvard University. Owner of a Biotechnology Company, Boston.*
18. **Deborah Toiber,** (The Hebrew University), 2002 – 2008. *Post-Doctoral Fellow, Harvard University. Lecturer, Department of Life Sciences, Ben-Gurion University.*
19. **Liat BenMoyal-Segal,** Haselkorn Fellowship, 2001-2002, Eshkol Fellowship, 2005, Adam's Fellowship, 2006-2010. *2014 Appointment Department of Oral & Maxillofacial Surgery, Beilinson Medical Center.*
20. **Erez Podoly**, M.Sc. (HUJ Co-Supervisor: Oded Livnah), 2003- 2008. Eshkol Fellowship, 2007. *Post-Doctoral Fellow, Stanford University. Entrepreneur.*
21. **Irit Shapira**, B.Sc. (in psychology, HUJ), (Co-supervisor: R. Yirmiya, Psychology), 2000-2005. *Staff Scientist, Beilinson Mediacl Center.*
22. **Marjorie Pick**, M.Sc. (University of Melbourne), (Co-supervisor: A. Eldor, TAU), 2000-2005. *Research Associate, Dept. of Oncology, Hadassah Hospital.*
23. **Eran Meshorer**, M.Sc. (HUJ), 1999-2003. ISN Travel Award, 2001, 2003; Lichtenstein Award, 2001.; ICNC Fellowship, 2002, Rector's Award, 2002-2003; ISBMB Prize, 2003, *Professor of Genetics, HUJ.*
24. **Ella H. Sklan,** M.Sc. (Ben Gurion University), 1999 – 2004. Lichtenstein Award, 2002 *Assoc. Professor, Dept of Human Microbiology, Tel Aviv University.*
25. **Tama Evron,** B.Sc. (HUJ) 1999 – 2006. *Post-Doctoral Fellow, Duke University Durham, N.C.* Biotechnology Company, Boston; Praxis Precision Medicine (Clarus) and Teleos.
26. **Inbal Mor**, M.Sc. (HUJ), Dean's Award, 2000. Pollack Award, 2001, 1998-2006. *Post-Doctoral Fellow, Weizmann, Rehovot and Glazgo, UK. Lab manager, The Technion.*
27. **Noa Farchi**, 1998-2004. Dean's Award, 1999, 2000, Pollack Award, 1999 (Co-supervisor: B. Hochner, Neurobiology).
28. **Osnat Cohen**, DVM (HUJ) 1997 -2004. ASPET Fellowship and Best Paper Award, 2000. Head, HUJ-society interactions.
29. **Michael Shapira**, 1994 – 2000. Pollack Award, 1995. Maria-Ascoli Award, 1999. Deans' Post-doctoral Fellowship, 2001. LSRF Fellowship, 2004. *Associate Professor, UC, Berkeley*.
30. **Daniela Kaufer**, 1994 –1999. Pollack Award, 1996. ISN Travel Fellowship, 1997. EMBO Post-doctoral Fellowship, 1999 (declined). Human Frontiers Post-doctoral Fellowship, 1999. LSRF Fellowship, 2002. Prof., U.C. Berkeley.
31. **Meira Sternfeld**, 1992-1999. Pollack Award, 1993. Lady Davis Post-doctoral Fellowship, 1999. *Lecturer, Oranim College.*
32. **Mirta Grifman**, 1993-1998. ISN Travel Fellowship, 1995. Mexican HUJ Friends Fellowship, 1996. *Pharmaceutics Consultant, Pfizer*.
33. **Efrat Lev-Lehman**, 1992-1997. Golda Meir Award, 1990. B. de Rothschild Post-doctoral Fellowship, 1997-1999.

34. **Rachel Beeri-Leibson**, 1991-1997. European Neurobiology Network Award, 1995, Lady Davis Post-doctoral Fellowship, 1997. Head, the Genomics lab, Shaarei Zedek Medical Center.
35. **Yael Loewenstein-Lichtenstein**, 1990 - 1996. Pollack Award, 1991, Landau Award, 1994, Human Frontiers Post-doctoral Fellowship, 1996-1998.
36. **Shlomo Seidman,** 1990-1994. Magna Cum Laude. Landau Award, 1995, deceased.
37. **Gal Ehrlich**, 1989-1993. Golda Meir Award, 1989, Pollack Award, 1990. Owner of a Patents in Biotechnology Company.
38. **Revital Ben-Aziz Aloya**, 1989 - 1993. Landau Award, 1991. Biotechnology Company.
39. **Averell Gnatt**, 1985-1990. Landau Award, 1990. *Assoc. Prof. in Pharmacology, University of Maryland.*

C. M.D. Ph.D. Students

1. **Alon Simchovitz** (The Hebrew University), 2016- non-coding RNAs in mental impairments**.** *Clore PhD fellowship, 2017-2019.*
2. **Asher Salmon**, M.D., (Technion, Haifa), 2001 – 2007. *Ministry of Health*
3. **Rinat Kahat**, M.D. (Technion), (Co-supervisor with Ido Perlman, Rapaport Institute), 2001-2007. *Post-Doctoral Fellow, St. Louis, US.*
4. **Chava Perry,** M.D. (HUJ), 2000-2005 (Co-supervisor: A. Eldor, TAU) Meirbaum Award, 2000.Long-term Ministry of Health Fellowship, 2001-2002. Bat-Sheva de Rothschild Fellowship, 2005-2007. *Senior Lecturer, Tel-Aviv University.*
5. **Daniel Grisaru**, M.D. (Tel Aviv University), 1996-2001. (Co-supervisor: A. Eldor, TAU). Meirbaum award, 1998. *Assoc. Prof., Tel-Aviv University.*
6. **Yaron Lifson-Lapidot**, M.D. (Ben-Gurion University), 1989-1991. Levi Eshkol Fellowship. Biotechnolgy Company.
7. **Patrick Dreyfus**, M.D. (The University of Paris), 1986-1989. INSERM exchange visitor. INSERM Fellow, Paris

D. M.D. Basic Research Fellows

1. **Yael Lewis**, M.D., (Hebrew University-Hadassah Medical School), 2010
2. **Naama Orpaz**, M.D., (Hebrew University-Hadassah Medical School), 2010
3. **Tatiana Wender**, M.D., (Ben Gurion University), 2001.
4. **Adrian Katz**, M.D., (Tel Aviv University), 1989.
5. **Ari Ayalon**, M.D., (Tel Aviv University), 1988.
6. **Eduardo Schejter**, M.D., (Tel Aviv University), 1987.
7. **Gustavo Malinger**, M.D., (Tel Aviv University), 1986. Israel Fertility Association Award, 1986, *Prof., Tel-Aviv University.*
8. **Avi Matzkel**, M.D., (Tel Aviv University), 1983.
9. **Nissim Razon**, M.D., (Tel Aviv University) 1982.Bornstein Award, 1982. *Prof., Tel Aviv University*.

E. Post-Doctoral Fellows

1. **Tamara Zorbaz, PhD** (University of Zagreb, Croatia) 2020- ELSC post-doctoral fellowship
2. **Mohammed Amir Husain, PhD** (Aligarh Muslim University, Aligarh, India) 2018- 2019 PBC post-doctoral fellowship
3. **Katarzyna Winek,** MD PhD (The Charité – Universitätsmedizin Berlin) 2018- 2021, ELSC, Shimon Peres Postdoctoral Fellowship
4. **Shani Shenhar-Tsarfaty,** PhD (Tel Aviv University), 2011-2015. ELSC post-doctoral fellowship, Eshkol Post doctoral fellowship. *Tel Aviv University, Senior lecturer.*
5. **Nibha Mishra**, PhD (in Pharmacology) Birla Institute of Technology, Mesra, **2014-2016** The Edmond and Lily Safra Center for Brain Science Postdoctoral Fellowship. 2014 The PBC Postdoctoral Fellowship for Outstanding students. *Takeda Pharmaceuticals U.S.A.*
6. **Song-Hua Lee** PhD (in Biochemistry) National University of Malaysia. 2013 EMBO short term Postdoctoral Fellowship. *Paris Biotechnology staratup.*
7. **Galit Shaltiel**, PhD (in Neuroscience, Ben-Gurion University). 2007 Lady Davis Fellowship; Levi Eshkol Fellowship. *2013 Head of R&D, Amorphical Ltd., Ben Gurion University, Senior lecturer in Physiological Psychology, Department of Psychology at Achva Academic College, Israel*
8. **Iftach Shaked,** PhD (in Neuro-immunology, WIS), 2005 –Psychobiology Fellowship, 2005-2007, Lady Davis Fellowship, 2008; *Post-Doctoral Fellow, Scrips Institute, La-Jolla. Neurophysics Lab, Physics Department, UCS.*
9. **Yoram Ben-Shaul, PhD**. (in Computational Neuroscience, HUJ) 2003-2005. Interdisciplinary Center for Neural Computation Post Doctoral Fellowship 2004-2006. *Post-Doctoral Fellow, Duke Univ., St. Louis; Harvard, Boston. Associate Professor in Medical Neurobiology, The Hebrew University.*
10. **Cinthya Assuncao Guimaraes**, Ph.D. (in Neurogenetics, University Rio de Janeiro, Brazil) EMBO New World Fellowship, 2002. Lady Davis Fellowship, 2003-2004. *Staff Scientist CPQ- National Institute of Cancer (INCA), Rio de Janeiro.*
11. **Amir Dori,** MD, PhD (in Physiology, BGU), 2002-2003. Smith Psychobiology Post-doctoral Fellowship. *Segol Fellowship, Talpiot Fellowship, SHEBA Medical Center, Neurologist, Sheba Medical Center.*
12. **Cesar Flores Flores**, Ph.D. (in Biochemistry, Univ. of Murcia, Spain) 1999 – 2000. Golda Meir Fellowship (declined); Long-term FEBS Fellowship. *Researcher, The University of Murcia, Spain.*
13. **Klara Birikh**, Ph.D. (in Molecular Biology, Moscow University), 1999 – 2000. Long-Term EMBO Fellowship 1999 – 2000, ENN Travel Fellowship, 2002. 2008- *Senior Project Manager, MetGen Finland.*
14. **Christina Erb**, Ph.D. (in Pharmacology, University of Mainz), 1999-2000. Long-Term Minerva Fellowship. *Drug Company.*
15. **Ron Broide**, Ph.D. (in Neurobiology, University of CA., Irvine), 1995-1997. Valazzi - Pikovsky Fellowship. Biotechnology company.
16. **Alon Friedman**, M.D., Ph.D. (in Neurobiology, Ben Gurion University), 1996-1998. Smith Psychobiology Post-doctoral Fellowship. Foulkes Prize, 1997. Teva Prize, 1997. *Professor of Neuroscience, Ben-Gurion University and Dalhousie University, Canada.*
17. **Christian Andres**, M.D., Ph.D (in Neurochemistry, University of Strasbourg), 1993-1995. INSERM & NCRD-Israel Ministry of Science Exchange Fellowships. *Professor of Genetics, University of Tours, France.*
18. **Ellen Chaikin**, Ph.D. (in Developmental Biochemistry, Hebrew University), 1993. Golda Meir Fellowship. *Blood Bank.*
19. **Mikael Schwarz**, Ph.D. (in Botany, Hebrew University), 1992-1994. Levy Eshkol Fellowship. Biotechnology Company.
20. **Rachel Karpel**, Ph.D., (in Ecology, Hebrew University), 1991-1994. ICRF Fellowship. *Head, Ministry of Health's Unit for New Medications.President, Israel PDA Chapter.*
21. **Lewis Neville**, Ph.D. (in Neurobiology, University of Southhampton) 1989-1991. Golda Meir Fellowship. *Biotechnology Co.*
22. **Judy Lieman-Hurwitz**, Ph.D. (in Virology, Weizmann Institute) 1987-1989. Levi Eshkol Fellowship. *Lab manager, Hebrew University.*
23. **Catherine Prody**, Ph.D. (in Biochemistry, University of California, Berkeley) 1984-1988. MDA Fellow.

24. **Sherena Cedar,** Ph.D. (in Immunology, London University) 1983 - 1984. EMBO Post-Doctoral Fellowship. *Senior Lecturer South Bank University, London.*

F. MAJOR EXTRAMURAL COLLABORATIONS

1. **David A. Bennett,** Director, Alzheimer's Disease Center, Rush University Medical Center, Chicago
2. **Shlomo Berliner**, Chairman, Department of Internal Medicine, Sourasky Medical Center, Tel Aviv.
3. **Andreas Meisel**, Department of Neurology, Charité-University of Medicine, Berlin
4. **Michaela Kress**, University of Innsbruck, FP7 project on nociceptive ncRNAs, 2013-2018.
5. **Gunther Hartmann**, University of Bonn, Germany, 2011; ImmunoSensation DFG center of excellence, 2012-2017.
6. **Reinhard Luehrmann**, MPI Gottingen, Eurasnet, 2007-2011; GIF Grant, 2011-2015.
7. **The late Uwe Heinemann**, Department of Pathology, Charité-University of Medicine, Berlin.
8. **Charles J. Arntzen**, Director, Arizona Biodesign Institute, Arizona State University, Member, US President's Advisory Council on Science. DARPA grant 2001-2005
9. **Alon Friedman**, Department of Physiology, Ben-Gurion University, Beer Sheva. US Army Medical Research and Development Grant, 1999-2004. DFG grant 2010-2016.
10. **James Patrick**, Vice President and Dean of Research, Baylor Medical School, Houston, Texas. BSF Grants, 1989-1992, 1993-1996, 1997-1999, 2000-2002.
11. **Fritz Eckstein**, Max Planck Institut for Experimental Medicine, Gottingen, W. Germany. Ministry of Science grant, 1991 - 1994; GIF grant, 1994-1997; (Joels Visiting Professor November 1997 - February 1998, Hebrew University of Jerusalem; honorary PhD, Hebrew University, 2007).
12. **Gene Robinson**, Dept. of Entomology, University of Illinois, Urbana, IL, U.S.A.. Molecular Genetics approach to Honey Bee Acetylcholinesterase. Fullbright Fellow, 1996. Smith Psychobiology Fund, 1996.
13. **Israel Hanin**, Chairman, Department of Pharmacology & Experimental Therapeutics, Loyola University, Chicago. Lady Davis Fellow, 1993. Smith Psychobiology Fund, 1993.
14. **Haim Zakut**, The Sackler Faculty of Medicine, Tel Aviv University. ISF grant, 1994-1996: Ministry of Health grant, 1995-1996.
15. The late **Amiram Eldor**, Chairman, Department of Hematology, Sourasky Medical Center, Tel Aviv.

IX. COURSES TAUGHT (Past 5 years)

HEBREW UNIVERSITY:

2015- Advanced techniques in molecular neuroscience (post-graduate course, English)

2014 The Road to Successful Publications (post-graduate course, English)

2010- The Degenerating Brain: From Research to Hope, Cornerstone course for B.A. Humanities and Social Science students. (English)

2009- The Biological Basis for Neurodegenerative Diseases (The Edmond and Lily Safra center for Brain science. (post-graduate course, English)

INTERNATIONAL:

2017 Lecturer, ISN Advanced School, Varennes Jarcy, France

2013 Teacher, RNA and the Etiology of Brain Disease, Cortona, Italy

Teacher, Shanghai Summer Class Shanghai Jiao Tong University, China

X. LIST OF PUBLICATIONS

TOTAL PUBLICATIONS TRACK-RECORD
>315 publications, cited 28,619 times in international peer-reviewed journals including 3 in Nature, 4 in Nature Medicine, one each in Science, Nature Genetics, Brain, Trends in Neuroscience, Nature Reviews Neuroscience, Immunity, Evolution and Molecular Biology, Current biology, Neuron, 2 in Blood, 3 in Mol Psych, 7 in Proceedings of the National Academy of Sciences, 4 in J. Neuroscience, 2 in EMBO Molecular Medicine and 3 in EMBO J. Google Scholar H-index is 87.

BOOKS AND MONOGRAPHS

2012 Tsim, K. and Soreq, H. Eds.
Special Topic: Acetylcholinesterase: Old Questions and New Developments
Frontiers in Molecular Neuroscience

2009 Soreq, H., Kaufer, D. and Friedman, A. Eds.
STRESS: from molecules to behaviour. A comprehensive analysis of the neurobiology of stress responses'
Wiley, Mannheim, Germany

Sklan, E.H. and Soreq, H.
Cholinergic Stress and Anxiety Signals involve Alternative Splicing
VDM Publishing House Ltd., Saarbrűcken 125p.

2004 Meshorer, E. and Soreq, H.
Stressed Out Towards the Molecular Biology of Stress Responses.
The United Kibbutz Publishers, Jerusalem (Hebrew).

2004 Silman, I. Soreq, H. Fischer, A. Anglister, L. and Michaelson, D., Eds.
Cholinergic Mechanisms.
Martin Dunitz, London

1996 Seidman S. and Soreq, H.
Transgenic *Xenopus:* Microinjection Methods and Developmental Neurobiology
Humana Press, Totowa, NJ: Neuromethods vol. 28. A. Boulton and G.B. Baker, Series Eds. 225p.

1993 Soreq, H. and Zakut, H.
Human Cholinesterases and anticholinesterases.
Academic Press, San Diego 300 p.

1990 Soreq, H. and Zakut, H.
Cholinesterase genes: Multileveled regulation
Monographs in Human Genetics, Vol. 13
Karger, Basel (R.S. Sparkes, ed.) 120 p.

PEER REVIEWED RESEARCH PAPERS

1. Lobentanzer, S., Klein, J. and Soreq, H. (2020) Establishing Human Male and Female Models of Cholinergic Neurons via Neurokine-Mediated Differentiation of LA-N-2 and LA-N-5 Neuroblastoma Cells. **STAR Protoc.** 2020 Dec 4;1(3):100193. doi: 10.1016/j.xpro.2020.100193. eCollection 2020 Dec 18.
2. Dudai A, Yayon N, Soreq H & London M. (2020) Cortical VIP+ /ChAT+ interneurons: from genetics to function. **J Neurochem**. 2020 Dec 10. doi: 10.1111/jnc.15263. Published as Early View.
3. Winek, K., Lobentanzer, S., Nadorp, B., Dubnov, S., Dames, C., Moshitzky, G., Hotter, B., Meisel, C., Greenberg, D.S., Shifman, S., Klein, J., Shenhar-Tsarfaty, S., Meise S. & Soreq, H. (2020) Transfer RNA fragments replace microRNA regulators of the cholinergic post-stroke immune blockade. **Proceedings of the National Academy of Sciences of the United States of America**, 202013542. doi: 10.1073/pnas.2013542117. Online ahead of print.
4. Shenhar-Tsarfaty, S., Brzezinski, R.Y., Waiskopf, N., Finkelstein, A., Halkin, A., Berliner, S., Rogowski, O., Zeltser, D., Shapira, I., Laufer-Perl, M., Shacham, Y., Litmanowicz, B., Banai, S., Soreq, H., Arbel, Y. (2020) Blood acetylcholinesterase activity is associated with increased 10 year all-cause mortality following coronary angiography. **Atherosclerosis** 313:144-149. doi: 10.1016/j.atherosclerosis.2020.10.004
5. Meydan, C., Madrer, N. and Soreq, H. (2020) The neat dance of COVID-19: NEAT1, DANCR and co-modulated Cholinergic RNAs link to inflammation. **Frontiers in Immunology**, 11:590870. doi: 10.3389/fimmu.2020.590870. eCollection 2020.
6. Simchovitz-Gesher, A. and Soreq, H. (2020) Pharmaceutical implications of Sex-related RNA divergence in psychiatric disorders. **Trends in Pharmacological Sciences**, 41(11):840-850. doi: 10.1016/j.tips.2020.09.003. Epub 2020 Oct 2.
7. Greenberg DS, Tzur Y & Soreq H. (2020) The Use of Gapmers for In Vivo Suppression of Hepatic mRNA Targets. **Methods Mol Biol.** 2020;2176:177-184. doi: 10.1007/978-1-0716-0771-8_13.
8. Hanan, M., Simchovitz, A., Yayon, N., Vaknine, S., Cohen-Fultheim, R., Karmon, M., Madrer, N., Rohrlich, T.M., Maman, M., Bennett, E.R., Greenberg, D.S., Meshorer, E., Levanon, E.Y., Soreq, H. & Kadener, S. (2020). A Parkinson's disease CircRNAs Resource reveals a link between circSLC8A1 and oxidative stress. **EMBO Mol Med**, e11942. doi: 10.15252/emmm.201911942
9. Moshitzky, G., Shoham, S., Madrer, N., Husain, A.M., Greenberg, D.S., Yirmiya, R., Ben-Shaul, Y. & Soreq, H. (2020). Cholinergic Stress Signals Accompany MicroRNA-Associated Stereotypic Behavior and Glutamatergic Neuromodulation in the Prefrontal Cortex. **Biomolecules**, 10(6):848. doi: 10.3390/biom10060848.
10. Meydan, C., Üçeyler, N, & Soreq, H. (2020). Non-coding RNA Regulators of Diabetic Polyneuropathy. **Neurosci Lett.**, 731:135058. doi: 10.1016/j.neulet.2020.135058.
11. Madrer, N. & Soreq, H. (2020). Cholino-ncRNAs Modulate Sex-Specific- And Age-Related Acetylcholine Signals. **FEBS Lett.**, 594(14):2185-2198. doi: 10.1002/1873-3468.13789.

12. Vaknine, S. & Soreq, H. (2020). Central and peripheral anti-inflammatory effects of acetylcholinesterase inhibitors. **Neuropharmacology**, 168:108020. doi: 10.1016/j.neuropharm.2020.108020.
13. Simchovitz, A., Hanan, M., Bennett, E.R., Greenberg, D.S., Kadener, S. & Soreq, H. (2020). A lncRNA survey finds increases in neuroprotective LINC-PINT in Parkinson's disease substantia nigra. **Aging Cell**, 19(3):e13115. doi: 10.1111/acel.13115.
14. Dudai, A., Yayon, N., Lerner, V., Tasaka, G., Deitcher, Y., Niederhoffer, N., Mizrahi, A., Soreq, H. & London, M. (2020). Functional characterization of cortical ChAT/VIP interneurons and their effect on the circuit in vivo. **Plos Biology**, 18(2):e3000613. doi: 10.1371/journal.pbio.3000613.
15. Schmitz, T.W., Soreq, H., Poirier, J.,Spreng, R.N. and for the Alzheimer's Disease Neuroimaging Initiative (2020) Longitudinal basal forebrain degeneration interacts with TREM2/C3 biomarkers of inflammation in pre-symptomatic Alzheimer's disease. **Journal of Neuroscience** 8 January 2020, 1184-19. doi: https://doi.org/10.1523/JNEUROSCI.1184-19.2019
16. Lobentanzer, S., Hanin, G., Klein, J., & Soreq, H. (2019) Integrative Transcriptomics Reveals Sexually Dimorphic Control of the Cholinergic/Neurokine Interface in Schizophrenia and Bipolar Disorder. **Cell Reports** 29, 764–777. doi: https://doi.org/10.1016/j.celrep.2019.09.017.
17. Simchovitz, A., Hanan, M., Niederhoffer,N., Madrer, N., Yayon, N., Bennett, E., Greenberg, D., Kadener, S., & Soreq, H. (2019) NEAT1 is overexpressed in Parkinson's disease substantia nigra and confers drug-inducible neuroprotection from oxidative stress. **Faseb Journal**, 33, 11223-11234. doi: 10.1096/fj.201900830R.
18. Salinas J., Lin H., Aparico H.J., Huan T., Liu C., Rong, J., Beiser, A., Himali J.J., Freedman J.E., Larson M.G., Rosand, J., Soreq, H., Levy, D., & Seshadri, S. (2019) Whole blood microRNA expression associated with stroke: Results from the Framingham Heart Study. **PLOS ONE** 14(8): e0219261. https://doi.org/10.1371/journal.pone.0219261.
19. Tejera, D., Mercan, D., Sanchez-Caro, J.M., Hanan, M., Greenberg, D.S., Soreq, H., Latz, E., Golenbock, D., & Heneka, M.T. (2019) Systemic inflammation impairs microglial Aβ clearance through NLRP3 inflammasome. **EMBO J.** 2019 Sep 2;38(17): e101064. doi: 10.15252/embj.2018101064.
20. Lackie, R.E., Razzaq, A.R., Farhan, S.M.K., Qiu, L.R., Moshitzky, G., Beraldo, F.H., Lopes, M,H,, Maciejewski, A., Gros, R., Fan, J., Choy, W.Y., Greenberg, D.S., Martins, V.R., Duennwald, M.L., Lerch, J.P., Soreq, H., Prado, V.F., & Prado, M.A.M. (2019) Modulation of hippocampal neuronal resilience during aging by the Hsp70/Hsp90 co-chaperone STI1. **J Neurochem.** doi: 10.1111/jnc.14882. [Epub ahead of print]
21. Raber, J., Arzy, S., Boulanger-Bertolus, J., Depue, B., Haas, H.E., Hofmann, S.G., Kangas, M., Kensinger, E., LeDoux, J., Lowry, C.A., Marusak, H.A., Minnier, J., Mouly, A., Muehlberger, A., Norrholm, S.D., Peltonen, K., Pinna, G., Rabinak, C., Shiban, Y., Soreq, H., van der Kooij, M., Weingast, L.T., Yamashita, P. & Boutros, S.W. (2019) Current understanding of fear learning and memory in humans and animal models and the value of a linguistic approach for analyzing fear learning and memory in humans. **Neuroscience and Biobehavioral Reviews** 105 (2019) 136–177. https://doi.org/10.1016/j.neubiorev.2019.03.015
22. Soreq H (2019) Fear, Fat, and Genes: New Answers to Old Questions. **Front. Young Minds** 6:76. doi: 10.3389/frym.2018.00076.
23. Kalozoumi, G., Kel-Margoulis, O., Vafiadaki, E., Greenberg, D.S., Bernard, H., Soreq, H., Depaulis, A. & Sanoudou, D. (2018) Glial responses during epileptogenesis highlights promising new therapeutic targets. **PLOS ONE:** 16;13(8):e0201742. doi: 10.1371/journal.pone.0201742. eCollection 2018.
24. Shaheen, M., Schindler, L., Saar-Ashkenazy, R., Odeh, K.B., Soreq, H., Friedman, A. & Kirschbaum, C. (2018) Victims of War – Psychoendocrine Evidence for the Impact of Traumatic Stress on Psychological Well-Being of Adolescents Growing Up during the Israeli-Palestinian Conflict. **Psychophysiology** e13271. https://doi.org/10.1111/psyp.13271.
25. Meydan, C., Bekenstein, B. & Soreq, H. (2018) Molecular Regulatory Pathways Link Sepsis With Metabolic Syndrome: Non-coding RNA Elements Underlying the Sepsis/Metabolic Cross-Talk. **Front. Mol. Neurosci.** 11:189. doi: 10.3389/fnmol.2018.00189.
26. Yayon, N., Dudai, A., Vrieler, N., Amsalem, O., London, L. & Soreq, H. (2018) Intensify3D: Normalizing signal intensity in large heterogenic image stacks. **Scientific Reports** 8:4311. doi:10.1038/s41598-018-22489-1.
27. Deshaies, JE., Shkreta, L., Moszczynski, A.J., Sidibe´, H., Semmler, S., Fouillen, A., Bennett, E.R., Bekenstein, U., Destroismaisons, L., Toutant, J., Delmotte, Q., Volkening, K., Stabile, S., Aulas, A., Khalfallah, Y., Soreq, H., Nanci, A., Strong, M.J., Chabot, B. & Vande Velde, C. (2018) TDP-43 regulates the alternative splicing of hnRNP A1 to yield an aggregation-prone variant in amyotrophic lateral sclerosis. **Brain**: 141; 1320–1333
28. Haviv, R., Oz, E. & Soreq, H. (2018) The Stress-Responding miR-132-3p Shows Evolutionarily Conserved Pathway Interactions. **Cell Mol Neurobiol** 38: 141-153. https://doi.org/10.1007/s10571-017-0515-z
29. Tafazzoli, A., Forstner, A. J., Broadley, D., Hofmann, Silke Redler, A., Petukhova, L., Giehl, K.A., Kruse, R., Blaumeiser, B., Böhm, M., Bertolini, M., Bartels, N.G., Lutz, G., Wolff, H., Blume-Peytavi, U., Soreq, H., Christiano, A.M., Botchkareva, N.V., Nöthen, M.M., Betz, R.C. (2017) Genome-wide microRNA analysis implicates *miR-30b/d* in the etiology of alopecia areata· **Journal of investigative dermatology,** 138(3) 549-556.
30. Barbash, S., Garfinkel, B. Maoz, R., Simchovitz, A., Nadorp, B., Guffanti, A., Greenberg, D.S., Bennett E.R., Seitz, A., Nadeau, C., Türk, A., Paul, L., Reda, T., Buchman, A.S., Bennett, D.A. and Soreq, H. (2017) Alzheimer's brains show inter-related changes in RNA and lipid metabolism. **Neurobiology of disease**, Jun 17;106:1-13. doi: 10.1016/j.nbd.2017.06.008. [Epub ahead of print].
31. Barbash, S., Simchovitz, A., Buchman, A.S., Bennett, D.A., Shifman, S. and Soreq, H. (2017) Neuronal-expressed MicroRNA-targeted Pseudogenes Compete with Coding Genes in the Human Brain. **Translational psychiatry**, 7(8):e1199. doi: 10.1038/tp.2017.163.
32. Bekenstein, U.*, Mishra, N.*, Millikovsky, D., Hanin, G., Zelig, D., Sheintuch, L., Berson, A., Greenberg, D.S., Friedman, A. and Soreq, H. (2017) Dynamic changes in murine forebrain miR-211 expression associate with cholinergic imbalances and epileptiform activity. **Proceedings of the National Academy of Sciences**, 114(25):E4996-E5005..
33. Hanin, G., Yayon, N., Tzur, Y., Haviv, R., Bennett, E.R., Krishnamoorthy, Y.R., Kotsiliti, E., Zangen, R., Tam, Y., Udi, S., Efron, B., Shteyer, E., Pappo, O.,Pikarsky, E., Heikenwalder, M., Greenberg, D.S., and Soreq H. (2018) miRNA-132 induces hepatic steatosis and hyperlipidemia by synergistic multi-target suppression. **Gut,** 67:1124–1134. doi:10.1136/gutjnl-2016-312869.
34. Simchovitz, A., Heneka, M. and Soreq, H. (2017) Personalized genetics of the cholinergic blockade of neuro-inflammation. **Jounal of neurochemistry,** 142 Suppl 2:178-187.

35. Pienica, C. and Soreq, H. (2016) MicroRNA regulators of cholinergic signaling link neuromuscular cardiac and metabolic systems. **Periodicum Biologorum**, Vol 118, No 4, 77-83.
36. Mishra, N., Friedson, L., Hanin, G., Bekenstein, U., Geula Hanin, Volovich, M., Bennett, E.R., Greenberg, D.S. and Soreq,H. (2017) Antisense miR-132 blockade via the AChE-R splice variant avoids cortical inflammation. **Scientific reports**, 7, 42755 13 pp.
37. Lasser-Katz, E., Simchovitz, A., Chiu, W.-H., Oertel, W.H.k, Sharon, R., Soreq, H., Roeper J. and Goldberg J.A. (2016) Mutant α-Synuclein overexpression induces stressless pacemaking in vagal motoneurons at risk in Parkinson's disease. **Journal of neuroscience,** 37,47-57 DOI: http://dx.doi.org/10.1523/JNEUROSCI.1079-16.2016
38. Dotan, I., Levy-Nissenbaum, E., Chowers, Y., Fich A., Israeli, E., Adar, T., Shteingart, S., Soreq, H. and Goldin, E. (2016) Ameliorating active ulcerative colitis via an orally available toll-like receptor-9 modulator (BL-7040): A prospective open-label, multi-center phase II trial. **Digestive Diseases and Sciences**, 61, 3246-3254
39. Garfinkel, B.P., Arad, S.; Neuner, S., Netser, S., Wagner, S., Kaczorowski, C.C., Rosen, C.J., Gal, M., Soreq, H. and Orly, J. (2016) HP1BP3 expression determines maternal behavior and offspring survival. **Genes Brain and Behavior,** 15, 678-688.
40. Pinho, R., Guedes, L.C., Soreq, L, Lobo, P.P., Mestre, T. Coelho, M. Rosa, M.M., Gonçalves, N., Wales, P., Mendes, T., Gerhardt, E., Fahlbusch, C., Bonifati, V., Bonin, M., Miltenberger-Miltényi, G., Borovecki, F., Soreq, H., Ferreira, J.J. and F. Outeiro, T. (2016) Gene expression differences in peripheral blood of Parkinson's disease patients with distinct progression profiles. **PLoS ONE** 11, 1 9pp. e0157852. doi:10.1371/journal. pone.0157852
41. Waiskopf, N., Ben Shahar, Y., Galchenko, M., Carmel, I., Moshitsky, G., Soreq, H.* and Banin, U.* (2016) Photocatalytic reactive oxygen species formation by semiconductor-metal hybrid nanoparticles: towards light-induced modulation of biological processes. **Nano letters**, 16, 4266-4273.
42. Kolisnyk, B., Al-Onaizi, M., Soreq, L., Barbash, S., Bekenstein, U., Haberman, N., Hanin, G., Kish, M. T., da Silva, J. S., Fahnestock, M., Ule, J., Soreq, H., Vania F. Prado, V. F., Prado, M. A. M. (2016) Cholinergic surveillance over hippocampal RNA metabolism and Alzheimer's-like pathology. **Cerebral cortex**, 27, 3553–3567.
43. Shenhar-Tsarfaty, S., Shapira, I., Toker, S., Rogowski, O., Berliner, S., Ritov, Y. and Soreq, H. (2016) Weakened Cholinergic Blockade of Inflammation Associates with Diabetes-Related Depression. **Molecular medicine**, 22, 156-161.
44. Kolisnyk, B., Al-Onaizi, M. A., Xu, J., Parfitt, G., Ostapchenko, V., Hanin, G., Soreq, H. Prado, M. A. M. and Prado V. F. Cholinergic Regulation of hnRNPA2/B1 Translation by M1 Muscarinic Receptors. **Journal of neuroscience**, 36, 6287-6296.
45. Lin, T.*, Simchovitz, A.*, Shenhar-Tsarfaty, S.*, Admon R., Vaisvaser S., Kessler, E., Hanin G, Hanan, M., Shomron, N., Fernandez, G., Fruchter E., Hendler T. and Soreq H. (2016) Intensified vmPFC surveillance over PTSS under perturbed microRNA-608/AChE interaction. **Translational psychiatry**, 6:e801, 8pp.
46. Lykhmus, O., Mishra, N., Koval, L.M., Kalashnyk, O.M., Gergalova, G.L., Uspenska, K.R., Komisarenko, S.V., Soreq, H., and Skok, M.V. (2016) Molecular Mechanisms Regulating LPS-Induced Inflammation in the Brain. **Frontiers in molecular neuroscience** http://dx.doi.org/10.3389/fnmol.2016.00019.
47. Cooper, G., Lasser-Katz, E., Simchovitz, A., Sharon, R., Soreq, H., Surmeier, J. D. and Goldberg, J. A. (2015) Functional segregation of voltage-activated calcium channels in motoneurons of the dorsal motor nucleus of the vagus. **Journal of neurophysiology**, 114,1513-1520.
48. Atsmon, J., Brill-Almon, E., Nadri-Shay, C., Chertkoff, R., Shaikevich, D., Volokhov, I., Haim, K. Y., Bartfeld, D., Shulman, A., Ruderfer, I., Ben-Moshe, T., Shilovitzky, O., Soreq, H. and Shaaltiel, Y. (2015). Preclinical and first-in-human evaluation of PRX-105, a PEGylated, plant-derived, recombinant human acetylcholinesterase-R. **Toxicology and applied pharmacology,** 287, 202-209.
49. Nadorp, B. and Soreq H. (2015) Gut feeling: MicroRNA discriminators of the intestinal TLR9-cholinergic links. **International immunopharmacology**, 29, 8-14. doi: 10.1016/j.intimp.2015.04.058.
50. Blohberger, J., Kunz, L., Einwang, D., Berg, U., Berg, D., Ojeda, S. R., Dissen, G., Fröhlich, T., Arnold, G., Soreq, H., Lara, H. and Mayerhofer. A. (2015) Readthrough acetylcholinesterase (AChE-R) and regulated necrosis: Pharmacological targets for the regulation of ovarian functions? **Cell death and disease**, 6, e1685 10 pp. doi: 10.1038/cddis.2015.51.
51. Shenhar-Tsarfaty, S., Yayon, N., Waiskopf, N., Shapira, I., Toker, S., Zaltser, D., Berliner S., Ritov, Y. and Soreq, H. (2015) Fear and C-reactive protein cosynergize annual pulse increases in healthy adults **Proceedings of the National Academy of Sciences of the United States of America**, 112, E467–E471. pii: 201418264. Highlighted in (1) Wood, J. (Dec.28, 2014) Fear of Terrorism Can Up Heart Rate, Risk of Death. **PsychCentral** http://psychcentral.com/news/2014/12/28/fear-of-terrorism-increases-risk-of-death/79157.html. (2) Tsalik, E. L. (Jan. 14, 2015) Fear as a Cardiovascular Risk Factor. 7, 270, pp. 270ec9 14 Jan 2015 **Science Translational Medicine** *Editors' Choice Cardiology*. http://stm.sciencemag.org/content/7/270/270ec9. (3) von Käne, R. Fear of terror and inflammation ignite heart health decline. **Proceedings of the National Academy of Science U S A.** *Commentary*. 112, 1248–1249. (4) **Research gate.** (Nov. 18, 2015). Fear of terrorism increases the risk of natural death. https://www.researchgate.net/blog/post/fear-of-terrorism-increases-risk-of-natural-death. (5) Blakemore, E. (December 4, 2015) Could fear of terrorism be deadlier than terrorism itself? A neuroscientist weighs in. In *Speaking of Science.* **The Washington Post**. https://www.washingtonpost.com/news/speaking-of-science/wp/2015/12/04/could-fear-of-terrorism-be-deadlier-than-terrorism-itself-a-neuroscientist-weighs-in/. (6) Dahl, M. (December 16, 2015) The Fear of Terrorism Is Dangerous on a Biological Level. Science of us. **New York Magazine** http://nymag.com/scienceofus/2015/12/fear-of-terror-can-lead-to-biological-harm.html.
52. Soreq, L., Salomonis, N., Guffanti, A., Bergman, H., Israel, Z. and Soreq, H. (2015) Whole transcriptome RNA sequencing data from blood leukocytes derived from Parkinson's disease patients prior to and following deep brain stimulation treatment **Genomics data**, 3, 57-60.
53. Hanin, G., Shenhar-Tsarfaty, S., Yayon, N., Hoe, Y.Y., Bennett, E.R., Sklan, E., Rao, D.C., Rankinen, T., Bouchard, C., Geifman-Shochat, S., Shifman, S, Greenberg, D.S. and Soreq, H. (2014) "Competing Targets of microRNA-608 Modulate the Risks of Anxiety and Hypertension". **Human molecular genetics,** 23, 4569-4580.
54. Shenhar-Tsarfaty, S., Berliner, S., Bornshtein, N. and Soreq, H. Cholinesterases as biomarkers for parasympathetic dysfunction and inflammation-related disease. **Journal of molecular neuroscience** (Cholinergic issue), 53, 298-305.

55. Waiskopf, N., Ofek, K., Gilboa-Geffen, A., Bekenstein, U., Bahat, A., Bennett, E. R., Podoly, E., Livnah, O., Hartmann, G. and Soreq, H (2013) AChE and RACK1 promote the anti-inflammatory properties of Fluoxetine. **Journal of molecular neuroscience** (Cholinergic Issue), 53, 306-315.
56. Barbash, S. Shifman, S. and Soreq, H. (2014) Global co-evolution of human microRNAs and their target genes. **Molecular biology and evolution**, 31, 1237-1247 /molbev/msu090.
57. Nadorp, B. and Soreq, H. (2014) Predicted overlapping microRNA regulators of acetylcholine packaging and degradation in neuroinflammation-related disorders. **Frontiers molecular neuroscience**, 7:9. doi: 10.3389/fnmol.2014.00009.
58. Guffanti, A., Simchovitz, A., Soreq, H. (2014) Emerging bioinformatics approaches for analysis of NGS-derived coding and non-coding RNAs in neurodegenerative diseases. **Frontiers in Cellular Neuroscience**, 8:89, 9pp. doi: 10.3389/fncel.2014.00089.
59. Arbel, Y., Shenhar-Tsarfaty, S., Waiskopf, N., Finkelstein, A., Halkin, A., Revivo, M., Berliner, S., Herz, I., Shapira, I., Keren, G. Soreq, H. and Banai, S. (2014) Decline in Serum Cholinesterase Activities Predicts 2 Year Major Adverse Cardiac Events. **Molecular Medicine**, 20, 38-45. doi: 10.2119/molmed.2013.00139.
60. Soreq, L., Guffanti, A., Salomonis, N., Simchovitz, A., Israel, Z., Bergman, H. and Soreq, H. (2014). Long Non-Coding RNA and Alternative Splicing modulations in Parkinson's Leukocytes Identified by RNA Sequencing. **Plos computational biology,** 10(3):e1003517. doi: 10.1371/journal.pcbi.1003517.
61. Goll, Y., Beckenstein, U., Barbash, S., Greenberg, D., Zangen, R., Shoham, S. and Soreq, H. (2014). Sustained Alzheimer's pathology in MyD88-deficient APPswe/PS1 mice. **Neurodegenerative diseases** 13, 58-60.
62. Kolisnyk, B., Al-Onaizi, M. A., Hirata, P. H. F., Guzman, M. S., Nikolava, S., Barbash, S., Soreq, H. Bartha, R., Prado, M. A. M. and Prado V. F. (2013) Forebrain Deletion of the Vesicular Acetylcholine Transporter Results in Deficits in Executive Function and Metabolic Abnormalities in the Prefrontal Cortex. **Journal of Neuroscience** 33, 14908-14920.
63. Lau, P., Bossers, K., Salta, E., Sala Frigerio, C., Janky, R., Barbash, S., Rothman, R., Sierksma, A., Thathiah, A., Greenberg, D.S., Papadopoulou, A.S., Achsel, T., Ayoubi, T., Aerts, S., Soreq, H., Verhaagen, J., Swaab, D.F. and De Strooper, B. (2013) Alteration of the microRNA network during the progression of Alzheimer's disease. **EMBO molecular medicine**, 5, 1613-1634.
64. Soreq, L., Bergman, H., Israel, Z. and Soreq, H. (2013) Deep Brain Stimulation Modulates Nonsense-Mediated RNA Decay in Parkinson's Leukocytes. **BMC Genomics** 14, 478. DOI: 10.1186/1471-2164-14-478.
65. Barbash, S., Hanin, G. and Soreq, H. (2013) Stereotactic injection of microRNA-expressing lentiviruses to the mouse hippocampus CA1 region and assessment of the behavioral outcome. **Journal of visualized experiments** 76, e50170, doi:10.3791/50170.
66. Maharshak, N., Shenhar-Tsarfaty, S., Aroyo, N., Orpaz, N., Guberman, I., Canaani, J., Halpern, Z., Dotan, I., Berliner, S. and Hermona Soreq, H. (2013) MicroRNA-132 Modulates Cholinergic Signaling and Inflammation in Human Inflammatory Bowel Disease. **Journal of Inflammatory Bowel Disease** 19, 1346-1353.
67. Bekenstein, U. and Soreq, H. (2013) Heterogeneous nuclear ribonucleoprotein A1 in health and neurodegenerative disease: From structural insights to post-transcriptional regulatory roles. **Molecular and cellular neurosciences** 56, 436-446.
68. Shenhar-Tsarfaty, S., Waiskopf, N., Ofek, K. Shopin, L., Usher, S., Berliner, S., Shapira, I., Bornstein N.M., Ritov, Y., Soreq, H. and Ben-Assayag, E. (2013) Atherosclerosis and arteriosclerosis parameters in stroke patients associate with Paraoxonase polymorphism and esterase activities. **European journal of neurology** 20, 891-898.
69. Soreq, L., Salomonis, N., Bronstein, M., Greenberg, D.S., Israel, Z. Bergman, H. and Soreq, H. (2013) Small RNA sequencing-microarray analyses in Parkinson leukocytes reveal deep brain stimulation induced splicing changes that classify brain region transcriptomes. **Frontiers in molecular neuroscience** 6, article 10, 20 pp.
70. Waiskopf, N., Rotem , R., Shweky, I., Yedidya, L., Soreq, H. and Banin, U. (2013) Labeling acetyl- and butyrylcholinesterase using semiconductor nanoparticles for biological applications. **Bionanoscience** 3, 1-11.
71. Ofek, K. and Soreq, H. (2013) Cholinergic involvement and manipulation approaches in multiple system disorders. **Chemico-biological interactions** 203, 113-119.
72. Barbash, S and Soreq, H. (2013) Statistically invalid classification of high throughput gene expression data. **Scientific reports** 3, 1102 (DOI:10.1038/srep01102 (2013)).
73. Alkalay, A, Rabinovici, G.D., Zimmerman, G., Agarwal, N., Kaufer, D., Miller, B.L., Jagust, W.J. and Soreq, H. (2013) Plasma acetylcholinesterase activity correlates with intracerebral β-amyloid load. **Current Alzheimer research** 10, 48-56. Featured in World Biomedical Frontiers http://biomedfrontiers.org/alzheimer-2013-july-1/.
74. Sailaja BS, Cohen-Carmon D, Zimmerman G, Soreq H and Meshorer E. (2012). Stress-induced epigenetic transcriptional memory of acetylcholinesterase by HDAC4. **Proceedings of the National Academy of Sciences of the United States of America**, 109, E3687-E3695. doi: 10.1073/pnas.1209990110.
75. Sussman, J.D, .Argov, Z., Wirguin, Y., Apolski, S., Milic-Rasic, V. and Soreq, H. (2012) Further developments with Antisense Treatment for Myasthenia Gravis. **Annals of the New York Academy of Science**, 1275, 13-16.
76. Shaltiel G., Hanan, M., Wolf, Y., Barbash, S., Kovalev E., Shoham S. and Soreq H. (2013) Hippocampal microRNA-132 mediates stress-inducible cognitive deficits through its acetylcholinesterase target. **Brain Structure & Function** 218, 59-72.
77. Kim, S.-Y., Buckwalter, M., Kaufer, D., Soreq, H. and Vezzani, A. (2012) Mechanisms underlying blood-brain barrier dysfunction in brain pathology and epileptogenesis (I) – Inflammatory control. **Epilepsia** Special Issue: *Blood-Brain Barrier and Epilepsia* 53 Suppl 6, 37-44.
78. Ofek, K., Schofknecht, K., Melamed-Book, Heinemann, U., Friedman, A. and Soreq, H. (2012). Fluoxetine Induces Vasodilation of Cerebral Arterioles by Co-modulating NO/muscarinic Signaling. **Journal of cellular and molecular medicine** 16, 2736–2744.
79. Berson, A., Barbash, S. Shaltiel, G., Goll, Y., Hanin, G., Greenberg, D. S., Ketzef, M., Becker, A. J., Friedman A. and Hermona Soreq. (2012). Cholinergic-associated loss of hnRNP-A/B in Alzheimer's disease impairs cortical splicing and cognitive function in mice. **EMBO Molecular Medicine** 4, 730-742.

80. Soreq, L., Greenberg, D.S., Bergman, H., Israel, Z. and Soreq, H. (2012) Exon arrays reveal alternative splicing aberrations in Parkinson's disease leukocytes. **Neurodegenerative Disease** 10, 203-206.
81. Soreq, L., Israel, Z., Greenberg, D.S., Bergman, H. and Soreq, H. (2012) Deep Brain Stimulation induces rapidly reversible transcript changes in Parkinson's leukocytes. **Journal of cellular and molecular medicine** 16, 1496-1507.
82. Gnatek, Y., Zimmerman, G., Goll, Y., Najami, N., Soreq, H. and Friedman, A. (2012) Acetylcholinesterase loosens the brain's cholinergic anti-inflammatory response and promotes epileptogenesis. **Frontiers in molecular neuroscience** 5, Article 66, 10 pp.
83. Gilboa-Geffen A. Hartmann, G., and Soreq, H. (2012) Stressing hematopoiesis and immunity: Nervous and immune system interactions. **Frontiers in molecular neuroscience** 5, Article 30, 10 pp.
84. Ben Assayag, E., Korczyn, AD., Giladi, N., Goldbourt, U., Berliner, AS., Shenhar-Tsarfaty, S., Kliper, E., Hallevi, H., Shopin, L., Gur, A,. Hendler, T., Ben Baashat, D., Eisenstein, O., Soreq, H., Katz, N., Solomon, Z., Mike1, A., Usher, S,. Hausdorff, JM. and Bornstein, NM. (2012) Predictors for Post-stroke outcomes: the TABASCO (Tel Aviv Brain Acute Stroke). **International journal of stroke** 7, 341-347.
85. Barbash S, Soreq H. (2012) Threshold-independent meta-analysis of Alzheimer`s disease transcriptomes shows progressive changes in hippocampal functions, epigenetics and microRNA regulation. **Current Alzheimer research** 9, 425-435.
86. Zimmerman, G., Shaltiel, G., Barabash, S., Cohen, J., Gasho, C., Shenhar, S. Shalev, H., Berliner, S., Shelef, I., Shoham, S., Friedman, A., Cohen, H. and Soreq, H. (2012) Post-traumatic anxiety associates with failure of the innate immune receptor TLR9 to block the pro-inflammatory NFkB pathway. **Translational Psychiatry** 2, e78.
87. BenMoyal-Segal, L., Soreq, L., Ben-Shaul, Y., Ben-Ari, S., Ben-Moshe, T., Aviel, S., Bergman, H. and Soreq, H. (2012) Adaptive alternative splicing correlates with less environmental risk of Parkinsonism. **Neurodegenerative Disease** 9, 87-98.
88. Geyer, B.C., Ben-Ari, S., Barbash, S., Delisle, J. M. P., Mor, T. S. and Soreq, H. (2012) Nicotinic stimulation induces Tristetraprolin over-production and attenuates inflammation in muscle. **Biochimica et biophysica acta** 1823, 368-378.
89. Soreq, L., Ben-Shaul, Y., Israel, Z., Bergman, H. and Soreq, H. (2012) Meta-analysis of genetic and environmental Parkinson's disease models reveals a common role of mitochondrial protection pathways, **Neurobiology of disease** 45, 1018-1030.
90. Ofek, K., Hanin, G., Gilboa-Geffen, A., Berson, A., Goll, Y., Greenberg, D. S., Soreq, H. and Wilton, S. (2011) Prophylactic oligonucleotide-mediated enhancement of host acetylcholinesterase protects from organophosphate poisoning. Conference: **Defense Science Research Conference and Expo - DSR** , 2011DOI: 10.1109/DSR.2011.6026854 Cumulative Annual.
91. Hanin, G. and Soreq, H. (2011) Cholinesterase targeting microRNAs affect specific biological processes**. Front. Mol. Neurosci**., 4, 28.
92. Shenhar, S., Ben-Assayag, E., Berliner, S., Bornstein, N. and Soreq, H. (2011) Letter Regarding the Article, "Autonomic Shift and Increased Susceptibility to Infections After Acute Intracerebral Hemorrhage. **Stroke** 42, E559-E559.
93. Gilboa-Geffen A., Wolf, Y., Hanin G., Melamed-Book, N., Pick, M., Bennett, E.R., Greenberg, D.S., Lester, S., Rischmueller, M. and Soreq, H. (2011) Activation of the alternative NFκB pathway improves disease symptoms in a model of Sjogren's syndrome. **PLoS One** 6,:e28727.
94. Berg, R. M. G.,Ofek, K., Qvist, T., Tofteng, F., Soreq, H., Møller, K. (2011) Cholinesterase Modulations in Patients with Acute Bacterial Meningitis. Letter to the Editor, **Scandinavian Journal of Clinical and Laboratory Investigation** 71, 350-352.
95. Waiskopf, N., Shweky, I., Lieberman, I., Banin, U. and Soreq, H. (2011) Quantum Dot Labeling of Butyrylcholinesterase Maintains Substrate and Inhibitor Interactions and Cell Adherence Features. **ACS Chemical Neuroscience**, 2, 141-150.
96. Shenhar-Tsarfaty, S., Bruck, T., Bennett, E.R., Bravman, T., Ben- Assayag, E., Waiskopf, N., Rogowski, O., Bornstein, N., Berliner S. and Soreq, .H. (2011). Butyrylcholinesterase interactions with amylin may protect pancreatic cells in metabolic syndrome. **Journal of cellular and molecular medicine** 15, 1747-56
97. Canaani, J. Shenhar-Tsarfaty, S., Waiskopf, N., Yakobi, R., Arbel, Y., Viskin, S., Soreq, H. and Berliner, S. (2010) Serum AChE Activities Predict Exercise Heart Rate Parameters of Asymptomatic Individuals. **Neuroscience and Medicine** 1, 43-49.
98. Geyer, B.C., Kannan, L., Garnaud, P.E., Broomfield, C.A., Cadieux, C.L., Cherni, I., Hodgins, S.M., Kasten, SA, Kelley, K., Kilbourne, J., Oliver, Z.P., Otto, T.C., Puffenberger, I., Reeves, T.E., Robbins, N. 2nd, Woods, R.R., Soreq, H., Lenz, D.E., Cerasoli, D.M. and Mor, T.S. (2010) Plant-derived human butyrylcholinesterase, but not an organophosphorous-compound hydrolyzing variant thereof, protects rodents against nerve agents. **Proceedings of the National Academy of Sciences of the United States of America**. 107, 20251-20256.
99. Toiber, D., Mendoza, G.A., Ben-Ari, S., Torán, N. Soreq, H. and Dierssen, M. (2010) Engineering DYRK1A over-dosage yields Down Syndrome-characteristic cortical splicing aberrations. **Neurobiology of Disease** 40, 348-359.
100. Ben Assayag,, E., Shenhar-Tsarfaty, S.,, Ofek, K., Soreq, L., Bova, I., Shopin, L., Berg, R., Berliner, S., Shapira, I., Bornstein, N. M. and Soreq, H. (2010). Serum cholinesterase activities distinguish between stroke patients and controls and predict 12 month mortality. **Molecular Medicine** 16:278-286.
101. Hucho, F. Soreq, H. Eds Amyloid Diseases. Virtual Issue of the **FEBS Journal** (FJ) Volume 277 January 2010 | ISSN 1742-464X.
102. Podoly, E. Hanin, G. and Soreq, H. (2010) Alanine to Threonine substitutions and amyloid diseases: Butyrylcholinesterase as a case study. **Chemico-Biological Interactions**, 187, 64-71.
103. Sifringer, M., Brait, D., Weichelt, U., Zimmerman, G., Endesfelder, S., Brehmer, F., von Haefen, C., Friedman, A., Soreq H, Bendix, I., Gerstner, B. and Felderhoff-Mueser, U. (2010). Erythropoietin attenuates hyperoxia-induced oxidative stress in the developing rat brain. **Brain, Behavior, and Immunity** 24, 792-799.
104. Greenberg, D., Toiber, D., Berson, A and Soreq, H. (2010). Acetylcholinesterase variants in Alzheimer's Disease: From Neuroprotection to Programmed Cell Death. ADPD (symposium proceedings) **Neurodegenerative Disease** 7, 60-63.
105. Meerson, A., Cacheaux, L., Goosens, K. Sapolsky, R., Soreq, H. and Kaufer, D. (2010). Changes in Brain MicroRNAs Contribute to Cholinergic Stress Reactions. **Journal of molecular neuroscience** (symposium proceedings) 40, 47-55.
106. Gilboa-Geffen, A., Berrih-Aknin, S. and Soreq, H. (2010). A bimodal role for AChE in regulating lymphocytic proliferation. **Journal of Molecular Neurosicence** (symposium proceedings) 40, 240-245.

107. Shaked, I., Meerson, A., Wolf, Y., Avni, R., Greenberg, D. S., Gilboa-Geffen, A. and Soreq, H. (2009). MicroRNA-132 Potentiates Cholinergic Anti-Inflammatory Signaling by Targeting Acetylcholinesterase **Immunity** 31; 965-973 cover. Accompanied by Preview O'Neil, L.A. (2009) Boosting the Brain's Ability to Block Inflammation via MicroRNA-132 **Immunity** 31; 854-855.
108. Toiber, D., Greenberg, D. and Soreq H. (2009). Pro-apoptotoic protein-protein interactions of the extended N-AChE terminus. **Journal of neural transmission** 116, 1435-1442.
109. Podoly, E., Shalev, D., Shenhar-Tsarfaty, S., Bennett, E., Ben-Assayag, E., Wilgus, H., Livnah, O. and Soreq, H.. (2009) The butyrylcholinesterase K variant confers structurally-derived risks for Alzheimer's pathology {diamondsuit}. **The Journal of biological chemistry** 284, 17170-17179. (June 2009 Article of the Week). F1000 Factor 6.0 http://www.f1000biology.com/article/id/
110. Heinrich, B., Zhang, Z., Raitskin, O., Hiller, M., Benderska, N., Hartmann, A.M., Bracco, L., Ben-Ari, S., Soreq, H., Sperling, J., Sperling, R. and Stamm, S. (2009) HnRNP G regulates splice site selection by binding to CC(A/C)-rich regions in pre-mRNA. **The Journal of biological chemistry** 284, 14303-15.
111. Karni, S., Soreq, H. and Sharan, R. (2009) A Protein - Protein Interaction - Based Method for Profiling Disease – Causing Alterations in the Pathway of Gene Expression. **Journal of computational biology** 16, 181-189.
112. Salas, R., Main, A., Gangitano, D.A., Zimmerman, G., Ben-Ari, S., Soreq, H and De Biasi, M (2008) Nicotine relieves anxiogenic-like behavior in Acetylcholinesterase-R overexpressing mice but not in wild-type mice. **Molecular pharmacology**, 74, 1641-8.
113. Toiber, D., Berson, A., Greenberg, D., Melamed-Book, N., Diamant, S. and Soreq, H. (2008) N-Acetylcholinesterase-induced apoptosis in Alzheimer's disease. **PLoS ONE**, 3 (9):e3108.
114. Soreq, L.T., Israel, Z., Bergman, H. and Soreq, H. (2008) Advanced Microarray Analysis highlights modified neuro-immune signaling in nucleated blood cells from Parkinson's disease patients. **Journal of Neuroimmunology** *Special Issue in honour of John Newsom-Davis* 201-202, 227-36.
115. Mor, I., Bruck, T., Greenberg, D., Berson, A. Grisaru, D. and Soreq, H. (2008). Alternate AChE-R variants facilitate cellular metabolic activity and resistance to genotoxic stress through enolase and RACK1 interactions. **Chemico-Biological Interactions** 175, 11-21.
116. Soreq, L., Gilboa-Geffen, A., Berrih-Aknin, S., Lacoste, P., Darvasi, A., Soreq, E., Bergman, H. and Soreq, H. (2008) Identifying Alternative Hyper-Splicing Signatures in MG-Thymoma by Exon Arrays. **Molecular pharmacology**. 3, (6):e2392.
117. Adamec R, Head D, Soreq H, Blundell J. (2008) The Role of the Read Through Variant of Acetylcholinesterase in Anxiogenic Effects of Predator Stress in Mice. **Behavioural brain research** 189, 180-190.
118. Zimmerman, G., Ivens, S., Behrens, C., Toner, E., Njunting, M., Gross, M., Soreq, H., Heinemann, U. and Alon Friedman, A. (2008) Acetylcholine-induced seizure-like activity and modified cholinergic gene expression in chronically epileptic rats. **European journal of neuroscience** 27, 965-975
119. Mor, I., Sklan, E.H., Podoly, E., Pick, M., Kirschner, M., Yogev, L., Bar-Sheshet Itach, S., Diamant, S., Schreiber, L., Mor, T., Grisaru, D. and Soreq, H. (2008). Acetylcholinesterase-R increases germ cell apoptosis but enhances sperm motility. **Journal of Cellular and Molecular Medicine** 12, 479-495. (Cover Illustration)
120. Sussman, J.D., Argov, Z., McKee, D., Hazum, E., Brawer, S. and Soreq, H.. (2008) Antisense Treatment for Myasthenia Gravis: Experience with Monarsen **Annals of the New York Academy of Sciences** 1132, 283-90.
121. Podoly, E., Bruck, T., Diamant, S., Melamed-Book, N., Weiss,, A., Huang, Y., Livnah, O., Langermann S., Wilgus, H. and Soreq H. (2008) Human Recombinant Butyrylcholinesterase Purified From the Milk of Transgenic Goats Suppresses Amyloid Beta Fibrils Formation in Vitro. **Neurodegenerative Disease** 5, 232-236..
122. Berson, A., Knobloch, M., Diamant, S., Sharoni, M., Schuppli, D., Geyer, B., Ravid, R., Mor, T., Nitsch, R. and Soreq, H. (2008). Changes in Readthrough Acetylcholinesterase Expression Modulate Amyloid-Beta Pathology. **Brain** 131, 109-119.
123. Cohen J. E., Zimmerman G., Friedman A., Dori A. and Soreq H. (2008) Transgenic inactivation of Acetylcholinesterase impairs homeostasis in mouse hippocampal granule cells. **Hippocampus** 8, 182-192.
124. Shapira-Lichter, I., Beilin, B., Ofek, K., Bessler, H., Ballas, M., Shavit, Y., Seror, D. Grinevich, G., Posner, E. Soreq, H. and Yirmiya, R. (2008). Cytokines and cholinergic signals co-modulate surgery stress-induced changes in mood and memory. **Brain, Behavior and Immunity** 22, 388-398.
125. Ofek, K,. Krabbe, K.S., Devecco, M., Nielsen, A.R, Brunnsgaard, H., Yirmiya, R., Soreq, H. and Pedersen, B.K. (2007). Cholinergic Status modulations in human volunteers under Acute Inflammation. **Journal of molecular medicine** 85, 1432-1440.
126. Argov, Z., McKee, D., Agus, S., Brawer, S., Shlomowitz, N., Ben Yoseph, O., Soreq, H. and Sussman, J.D. (2007). Treatment of human myasthenia with oral antisense suppression of acetylcholinesterase. **Neurology** 69, 699-700.
127. Evron, T., Geyer, B.C., Cherni, I., Muralidharan, M., Kilbourne, J., Fletcher, S.P., Soreq, H. and Mor, T.S. (2007). Plant-derived human acetylcholinesterase-R provides protection from lethal organophosphate poisoning and its chronic aftermath. **FASEB Journal** 21, 2961-2969.
128. Perry, C., Pick M., Podoly, E., Gilboa, A., Zimmerman, G., Sklan, E.H., Ben-Shaul, Y., Diamant, S. and Soreq, H. (2007). Acetylcholinesterase/C terminal binding protein links modify Ikaros functions, causing T lymphopenia. **Leukemia** 21, 1472-1480.
129. Dori, A, Saar, T., Ifergane, G., Soreq, H. and Wirguin, Y. (2007) Readthrough acetylcholinesterase in inflammation associated neuropathologies. **Life Sciences**, *Special issue Proceedings from the 2nd Symposium on Non-neuronal Acetylcholine*, 80, 2369-2374.
130. Kehat, R., Zemel, E., Cuenca, N., Evron, T., Toiber, D., Loewenstein, A., Soreq, H. and Perlman, I. (2007). A novel isoform of acetylcholinesterase exacerbates photoreceptors death following photic stress. **Investigative ophthalmology** 48, 1290-1297.
131. Gilboa-Gefen, A., Lacoste P.P., Soreq, L. Cizeron-Clairac G, Le Panse R, Truffault F, Shaked I, Soreq, H. and Berrih-Aknin, S. (2007). The thymic theme of acetylcholinesterase splice variants in myasthenia gravis. **Blood** 109, 4383-4391.
132. Farchi, N., Shoham, S., Hochner, B., and Soreq, H. (2007). Impaired hippocampal plasticity and errors in cognitive performance in mice with maladaptive neuronal splice site selection. **The European journal of neuroscience** 25, 87-98.

133. Farchi, N., Ofek, K., Podoly, E., Dong, H., Xiang, Y.-Y., Diamant, S., Livnah, O., Hochner, B., Lu, W.-Y. and Soreq, H. (2007). Peripheral site acetylcholinesterase blockade induces RACK-1 associated neuronal modeling. **Neuro-degenerative diseases** 4, 171-184.
134. Zimmerman, G. and Soreq, H. (2006). Termination and beyond: Acetylcholinesterase as modulator of synaptic transmission. **Cell & Tissue Research** Review, 326, 655-669.
135. Sklan, E.H., Berson, A., Birikh, K., Gutnick, A., Shahar, O., Shoham, S. and Soreq, H. (2006). Acetylcholinesterase modulates stress-induced motor responses through catalytic and non-catalytic properties. **Biological Psychiatry** 60, 741-51.
136. Diamant, S., Podoly, E., Friedler, A., Livnah, O. and Soreq, H. (2006). Butyrylcholinesterase Attenuates Amyloid Fibril Formation in vitro. **Proceedings of the National Academy of Sciences of the United States of America** 103, 8628-8633.
137. BenMoyal-Segal, L. and Soreq, H. (2006). Gene-environment interactions in sporadic Parkinson's Disease. **Journal of neurochemistry** 97, 1740-1755.
138. Ben-Shaul, Y, BenMoyal-Segal, L., Ben-Ari, S., Bergman, H. and Soreq, H. (2006). Adaptive acetylcholinesterase splicing patterns attenuate 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced Parkinsonism in mice. **The European journal of neuroscience** 23, 2915-2922.
139. Browne, R.O., Ben-Moyal-Segal, L., Bryk, B., David, J., Kofman, O., Berger, A., Soreq, H. and Friedman, A. (2006). Coding region paraoxonase polymorphisms dictate accentuated neurophysiological responses to chronic, subacute insecticide exposure. **FASEB Journal** 20, 1733-1735.
140. Sklan, E.H., Podoly, E. and Soreq, H. (2006) RACK1 has the nerve to act: Structure meets function in the nervous system. **Progress in neurobiology** 78, 117-134.
141. Grisaru, D., Pick, M., Perry, C., Sklan, E.H., Almog, R., Goldberg, I., Naparstek, E., Lessing, J.B., Soreq H. and Deutsch, V, (2006). Hydrolytic and non-enzymatic functions of acetylcholinesterase co-modulate hematopoietic stress responses. **Journal of immunology** 176, 27-35.
142. Meshorer E, Biton I, Ben-Shaul Y, Assaf Y, Soreq H and Cohen Y (2006) Comment on: Abnormalities in the pattern of AQP4 immunoreactivity**. FASEB Journal** 20:2425.
143. Pick, M., Perry, C., Grisaru, D., Lapidot, Z., Naparstek, E., Deutsch, V. and Soreq, H. (2006). Stress-induced cholinergic signaling promotes inflammation-associated thrombopoiesis. **Blood** 107, 3397-3406. Accompanied by Comment: "From brain to blood", Zander, A.R. and Boris Fehse, B. (2006) Blood, 107, 3023-3024. [No. 4 in the Hidden Jewels Top 10 Cell Biology F1000 Factor 9.0 Exceptional 21.04.06 http://www.f1000biology.com/article/16380450/evaluation]
144. Ben-Ari, S., Toiber, D., Soreq, H. and Ben-Shaul, Y. (2006) Modulated splicing associated gene expression in p19 cells expressing distinct acetylcholinesterase splice variants. **Journal of neurochemistry** 97, 24-34 Suppl.
145. Geyer, B.C., Muralidharan, M., Cherni, I., Doran, J., Fletcher, S.P., Evron, T., Soreq, H. and Mor, T.S. (2005). Purification of transgenic plant-derived recombinant human acetylcholinesterase-R. **Chemico-biological interactions** 157-158, 331-334.
146. Toiber, D and Soreq, H. (2005) Cellular stress reactions as putative cholinergic links in Alzheimer's disease. **Neurochemical research** 30, 909-919.
147. Guimaraes-Sternberg, C., Meerson, A., Shaked, I. and Soreq, H. (2006). MicroRNA modulation of megakaryoblast fate involves cholinergic signaling. **Leukemia research** 30, 583-595.
148. Dori, A. and Soreq, H. (2006). ARP, the cleavable C-terminal peptide of "readthrough" acetylcholinesterase, promotes neuronal development and plasticity **Journal of molecular neuroscience** 28, 247-256, special issue.
149. Meshorer, E., Bryk, B., Toiber, D., Cohen, J., Dori, A. and Soreq H. (2005). SC35 promotes sustainable stress-induced alternative splicing of neuronal acetylcholinesterase mRNA. **Molecular psychiatry** 10, 985-997, Lilly Award.
150. Salmon, A., Erb, C., Meshorer, E., Ginzberg, D., Adani, Y., Rabinovitz, I., Amitai, G. and Soreq, H. (2005). Muscarinic modulations of neuronal anti-cholinesterase responses. **Chemico-Biological Interactions** 157-158, 105-113.
151. Evron, T., Ben-Moyal L., Lam, N., Gilboa-Geffen, A. and Soreq, H. (2005). RNA-targetted suppression of stress-induced allostasis in monkey spinal cord neurons. **Neurodegenerative Diseases** 2, 16-27.
152. Pollak, Y., Gilboa, A., Ben-Menachem, O., Ben-Hur, T., Soreq, H. And Yirmiya, R. (2005) Acetylcholinesterase modulates interleukin-1 production in the hippocampus and blood. **Annals of neurology** 57, 741-745.
153. Meshorer, E., Biton, I., Ben-Shaul, Y., Ben-Ari, S., Assaf, Y., Soreq, H. and Cohen, Y.(2005). Chronic cholinergic imbalances promote brain diffusion and transport abnormalities. **FASEB Journal** 19, 910-922.
154. Rees, T.M., Berson, A., Sklan, E.H, Younkin, L., Younkin, S., Brimijoin, and Soreq, H. (2005). Memory deficits correlating with acetylcholinesterase splice shift and amyloid burden in doubly transgenic mice. **Current Alzheimer Research** 2, 291-300.
155. BenMoyal-Segal, L., Vander, T., Shifman, S., Herishanu, Y., Bryk, B., Ebstein, R., Marcus, E., Schtassman, J., Darvasi, A., Herishanu, Y., Friedman, A. and Soreq, H. (2005). Acetylcholinesterase/Paraoxonase interactions increase the risk of insecticide-induced Parkinson's disease. **FASEB Journal** 19, 452-454.
156. Bryk, B., BenMoyal-Segal, L., Podoly, E., Livnah, O., Eisenkraft, A., Luria, S., Cohen, A., Yehezkelli, Y., Hourvitz, A. and Soreq, H. (2005). Inherited and acquired interactions between ACHE and PON1 polymorphisms modulate plasma acetylcholinesterase and paraoxonase activities. **Journal of neurochemistry** 92, 1216-1227.
157. Stamm, S., Ben-Ari, S., Rafalska, I., Yesheng-Teng, Zhayi-Zhang, Debora Toiber, D., Thanaraj, A. and Soreq, H. (2005). Function of alternative splicing. **Gene** 344, 1-20.
158. Ben-Shaul, Y. Bergman, H. and Soreq, H. (2005) Identifying Subtle Interrelated Changes in Functional Gene Categories using Continuous Measures of Gene. **Bioinformatics** 21(7):1129-1137.
159. Pick, M., Flores-Flores, C., Grisaru, D. Shochat, S., Deutsch, V. and Soreq, H. (2004). Blood cells-specific acetylcholinesterase splice variations under changing stimuli **International journal of developmental neuroscience** 22, 523-531.

160. Dong, H, Xiang, Y.-Y., Farchi, N., Ju, W., Wu, Y., Chen, L., Wang, Y., Hochner, B., Yang, B., Soreq, H. and Lu, W.-Y. (2004). Excess acetylcholinesterase impairs glutamatergic synaptogenesis in hippocampal neurons. **The Journal of neuroscience** 24, 8950-8960.
161. Dori, A., Cohen J., Silverman, W.F., Pollack, Y. and Soreq H. (2005). Functional Manipulations of Acetylcholinesterase Splice Variants Highlight Alternative Splicing Contributions to Murine Neocortical Development. **Cerebral Cortex** 15, 419-430.
162. Perry, C. and Soreq, H. (2004). Organophosphate risk of leukemogenesis. **Leukemia research** 28, 905-906.
163. Meshorer, E., Toiber, D., Zurel, D., Dori, A., Sahly, I., Cagnano, E., Grisaru, D., Tronche, F. and Soreq, H. (2004) Combinatorial Complexity of 5' Alternative ACHE Transcripts and Protein Products. **The Journal of biological chemistry** 279, 29740-29751.
164. Sklan, E.H, Lowenthal, A., Korner, M., Ritov, Y., Rankinen, T., Bouchard, C., Leon, A.S., Rao, D.C., Wilmore, J.H., Skinner, J.S. and Soreq, H. (2004). Acetylcholinesterase/paraoxonase genotype and expression predict anxiety scores in Health, Risk Factors, Exercise Training, and Genetics study. **Proceedings of the National Academy of Sciences of the United States of America** 101, 5512-5517.
165. Perry, C. Sklan E.H. and Soreq, H. (2004). CREB regulates AChE-R-induced proliferation of human glioblastoma cells. **Neoplasia** 6, 279-286.
166. Darreh-Shori, T., Hellström-Lindahl, E., Flores-Flores, C, Guan, Z., Soreq, H. And Nordberg, A. (2004). Long-lasting acetylcholinesterase splice variations in anticholinesterase-treated Alzheimer's disease patients. **Journal of neurochemistry** 88:1102-1113.
167. Nijholt, I., Farchi, N., Kye, M.-J., Sklan, E., Shoham, S., Verbeurre, B., Owen D., Hochner, B., Spiess, J., Soreq, H. and Blank., T. (2004). Stress-induced alternative splicing modulation of acetylcholinesterase results in enhanced fear memory and long-term-potentiation. **Molecular psychiatry** 9, 174-183.
168. Cohen, O., Reichenberg, A., Perry, C., Ginzberg, D., Pollmächer, T., Soreq, H. and Yirmiya, R. (2003). Endotoxin-induced changes in human working and declarative memory are associated with C - terminal cleavage of plasma "readthrough" acetylcholinesterase. **Journal of molecular neuroscience** 21, 199-212.
169. Birikh, K., Sklan, E., Shoham, S. and Soreq, H. (2003). Interaction of "Readthrough" acetylcholinesterase with RACK1 and PKCβII correlates with intensified fear induced conflict behavior. **Proceedings of the National Academy of Sciences of the United States of America** 100, 283-288.
170. Rees, T., Hammond, P. I., Soreq, H., Younkin, S.and Brimijoin. S. (2003) Acetylcholinesterase promotes beta-amyloid plaques in cerebral cortex. **Neurobiology of Aging** 5810, 1-11.
171. Farchi, N., Soreq, H. and Hochner, B. (2003). Chronic acetylcholinesterase overexpression induces multileveled aberrations in neuromuscular physiology. **Journal of Physiology** 546.1, 165-173.
172. Stoilov, P., Meshorer, E., Gencheva, M., Glick, D., Soreq., H. and Stamm, S. (2003). Defects in pre-mRNA processing as causes of and predisposition to diseases. **DNA and Cell Biology** 18, 803-818.
173. Brenner, T. Hamra, Y., Evron, T., Boneva, N., Seidman, S. and Soreq, H. (2003). The role of readthrough acetylcholinesterase in the pathophysiology of myasthenia gravis. **FASEB Journal** 17, 214-222.
174. Perry, C., Sklan, E., Birikh, K., Shapira, M., Trejo, L., Eldor, A. and Soreq, H. (2002). Complex regulation of acetylcholinesterase gene expression in human brain tumors. **Oncogene** 21, 8428-8441.
175. Darreh-Shori, T., Almkvist, O., Guan, Z.Z., Garlind, A. Strandberg, B., Svensson, A.-L., Soreq, H., Hellström–Lindahl, E. and Nordberg A. (2002). Sustained cholinesterase inhibition in AD patients receiving rivastigmine for 12 months. **Neurology** 59, 563-572.
176. Deutsch, V.R., Pick, M., Grisaru, D., Perry, C., Hemo, Y., Golan-Hadari, D., Grant, A., Eldor, A. and Soreq, H. (2002). The acetylcholinesterase variant AChE-R is expressed in human CD34+ hematopoietic progenitors, and its C-terminal peptide ARP promotes their proliferation. **Experimental Haematology** 30, 1153-1161.
177. Svedberg, M.M., Svensson, A.-L., Johnson, M., Lee, M., Cohen, O., Court, J., Soreq, H., Perry, E. and Nordberg, A. (2002). Upregulation of neuronal nicotinic receptor subunits α4, β2 and α7 in transgenic mice overexpressing human acetylcholinesterase. **Journal of molecular neuroscience** 18, 211-222.
178. Cohen, O., Erb, C., Ginzberg, D., Pollak, Y., Shohami, S., Seidman, S., Soreq, H., and Yirmiya, R. (2002). Overexpression of "readthrough" acetylcholinesterase is associated with antisense suppressible behavioral impairments. **Molecular psychiatry** 7, 874–885.
179. Perry, C., Eldor, A. and Soreq, H. (2002). Runx1/AML1 in Leukemia: Disrupted Association with Diverse Protein Partners. **Leukemia Research**, 3:221-8.
180. Meshorer, E., Erb, C. Gazit, R., Pavlovsky, L., Kaufer, D., Glick, D., Friedman, A., Ben-Arie, N. and Soreq, H. (2002). Alternative splicing and neuritic mRNA translocation under long-term neuronal hypersensitivity. **Science**, 295, 508-512.
181. Tomkins, O., Kaufer, D., Shelef, I., Hertzanu, Y., Richenthal, E., and Soreq, H., Friedman, A. (2001). Frequent blood-brain barrier disruption in the cerebral cortex. **Cellular and molecular neurobiology**, 21, 675-91.
182. Grant, A.D., Shapira, M. and Soreq, H. (2001). Genomic dissection reveals locus response to stress for mammalian acetylcholinestersase. **Cellular and molecular neurobiology**, 21, 783-97.
183. Mor, T.S., Sternfeld, M., Soreq, H., Arntzen, C.J. and Mason, H.S., (2001). Expression of recombinant human acetylcholinesterase in transgenic tomato plants. **Journal of Psychiatry and Behavioral Science** 75, 259-266.
184. Mor, I., Grisaru, D., Evron, T., Richler, C., Wahrman, J., Sternfeld, M., Teitelbaum, L., Meiri, N., Yogev, L., Seidman, S. and Soreq, H. (2001). Modified testicular expression of stress-associated "readthrough" acetylcholinesterase predicts male infertility. **FASEB J.,** 15, 2039-2041.
185. Erb, C., Troost, J., Kopf, S., Schmitt, U., Löffelholz, K., Soreq, H. and Klein, J. (2001) Compensatory mechanisms enhance hippocampal acetylcholine release in transgenic mice expressing human acetylcholinesterase. **J. Neurochemistry,** 77, 638-646.
186. Shapira, M., Thompson, C., Soreq, H and Robinson, G.E. (2001). Changes in neuronal acetylcholinesterase gene expression are temporally and functionally associated with honey bee division of labor. **Journal of molecular neuroscience** 17, 1-12.

187. Grisaru, D., Deutsch, V., Shapira, M., Pick, M., Sternfeld, M., Melamed-Book, N., Kaufer, D., Galyam, N., Lessing, B., Gait, M., Owen, D., Eldor, A. and Soreq, H. (2001). ARP, a peptide derived from the stress-associated acetylcholinesterase variant has hematopoietic growth promoting activities. **Molecular medicine** 7, 93-105.
188. Galyam, N., Grisaru, D., Melamed-Book, N., Grifman, M., Eckstein, F., Eldor, A. and Soreq, H. (2001) Complex host cell responses to antisense suppression of ACHE gene expression. **Antisense and Nucleic Acid Drug Development** 11, 51-57.
189. Sternfeld, M., Shoham, S., Klein, O., Flores-Flores, C., Evron, T. Idelson, G.H., Kitsberg, D., Patrick, J.W. and Soreq, H. (2000). Excess "readthrough" acetylcholinesterase attenuates but the "synaptic" variant intensifies neurodeterioration correlates. **Proceedings of the National Academy of Sciences of the United States of America**, 97, 8647-8652.
190. Shohami, E., Kaufer, D., Chen, Y., Seidman, S., Cohen, O., Ginzberg, D., Melamed-Book, N., Yirmiya, R. and Soreq, H. (2000). Antisense prevention of neuronal damages following head injury in mice **Journal of molecular medicine** 78, 228-236.
191. Shapira, M., Tur-Kaspa, I., Bosgraaf, L., Livni, N., Grant, A.D., Grisaru, D., Korner, M., Ebstein, R.P. and Soreq, H. (2000). A transcription-activating polymorphism in the ACHE promoter associated with acute sensitivity to anti-cholinesterases. **Human Molecular Genetics** 9, 1273-1281.
192. Lev-Lehman, E., Evron, T., Broide, R.S., Meshorer, E., Ariel, I., Seidman, S and Soreq, H. (2000). Synaptogenesis and myopathy under acetylcholinesterase overexpression **Journal of molecular neuroscience** 14, 93-105.
193. Itskovitz-Eldor, J., Karsenti, D., Schuldiner, M., Eden, A., Yanuka, O., Amit, M., Soreq, H. and Benvenisty, N. (2000). Differentiation of human ES cells into Embryoid bodies comprising the three embryonic germ layers. **Molecular Medicine** 6, 88-95 (Cover).
194. Perry, E., Martin-Ruiz, C., Lee, M., Griffiths, M., Johnson, M., Piggott, M., Haroutunian, V., Davis, K., Gotti, C., Tzartos, S., Cohen, O., Soreq, H., Jaros, E., Perry, R. and Court, J. (2000) Nictotinic receptor subtypes in human brain ageing and dementia. **European journal of pharmacology** 393, 215-222.
195. Broide, R.S., Grifman, M., Loewenstein, A., Grisaru, D., Stone, J., Patrick, J.W., Timberg, R., Shani, M. and Soreq, H. (1999). Manipulations of ACHE gene expression suggest non-catalytic involvement of acetylcholinesterase in the functioning of mammalian photoreceptors but not in retinal degeneration. **Brain research Molecular brain research** 71, 137-148.
196. Salmon, A., Goren, Z., Avissar, Y., Gluzman, N. and Soreq, H. (1999). Human erythrocyte but not brain acetylcholinesterase hydrolyzes heroin to morphine. **Clinical and Experimental Pharmacology and Physiology** 26, 596-600.
197. Kaufer, D., Friedman, A., Seidman, S. and Soreq, H. (1999). Anticholinesterases induce multigenic transcriptional feedback response suppressing cholinergic neurotransmission. **Chemical-Biological Interactions** 14, 119-120, 349-360.
198. Grisaru, D., Sternfeld, M., Eldor, A., Glick, D. and Soreq, H. (1999). Structural roles of acetylcholinesterase variants in biology and pathology. **European journal of biochemistry / FEBS** 264, 672-686.
199. Grisaru, D., Lev-Lehman, E., Shapira, M., Chaikin, E., Lessing, J.B., Eldor, A., Eckstein, F. and Soreq, H. (1999) Human osteogenesis involves differentiation-dependent increases in the morphogenically-active 3' alternative splicing variant of acetylcholinesterase. **Molecular and cellular biology** 19, 788-795.
200. Grifman, M., Galyam, N., Seidman, S. and Soreq, H. (1998). Functional redundancy of acetylcholinesterase and neuroligin in mammalian neuritogenesis. **Proceedings of the National Academy of Sciences of the United States of America** 95, 13935-13940.
201. Friedman, A., Kaufer, D., Pavlovsky, L. and Soreq, H. (1998). Cholinergic activation induces activity-dependent electrophysiological and transcriptional responses in hippocampal slices. **Journal of physiology, Paris** 92, 329-336.
202. Sternfeld, M., Patrick, J.D. and Soreq, H. (1998). Position effect variegations and brain-specific silencing in transgenic mice overexpressing human acetylcholinesterase variants. **Journal of physiology, Paris** 92, 249-256.
203. Andres, C., Seidman, S., Beeri, R., Timberg, R. and Soreq, H. (1998) Transgenic acetylcholinesterase induces enlargement of murine neuromuscular junctions but leaves spinal cord synapses intact. **Neurochemistry international** 32, 449-456.
204. Kaufer, D., Friedman, A., Seidman, S. and Soreq, H. (1998). Acute stress facilitates long-lasting changes in cholinergic gene expression. **Nature** 393, 373-377. Accompanied by: News & Views: The stress of Gulf War Syndrome. Sapolsky, R.M. **Nature** 393:308-309.
205. Sternfeld, M., Ming, G-L., Song, H-J., Sela, K., Poo, M-M. and Soreq, H. (1998). Acetylcholinesterase enhances neurite growth and synapse development through alternate contributions of its hydrolytic capacity, core protein and variable C-termini. **The Journal of neuroscience** 18, 1240-1249.
206. Beeri, R., LeNovere, N., Mervis, R., Huberman, T., Grauer, E., Changeux, J.P. and Soreq, H. (1997). Enhanced hemicholinium binding and attenuated dendrite branching in cognitively impaired ACHE-transgenic mice. **Journal of neurochemistry** 69, 2441-2451.
207. Grifman, M. and Soreq, H. (1997). Differentiation intensifies the susceptibility of phaeochromocytoma cells to antisense oligodeoxynucleotide-dependent suppression of acetylcholinesterase activity. **Antisense Research and Nucleic Acids Drug Development** 7, 351-359.
208. Andres, C., Beeri, R., Friedman, A., Lev-Lehman, E., Henis, S., Timberg, R., Shani, M. and Soreq, H. (1997). ACHE transgenic mice display embryonic modulations in spinal cord CHAT and neurexin I gene expression followed by late-onset neuromotor deterioration. **Proceedings of the National Academy of Sciences of the United States of America** 94, 8173-8178.
209. Sternfeld, M., Rachmilewitz, J., Loewenstin-Lichtenstein, Y., Andres, C., Timberg, R., Ben-Ari, S., Soreq, H. and Zakut, H. (1997). Normal and "Atypical" Butyrylcholinesterase in placental development, function and malfunction. **Cellular and molecular neurobiology** 17, 315-332.
210. Lev-Lehman, E., Deutsch, V., Eldor, A. and Soreq, H. (1997). Immature human megakaryocytes produce nuclear-associated acetylcholinesterase. **Blood**, 89, 3644-3653.
211. Lidar, T., Andres, C., Yakar, S., Langevitz, P., Zeilig, G., Ohry, A., Bakimer, R., Soreq H. and Livneh A. (1997) Clinically insignificant (natural) autoantibodies against acetylcholinesterase in the sera of patients with a variety of neurologic, muscular and autuimmune diseases. **Immunolgy Letters** 55, 79-84.

212. Soreq, H., Kaufer, D. and Friedman, A. (1997) Less stress - more pressure? **Nature Medicine** 2, 366 (correspondence).
213. Birikh, K., Berlin, U.A., Soreq, H. and Eckstein, F. (1997) Probing accessible sites for ribozymes on human acetylcholinesterase RNA. **RNA**, 4, 429-437.
214. Broide, R., Grifman, M., Shapira, M., Ginzberg, D. and Soreq, H. (1997) Genetic manipulations of cholinergic communication reveal trans-acting control mechanisms over acetylcholine receptors. **Journal of receptor and signal transduction research** 17:279-291.
215. Loewenstein-Lichtenstein, Y., Glick, D., Gluzman, N., Sternfeld, M., Zakut, H. and Soreq, H. (1996). Overlapping drug interaction sites of human butyrylcholinesterase dissected by site-directed mutagenesis. **Molecular pharmacology** 50, 1423-1431.
216. Friedman, A., Kaufer-Nachum, D., Shemer, J., Hendler, I., Soreq, H. and Tur-Kaspa, I. (1996). Pyridostigmine brain penetration under stress enhances neuronal excitability and induces early immediate transcriptional response. **Nature Medicine** 2, 1382-1385. Accompanied by: News&Views: The Gulf War, Stress and a leaky blood-brain barrier. Israel Hanin. **Nature Medicine**. 2:1307-1308.
217. Nechushtan, H., Soreq, H., Kuperstein, V., Tshori, S. and Razin, E. (1996) Murine mast cells express acetylcholinesterase. **FEBS Letters** 379:1-6.
218. Karpel, R., Sternfeld, M., Ginzberg, D., Guhl, E., Graessman, A. and Soreq H. (1996) Overexpression of alternative human acetylcholinesterase forms modulates process extensions in cultured glioma cells. **Journal of Neurochemistry** 66, 114-123.
219. Soreq, H. (1995) Cholinergic symptoms and Gulf War Syndrome. **Nature Medicine** 1, 1226 (correspondence).
220. Loewenstein-Lichtenstein, Y., Schwarz, M., Glick, D., Norgaard-Pederson, B., Zakut, H. and Soreq, H. (1995) Genetic predisposition to adverse consequences of anti-cholinesterases in "atypical" BCHE carriers. **Nature Medicine** 1, 1082-1085.
221. Beeri, R., Andres, C., Lev-Lehman, E., Timberg, R., Huberman, T., Shani, M. and Soreq, H. (1995) Transgenic expression of human acetylcholinesterase induces progressive cognitive deterioration in mice. **Current Biology** 5, 1063-1071.
222. Seidman, S., Sternfeld, M., Ben Aziz-Aloya, R., Timberg, R., Kaufer-Nachum, D. and Soreq, H. (1995) Synaptic and epidermal accumulations of human acetylcholinesterase is encoded by alternative 3'-terminal exons **Molecular and cellular biology** 15, 2993-3002.
223. Schwarz, M., Loewenstein-Lichtenstein, Y., Glick, D., Liao, J., Norgaard-Pedersen, B. and Soreq, H. (1995) Successive organophosphate inhibition and oxime reactivation reveals distinct responses of recombinant human cholinesterase variants. **Brain research Molecular brain research** 31, 101-110.
224. Lev-Lehman, E., El-Tamer, A., Yaron, A., Grifman, M., Ginzberg, D., Hanin, I. and Soreq, H (1995) Cholinotoxic effects on acetylcholinesterase gene expression are associated with brain-region specific alterations in G,C-rich transcripts. **Brain research** 661,75-82.
225. Patinkin, D., Lev-Lehman, E., Zakut, H., Eckstein, F. and Soreq, H. (1994) Antisense inhibition of butyrylcholinesterase gene expression predicts adverse hematopoietic consequences to cholinesterase inhibitors. **Cellular and molecular neurobiology** 14:459-474.
226. Shapira, M., Seidman, S., Sternfeld, M., Timberg, R., Kaufer, D., Patrick, J.W. and Soreq, H. (1994) Transgenic engineering of neuromuscular junctions in Xenopus laevis embryos transiently overexpressing key cholinergic proteins. **Proceedings of the National Academy of Sciences of the United States of America**, 91, 9072-9076.
227. Soreq, H., Patinkin, D., Lev-Lehman, E., Grifman, M., Ginzberg, D., Eckstein, F. and Zakut, H. (1994) Antisense oligonucleotide inhibition of acetylcholinesterase gene expression induces progenitor cell expansion and suppresses hematopoietic apoptosis ex vivo. **Proceedings of the National Academy of Sciences of the United States of America**, 91, 7907-7911.
228. Soreq, H., Ehrlich, G., Schwarz, M., Loewenstein, Y., Glick, D. and Zakut, H. (1994) Mutations and impaired expression in the Human ACHE and BCHE genes: Neurological implications. **Biomedicine and Pharmacotherapeutics** 48, 253-259.
229. Ehrlich, G., Patinkin, D., Ginzberg, D., Zakut, H., Eckstein, F. and Soreq, H. (1994) Use of partially phosphorothioated "antisense" oligodeoxynucleotides for sequence-dependent modulation of hematopoiesis in culture. **Antisense Research and Development** 4, 173-183.
230. Ehrlich, G., Ginzberg, D., Loewenstein, Y., Glick, D., Kerem, B., Ben-Ari, S., Zakut, H. and Soreq, H. (1994) Population diversity and distinct haplotype frequencies associated with ACHE and BCHE genes of Israeli Jews from Trans-Caucasian Georgia and from Europe. **Genomics** 22 288-295.
231. Beeri, R., Gnatt, A., Lapidot-Lifson, Y., Ginzberg, D., Shani, M., Zakut, H. and Soreq, H. (1994) Testicular Amplification and impaired transmission of human butrylcholinesterase cDNA in transgenic mice. **Human Reproduction** 9, 284-292.
232. Seidman, S., Ben-Aziz Aloya, R., Timberg, R., Loewenstein, Y., Velan, B., Shafferman, A., Liao, J., Norgaard-Pedersen, B., Brodbeck, U. and Soreq, H. (1994) Overexpressed monomeric human acetylcholinesterase induces subtle ultrastructural modifications in developing neuromuscular junctions of Xenopus laevis embryos. **Journal of neurochemistry** 62, 1670-1681.
233. Gnatt, A., Loewenstein, Y., Yaron, A., Schwarz, M. and Soreq, H. (1994) Site-directed mutagenesis of active site residues reveals plasticity of human butyrylcholinesterase in substrate and inhibitor interactions. **Journal of neurochemistry** 62, 749-755.
234. Karpel, R., Ben Aziz-Aloya, R., Sternfeld, M., Ehrlich, G., Ginzberg, D., Tarroni, P., Clementi, F., Zakut, H. and Soreq, H. (1994) Expression of three alternative acetylcholinesterase messenger RNAs in human tumor cell lines of different tissue origins. **Experimental cell research** 210, 268-277.
235. Loewenstein, Y., Gnatt, A., Neville, L.F., Zakut, H. and Soreq, H. (1993) Structure-function relationship studies in human cholinesterases reveal genomic origins for individual variations in cholinergic drug responses. **Progress in neuro-psychopharmacology & biological psychiatry** 17, 905-926.
236. Lev-Lehman, E., Hornreich, G., Ginzberg, D., Gnatt, A., Meshorer, A., Eckstein, F., Soreq, H. and Zakut, H. (1994) Antisense inhibition of acetylcholinesterase gene expression causes transient hematopoietic alterations in vivo. **Gene therapy** 1, 127-135.
237. Loewenstein, Y., Gnatt, A., Neville, L.F. and Soreq, H. (1993) A chimeric human cholinesterase: identification of interaction sites responsible for sensitivity to acetyl or butyrylcholinesterase-specific ligands. **Journal of molecular biology** 234, 289-296.

238. Loewenstein, Y., Denarie, M., Zakut, H. and Soreq, H. (1993) Molecular dissection of cholinesterase domains responsible for carbamate toxicity. **Chemical-Biological Interactions** 87, 209-216.
239. Ben Aziz-Aloya, R., Seidman, S., Timberg, R., Sternfeld, M., Zakut, H. and Soreq, H. (1993) Expression of a human acetylcholinesterase promoter-reporter construct in developing neuromuscular junctions of Xenopus embryos. **Proceedings of the National Academy of Sciences of the United States of America**., 90, 2471-2475.
240. Richler, C., Soreq, H. and Wahrman, J. (1992) X inactivation in mammalian testis is correlated with inactive X- specific transcription. **Nature genetics** 2, 192-195 (accompanied by a News and Views cover, p. 169-170).
241. Soreq, H., Gnatt, A., Loewenstein, Y. and Neville, L.F. (1992) Excavations into the active site gorge of cholinesterases. **Trends in biochemical sciences** 17, 353-358.
242. Ehrlich, G., Viegas-Pequignot, E., Ginzberg, D., Sindel, L., Soreq, H. and Zakut, H. (1992). Mapping the human acetylcholinesterase gene to chromosomes 7q22 by fluorescent in situ hybridization coupled with selective PCR amplification from a somatic hybrid cell panel and chromosome-sorted DNA libraries. **Genomics** 13, 1192-1197.
243. Soreq, H., Meir, R. and Zakut, H. (1992) (Cholinesterase inhibitors: medical and structural implications of their mechanism of action) **Harefuah** 123, 100-110.
244. Zakut, H., Lapidot-Lifson, Y., Beeri R., Ballin, A. and Soreq, H. (1992) In vivo gene amplification in non-cancerous cells: Cholinesterase genes and oncogenes amplify in thrombocytopenia associated with lupus erythematosus. **Mutation Research** 276, 275-284.
245. Neville, L.F., Gnatt, A., Loewenstein, Y., Seideman, S., Ehrlich, G. and Soreq, H. (1992) Intramolecular relationships in cholinesterases revealed by oocyte expression of site-directed and natural variants of human BCHE. **EMBO Journal** 11, 1641-1649.
246. Lapidot-Lifson, Y., Patinkin, D., Prody, C.A., Ehrlich, G., Seidman, S., Ben-Aziz, R., Benseler, F., Eckstein, F., Zakut, H. and Soreq, H. (1992) Cloning and antisense oligodeoxynucleotide inhibition of a human homolog of cdc2 required in hematopoiesis. **Proceedings of the National Academy of Sciences of the United States of America**, 89, 579-583.
247. Zakut, H., Lieman-Hurwitz, J., Zamir, R., Sindell, L., Ginzberg, D. and Soreq, H. (1991) Chorionic villi cDNA Library displays expression of butyrylcholinesterase: putative genetic disposition for ecological danger. **Prenatal Diagnosis** 11, 597-607.
248. Velan, B., Kronman, C., Grosfeld, H., Leitner, M., Gozes, Y., Flashner, Y., Sery, T., Cohen, S., Ben-Aziz, R., Seideman, S., Shafferman, A. and Soreq, H. (1991) Recombinant human acetylcholinesterase is secreted from transiently transfected 293 cells as a soluble globular enzyme. **Cellular and molecular neurobiology** 11, 143-156.
249. Gnatt, A., Ginzberg, D., Lieman-Hurwitz, J., Zamir, R., Zakut, H. and Soreq, H. (1991) Human acetylcholinesterase and butyrylcholinesterase are encoded by two distinct genes. **Cellular and molecular neurobiology** 11, 91-104.
250. Soreq, H. (1991) Cholinesterases in cellular and molecular neurobiology. **Cellular and molecular neurobiology** 11, 3-5.
251. Soreq, H., Katz, A., Richler, C., Malinger, G. and Zakut, H. (1990) Expression of cholinesterase genes in human germline cells: implications on reproduction. **Israel Journal of Obstetrics and Gynecology** 1, 111-113.
252. Neville, L.F., Gnatt, A., Lowenstein, Y. and Soreq, H. (1990) Aspartate 70 to glycine substitution confers resistance to naturally occurring and synthetic anionic site ligands on in ovo produced human butyrylcholinesterase. **Journal of neuroscience research** 27, 452-460.
253. Soreq, H., Ben-Aziz, R., Prody, C.A., Gnatt, A., Neville, L., Lieman-Hurwitz, J., Lev-Lehman, E., Ginzberg, D., Seidman, S. Lapidot-Lifson, Y. and Zakut, H. (1990). Molecular cloning and construction of the coding region for human acetylcholinesterase reveals a G,C-rich attenuating structure. **Proceedings of the National Academy of Sciences of the United States of America**, 87, 9688-9692.
254. Neville, L.F., Gnatt, A., Padan, R., Seidman, S. and Soreq, H. (1990) Anionic site interactions in human butyrylcholinesterase disrupted by two adjacent single point mutations. **The journal of biological chemistry** 265, 20735-20739.
255. Patinkin, D., Seidman, S., Eckstein, F., Benseler, F., Zakut, H. and Soreq, H. (1990) Manipulations of cholinesterase gene expression modulate Murine Megakaryocytopoiesis in vitro, **Molecular and cellular biology** 10, 6046-6050.
256. Zakut, H., Ehrlich, G., Ayalon, A., Prody, C. A., Malinger, G., Seidman, S., Kehlenbach, R., Ginzberg, D. and Soreq, H. (1990) Acetylcholinesterase and butyrylcholinesterase genes co-amplify in primary ovarian carcinomas. **The journal of clinical investigation** 86, 900-908.
257. Ben Aziz, R. and Soreq, H. (1990) Improving poor in vitro transcription from G,C-rich genes. **Nucleic acids research** 18, 3418.
258. Gnatt, A., Prody, C.A., Zamir, R., Lieman-Hurwitz, J., Zakut, H. and Soreq, H. (1990) Expression of alternatively terminated unusual CHEmRNA transcripts mapping to chromosome 3q26-ter in nervous system tumors. **Cancer Research** 50, 1983-1987.
259. Ballas, N., Broido, S., Soreq, H. and Loyter, A. (1989) Efficient functioning of plant promoters and poly(A)sites in Xenopus oocytes. **Nucleic acids research** 17, 7891-7983.
260. Zakut, H., Zamir, R., Sindel, L. and Soreq, H. (1989) Gene mapping on chorionic villi chromosomes by hybridization in situ refinement of cholinesterase genes localization to chromosomes 3q21, 3q26-ter and 16q-21. **Human Reproduction** 4, 941-946.
261. Benvenisty, N., Shoshani, T., Farkash, Y., Soreq, H. and Reshef, L. (1989) Trans-activation of phosphoenolpyruvate carboxykinase (GTP) gene expression by rat liver mRNA in microinjected Xenopus oocytes. **Molecular and cellular biology** 9, 5244-5247
262. Ludgate, M., Dong, P., Dreyfus, P. A., Zakut, H., Taylor, P., Vassart, G. and Soreq, H. (1989) Definition, at the molecular level, of a thyroglobulin-acetyl-cholinesterase shared epitope: Study of its pathophysiological significance in pateints with Grave's ophthalmopathy**. Autoimmunity** 3, 167-176.
263. Dreyfus, P. A., Seidman, S., Pincon-Raymond, M. Murawsky, M., Rieger, F., Schejter, E., Zakut, H. and Soreq, H. (1988) Tissue-specific processing and polarized compartmentalization of nascent cholinesterase in microinjected Xenopus oocytes. **Cellular and molecular neurobiology** 9, 323-341.
264. Lifson-Lapidot, Y., Prody, C. A., Ginzberg, D., Meytes, D., Zakut, H. and Soreq, H. (1989) Co-amplification of human acetylcholinesterase and butyryl-cholinesterase genes in blood cells: Correlation with various leukemias and abnormal megakaryocytopoiesis. **Proceedings of the National Academy of Sciences of the United States of America**, 86, 4715-4719.

265. Soreq, H., Seidman, S., Dreyfus, P. A., Zevin-Sonkin, D. and Zakut, H. (1989) Expression and tissue-specific assembly of human butyrylcholinesterase in microinjected Xenopus oocytes. **The journal of biological chemistry** 264, 10608-10613.
266. Zakut, H., Zamir, R., Sindel, L. and Soreq, H. (1989) Mapping genes on chorionic villi chromosomes by hybridization in situ. **Harefuah** 39, 81-85 (Hebrew).
267. Prody, A. C., Dreyfus, P., Zamir, R., Zakut, H. and Soreq, H. (1989) De novo amplification within a "silent" human cholinesterase gene in a family subjected to prolonged exposure to organophosphorous insecticides. **Proceedings of the National Academy of Sciences of the United States of America** 86, 690-694.
268. Malinger, G., Zakut, H. and Soreq, H. (1989) Cholinoceptive properties of human primordial, pre-antral and antral oocytes: In situ hybridization and biochemical evidence for expression of cholinesterase genes. **Journal of molecular neuroscience** 1, 77-84.
269. Dreyfus, P., Zevin-Sonkin, D., Seidman, S., Prody, C., Zisling, R., Zakut, H. and Soreq, H. (1988) Cross homologies and structural differences between human cholinesterases revealed by antibodies against cDNA-produced human butyrylcholinesterase peptides. **Journal of Neurochemistry** 51, 1858-1867.
270. Farkash, Y., Soreq, H. and Orly, Y. (1988) Biosynthesis of catalytically active rat testosterone 5-reductase in microinjected Xenopus oocytes: Evidence for tissue- specific differences in translatable mRNA. **Proceedings of the National Academy of Sciences of the United States of America** 85, 5824-5828.
271. Livneh, A., Sarova, I., Michaeli, D., Pras, M., Wagner, K., Zakut, H. and Soreq, H. (1988) Antibodies against acetylcholinesterase and low levels of cholinesterases in a patient with an atypical neuromuscular disorder. **Clinical Immunology and Immunopathology** 48, 119-131.
272. Mollgard, K., Djiegielewska, K. M., Saunders, N. R., Zakut, H. and Soreq, H. (1988) Synthesis and localization of plasma proteins in the developing human brain: Integrity of the fetal blood-brain barrier to endogenous proteins of hepatic origin. **Developmental biology** 128, 207-221.
273. Zakut, H., Even, L., Birkenfeld, S., Malinger, G., Zisling, R. and Soreq, H. (1988) Modified properties of serum cholinesterases in primary carcinomas. **Cancer** 61, 727-737.
274. Soreq, H., Malinger, G. and Zakut, H. (1987) Expression of cholinesterase genes in developing human oocytes revealed by in situ hybridization. **Human Reproduction** 2, 689-693.
275. Soreq, H., Zamir, R., Zevin-Sonkin, D. and Zakut, H. (1987) Human cholinesterase genes localized by hybridization to chromosomes 3 and 16. **Human Genetics** 77, 325-328.
276. Prody, C. A., Zevin-Sonkin, D., Gnatt, A., Goldberg, O. and Soreq, H. (1987) Isolation and characterization of full-length cDNA clones coding for cholinesterase from fetal human tissues. **Proceedings of the National Academy of Sciences of the United States of America** 84, 3555-3559.
277. Soreq, H., Dziegielewska, K. M., Zevin-Sonkin, D. and Zakut, H. (1986) The use of mRNA translation in vitro and in ovo followed by crossed immunoelectrophoretic autoradiography to study the biosynthesis of human cholinesterases. **Cellular and molecular neurobiology** 6, 227-237.
278. Prody, C., Zevin-Sonkin, D., Gnatt, A., Koch, R., Zisling, R., Goldberg, O. and Soreq, H. (1986) Use of synthetic oligodeoxynucleotide probes for the isolation of a human cholinesterase cDNA clone. **Journal of neuroscience research** 16, 25-36.
279. Dziegielewska, K. M., Saunders, N. R., Schejter, E. J., Zakut, H., Zevin-Sonkin, D., Zisling, R. and Soreq, H. (1986) Synthesis of plasma proteins in fetal, adult and neoplastic human brain tissue. **Developmental biology** 115, 93-104.
280. Egozi, Y., Sokolovsky, M., Schejter, E., Blatt, I., Zakut, H., Matzkel, A. and Soreq, H. (1986) Divergent regulation of muscarinic binding sites and acetylcholinesterase in discrete regions of the developing human fetal brain. **Molecular Neurobiology** 6, 55-70.
281. Libermann, T. A., Nusbaum, H. R., Razon, N., Kris, R., Lax, I., Soreq, H., Whittle, N., Waterfield, M. D., Ullrich, R. and Schlessinger, J. (1985) Amplification and overexpression of the EGF receptor gene in primary human glioblastomas. **Journal of Cell Science** 3, 161-172.
282. Dziegielewska, K. M., Saunders, N. R. and Soreq, H. (1985) Messenger RNA from developing rat cerebellum directs in vitro biosynthesis of plasma proteins **Developmental Brain Research** 23, 259-267.
283. Zevin-Sonkin, D., Avni, A., Zisling, R., Koch, R. and Soreq, H. (1985) Expression of acetylcholinesterase gene(s) in the human brain: Molecular cloning evidence for cross-homologous sequences**. Journal de physiologie (Paris)** 80, 221-228.
284. Zakut, H., Matzkel, A., Schejter, E., Avni, A. and Soreq, H. (1985) Polymorphism of acetylcholinesterase in discrete regions of the developing fetal human brain. **Journal of neurochemistry** 45, 382-389.
285. Libermann, T. A., Nusbaum, H. R., Razon, N., Kris, R., Lax, I., Soreq, H. Whittle, N., Waterfield, M. D., Ullrich, A. and Schlessinger, J. (1984) Amplification, enhanced expression and possible rearrangement of the EGF receptor gene in primary human brain tumors of glial origin. **Nature** 313, 144-147.
286. Soreq, H., Zevin-Sonkin, D., Avni, A., Hall, L. and Spierer, P. (1985) A human acetylcholinesterase gene identified by homology to the Drosophila gene. **Proceedings of the National Academy of Sciences of the United States of America** 82, 1827-1831.
287. Burmeister, M., Avivi, A., Schlesinger, J. and Soreq, H. (1984) The biosynthesis of EGF-containing polypeptides in mRNA-microinjected Xenopus oocytes. **The EMBO Journal** 3. 1499-1505.
288. Razon, N., Soreq, H., Roth, E., Bartal, A. and Silman, I. (1984) Characterization of levels and forms of cholinesterases in human primary brain tumors. **Experimental Neurology** 84, 681-695.
289. Soreq, H., Zevin-Sonkin, D. and Razon, N. (1984) Expression of cholinesterase gene(s) in human brain tissues: translational evidence for multiple mRNA species. **The EMBO Journal.** 3, 1371-1375.
290. Libermann, T. A., Razon, N., Bartal, A. D., Yarden, Y., Schlessinger, J. and Soreq, H. (1984) Expression of epidermal growth factor receptors in human brain tumors. **Cancer Research** 44, 753-760.

291. Soreq, H. and Miskin, R. (1983) Plasminogen activator in the developing rat cerebellum: Biosynthesis and localization in granular neurons. **Developmental Brain Research** 11, 149-158.
292. Koren, R., Burstein, Y. and Soreq, H. (1983) Synthetic leader peptide modulates secretion of proteins from microinjected Xenopus oocytes. **Proceedings of the National Academy of Sciences of the United States of America** 80, 7205-7210.
293. Parvari, R., Pecht, I. and Soreq, H. (1983) A microfluorometric assay for cholinestrases, suitable for multiple kinetic determinations of picomoles of released thiocholine. **Analytical biochemistry** 133, 450-456.
294. Soreq, H., Safran, A. and Eliyahu, D. (1983) Modified composition of major ontogenetically regulated mRNAs and proteins in the cerebellum of old and of staggerer mice. **Brain research** 312: 73-82.
295. Soreq, H., Miskin, R., Zutra, A. and Littauer, U. Z. (1983) Modulation in the levels and localization of plasminogen activator in differentiating neuroblastoma cells. **Brain research** 7, 257-269.
296. Zisapel, N., Miskin, R., Laudon, M. and Soreq, H. (1982) Plasminogen activator is enriched in the synpatosomal plasma membrane. **Brain Research** 248, 129-139.
297. Soreq, H., Gurwitz, D., Eliyahu, D. and Sokolovsky, M. (1982) Altered ontogenesis of muscarinic receptors in agranular cerebellar cortex. **Journal of neurochemistry** 39, 756-763.
298. Soreq, H., Bartfeld, D., Parvari, R. and Fuch, S. (1982) Increase in the translatable mRNA for acetylcholine receptor during embryonic development of Torpedo ocellata electric organ. **FEBS Letters** 139, 32-36.
299. Soreq, H., Parvari, R. and Silman, I. (1982) Biosynthesis and secretion of active acetylcholinesterase in Xenopus oocytes microinjected with mRNA from rat brain and from Torpedo electric organ. **Proceedings of the National Academy of Sciences of the United States of America** 79, 830-834.
300. Eliyahu, D. and Soreq, H. (1982) Degranulation of rat cerebellum induces selective variations in gene expression. **Journal of neurochemistry** 38, 313-321.
301. Soreq, H., Safran, A. and Zisling, R. (1982) Variations in gene expression during development of the rat cerebellum. **Brain research** 3, 65-79.
302. Miskin, R. and Soreq, H. (1981) Sensitive autoradiographic quantification of electrophoretically separated proteases. **Analytical biochemistry** 118, 252-258.
303. Soreq, H. and Miskin, R. (1981) Secreted proteins in the medium of microinjected Xenopus oocytes are degraded by oocyte proteases. **FEBS letters** 128, 305-310.
304. Miskin, R. and Soreq, H. (1981) Microinjected Xenopus oocytes synthesize active human plasminogen activator. **Nucleic acids research** 9, 3355-3364.
305. Soreq, H. and Miskin, R. (1981) Plasminogen activator in the developing rodent brain. **Brain research** 216, 361-374.
306. Soreq, H., Sagar, H. and Sehgal, P. B. (1981) Translational activity and functional stability of human fibroblast beta1 and beta2 interferon mRNA species lacking 3'-terminal sequences. **Proceedings of the National Academy of Sciences of the United States of America** 78, 1741-1745.
307. Weissenbach, J., Cherjanovsky, Y., Zeevi, M., Shulman, L., Soreq, H., Nir, U., Wallach, D., Perricaudet, M., Tiollais, P. and Revel, M. (1980) Two interferon mRNAs in human fibrobalsts: In vitro translation and E. coli cloning studies. **Proceedings of the National Academy of Sciences of the United States of America** 77, 7152-7156.
308. Soreq, H., Harpold, M. M. and Darnell, J. E. (1980) Rate of synthesis and concentration of specific cloned mRNA sequences in cultured Chinese hamster ovary cells compared to liver cells. **Biochemical and biophysical research communications** 92, 485-491.
309. Soreq, H., Harpold, M. M., Evans, R. M., Darnell, J. E. and Bancroft, F. C. (1979) Rat growth-hormone gene: intervening sequences within the coding region. **Nucleic acids research** 6, 2471-2482.
310. Kaempfer, R., Hollender, R., Soreq, H. and Nudel, U. (1979) Recognition of messenger RNA in eukaryotic protein synthesis: Equilibrium studies of the interaction between mRNA and the initiation factor that binds methionyl tRNAmetf. **European journal of biochemistry / FEBS** 94, 591-600.
311. Sehgal, P., Soreq, H. and Tamm, I. (1978) Does 3'-terminal poly(A) stabilize human fibroblast interferon mRNA in oocytes of Xenopus laevis? **Proceedings of the National Academy of Sciences of the United States of America** 75, 5030-5033.
312. Salomon, R., Bar-Joseph, M., Soreq, H., Gozes, I. and Littauer, U. Z. (1978) Translation in vitro of Carnation mottle virus RNA: Regulatory function of the 3'-region. **Virology** 90, 288-298.
313. Gilboa, E., Soreq, H. and Aviv, H. (1977) Initiation of RNA synthesis in isolated nuclei **European journal of biochemistry / FEBS** 77, 393-400.
314. Grosfeld, H., Soreq, H. and Littauer, U. Z. (1977) Membrane-associated cytoplasmic mRNA in Artemia salina: Functional and physical changes during development. **Nucleic acids research** 4, 2109-2121.
315. Soreq, H. and Littauer, U. Z. (1977) Purifcation and characterization of polynucleotide phosphorylase from E. coli: Probe for the analysis of 3'-end sequences of messenger RNA. **The Journal of biological chemistry** 252, 6885-6888.
316. Huez, G., Marbaix, G., Burny, A., Hubert, E., Leclercq, M., Cleuter, Y., Chantrenne, H., Soreq, H. and Littauer, U. Z. (1977). Degradation of deadenylated rabbit alpha-globin mRNA in Xenopus oocytes is associated with its translation. **Nature** 66, 472-473.
317. Salomon, R., Sela, I., Soreq, H., Giveon, D. and Littauer, U. Z. (1976) Enzymatic acylation of hystidine to tobacco mosaic virus RNA. **Virology** 71, 74-84.
318. Nudel, U., Soreq, H., Littauer, U. Z., Huez, G., Marbaix, G., Hubert, E. and Leclercq, M. (1976) Globin mRNA species containing poly(A) segments of different lengths: Their functional stability in Xenopus oocytes. **European journal of biochemistry / FEBS** 64, 115-121.

319. Huez, G., Marbaix, G., Hubert, E., Cleuter, Y., Leclercq, M., Chantrenne, H., Devos. R., Soreq, H., Nudel, U. and Littauer, U. Z. (1975) Readenylation of polyadenylate-free globin messenger RNA restores its stability in vivo. **European journal of biochemistry / FEBS** 59, 589-592.
320. Marbaix, G., Huez, G., Burny, A., Cleuter, Y., Hubert, E., Leclercq, M., Chantrenne, H., Soreq, H., Nudel, U. and Littauer, U. Z. (1975) Absence of polyadenylate segment in globin messenger RNA accelerates its degradation in Xenopus oocytes **Proceedings of the National Academy of Sciences of the United States of America** 72, 3065-3067.
321. Huez, G., Marbaix, G., Hubert, E., Leclercq, M., Nudel, U., Soreq, H., Salomon, R., Lebleux, B., Revel, M. and Littauer, U. Z. (1974) Role of polyadenylate segment in the translation of globin messenger RNA in Xenopus oocytes. **Proceedings of the National Academy of Sciences of the United States of America** 71, 3143-3146.
322. Soreq, H., Nudel, U., Salomon, R., Revel, M. and Littauer, U. Z. (1974) In vitro translation of polyadenylic acid-free rabbit globin messenger RNA. **Journal of molecular biology** 88, 233-245.
323. Soreq, H. and Kaplan, R. (1971) Inducible and constitutive beta-galactosidase formation in cells recovering from protein synthesis inhibition. **Journal of bacteriology** 108, 1147-1153.

REVIEWS AND BOOK CHAPTERS

1. Winek, K., Soreq, H. and Meisel, A. (2021) Regulators of cholinergic signaling in disorders of the central nervous system. **J Neurochem** doi: 10.1111/jnc.15332. Online ahead of print.
2. Soreq, H., Podoly, E. and Gok, M. (2019). **Cholinesterases**. In ***Encyclopedia of Molecular Pharmacology***, 3rd edition. Stefan Offermanns, Walter Rosenthal, Eds.
3. Lissek, T.,…Soreq, H.,…Hasan, M. T. (2017) Building Bridges through Science. **Neuron** 96, 730-735.
4. Maoz, R., Garfinkel, B. and Soreq, H. (2016) Alzheimer and ncRNAs in **Neuroepigenomics in Aging and Disease** (Ed) Delgado Morales,R. Springer, Volume 978 of the series *Advances in Experimental Medicine and Biology* pp 337-361 ISBN: 978-3-319-53888-4.
5. Pienica, P. and Soreq, H. (2016) microRNA regulators of cholinergic signaling link neuromuscular cadiac and metabolic systems. **Periodicum biologorum**, 118, 373-379
6. Berson, A. and Soreq, H. Heterogeneous nuclear ribonucleoprotein A1. **Encyclopedia of Signaling Molecules** (Ed) Choi, S. Springer, in press.
7. Hanan, M., Soreq, H. and Kadener, S. (2016) CircRNAs in thebrain. **RNA Biology**, 14:8, 1028-1034, DOI: 10.1080/15476286.2016.1255398
8. Meydan, C., Shenhar-Tsarfaty, S. and Soreq H. (2016) MicroRNA Regulators of Anxiety and Metabolic Disorders **Trends in Molecular Medicine**, 22, 798-812. Review.
9. Mishra, N. and Soreq, H. Stress reactions orchestrate parasympathetic functioning and inflammation under diverse cholinergic manipulations. in: ***Neuroendocrinology and Endocrinology: Handbook of Stress Series Volume 2***. (Ed) Fink, G. Elsevier.
10. Soreq, H. (2015) Checks and balances on cholinergic signaling, from brain to body and back. **Trends in Neuroscience**, 38. 448-458. Review.
11. Waiskopf, N., Shenhar-Tsarfaty, S. and Soreq, H. (2015). Serum cholinesterases as cardiac biomarkers. **Biomarkers in Cardiovascular Disease: Methods, Discoveries and Applications** V.B. Patel, V.R. Preedy (eds.)**,** Springer Science+Business Media Dordrecht**.**
12. Waiskopf, N. and Soreq, H. (2015) Cholinesterase Inhibitors: From Molecular Mechanisms of Action to Current and Future Prospects in 2nd edition of **Handbook of Toxicology of Chemical Warfare Agent**. (Ed) Gupta, R. Academic Press/Elsevier. 2015.
13. Soreq, H. (2014) Dimmer **Odyssey** (Hebrew), 25.
14. Greenberg, DS and Soreq, H. MicroRNA therapeutics in neurological disease (2014). **Current Pharmaceutical Design**, 20, 6022-6027. Review.
15. Soreq, H. and Barbash, S. (2013) ´Role of microRNAs in Alzheimer's disease', In **MicroRNAs in Medicine**. (Ed.) Charles H. Lawrie, Wiley-Blackwell pp. 535-548.
16. Kress M, Hüttenhofer A, Landry M, Kuner R, Favereaux A, Greenberg D, Bednarik J, Heppenstall P, Kronenberg F, Malcangio M, Rittner H, Uçeyler N, Trajanoski Z, Mouritzen P, Birklein F, Sommer C, Soreq H. (2013) microRNAs in nociceptive circuits as predictors of future clinical applications. **Frontiers in Molecular Neuroscience**, 6, 33. Review.
17. Soreq, L., Bergman, H., Israel, Z. and Soreq, H. (2013) Overlapping molecular signatures in Parkinson's patient leukocytes before and after treatment and in mouse model brain regions. Arianna Bellucci (Ed) Special issue "Novel perspectives in Parkinson's disease therapy" **CNS & Neurological Disorders – Drug Targets**, 12, 1086-93. Review.
18. Greenberg, D. S. and Soreq, H. (2013) Alternative Splicing. In **2nd edition, *Brenner's Online Encyclopedia of Genetics***, (Eds) Maloy, S. and Hughes, K., Elsevier/Academic Press. pp. 97-98.
19. Tsim, K and Soreq H. (2012) Acetylcholinesterase: Old Questions and New Developments, Editorial article. **Front. Mol. Neurosci.** 5:101. doi: 10.3389/fnmol.2012.00101.
20. Gilboa-Geffen A., Hartmann, G. and Soreq, H. (2012) Stressing Hematopoiesis and Immunity: an acetylcholinesterase window into nervous and immune system interactions. **Frontiers in Molecular Neuroscience**, 5, Article 30: 1-10. (Review).
21. Soreq, H. and Greenberg, D.S. 2012 ACHE (acetylcholinesterase) in **Atlas of Genetics and Cytogeneticsin Oncology and Haematology** Jean-Loup Huret, Ed Published in **Atlas Database**: May 2012Online updated version : http://AtlasGeneticsOncology.org/Genes/ACHEID44317ch7q22.htmlDOI: 10.4267/2042/48145 Atlas Genet Cytogenet Oncol Haematol. 16, 710-713
22. Soreq, H. and Wolf, Y. (2011) NeurimmiRs: Micro-RNAs in the neuroimmune interface. **Trends in Molecular Medicine**, 17, 548-55. (Review).

23. Shenhar-Tsarfaty, S., Ben Assayag, E, Bornstein, N. M., Berliner, S. and Soreq, H. (2011) Post-Stroke Cholinergic Biomarkers. Letter regarding Science e-letter about Wong CH, Jenne CN, Lee WY, Léger C, Kubes P. (2011) Functional innervation of hepatic iNKT cells is immunosuppressive following stroke. **Science**.;334, 101-105.
24. Højgaard, L., Baselga, J., Brasseur, D., Brodniewicz-Proba, T., Celis, J., Aviles, F. F., Garaci, E., Gasser, S., Jiricny, J., Kieny, M.-P., Kuznicki, J., Mattaj, I., Olauson, A., Pitkanan, A., Schöler, H., Soltesz, G., Soreq, H., Taipale, V., and Taruscio, D. (2011) Europe and the century of biomedical discovery and implementation of the European Commission Science Advisory Board in Health. **World Report Lancet** 2011; 377: 541 DOI:10.1016/S0140-6736(11)60180-3.
25. Mor, I. Soreq, H. (2011) Reproductive and Developmental Toxicology Section 11 Special Topics in "**Reproductive and Developmental Toxicology**" (Academic Press/Elsevier). Ed., Ramesh C. Gupta., pp. 863-870.
26. Berson, A. and Soreq H. (2010) It all starts at the ends: Multifaceted involvement of N- and C-terminally modified cholinesterases in Alzheimer's disease. **Maimonides Medical Journal (RMMJ)**, **1**(2) e004. (Review)
27. Berson, A., Hanan, M. and Soreq, H. (2010) Stress and Neurodegeneration: Adding Insult to Injury? In **STRESS: from molecules to behaviour. A comprehensive analysis of the neurobiology of stress responses**. (Eds.) Soreq, H. Kaufer, D. and Friedman, A. Wiley-VCH Verlag GmbH, Weinham, Germany, pp. 299-316.
28. Podoly, E. and Soreq, H. (2010) The Bimodal Features of Butyrylcholinesterase in Cholinergic Neurotransmission and Amyloid Suppression, Chapter 4 in **EMERGING DRUGS AND TARGETS FOR ALZHEIMER´S DISEASE Volume 1: Beta-Amyloiod, Tau Protein and Glucose Metabolism**, Ana Martinez Ed. RSC Drug Discovery Series, Royal Society of Chemistry Publ. Cambrigde, England, pp.59-93
29. Cohen, J., Zimmerman, G., Friedman, A. and Soreq, H. (2010). "Genomic implications of anticholinesterase activities." In "**Anticholinesterase Pesticides: Metabolism, Neurotoxicity and Epidemiology**". Tetsuo Satoh and Ramesh Gupta, Eds,, John Wiley & Sons, pp.19-24.
30. Geyer, B., Evron, T. Mor, T. and Soreq, H. (2009) Organophosphate intoxication: Molecular Consequences, Mechanisms and Solutions. Ramesh Gupta, Editor. In: **Handbook of the Toxicology of Chemical Warfare Agents**. Elsevier, Publ. pp. 691-720.
31. Shaked, I., Zimmerman, G. and Soreq, H. (2008) Stress-induced Alternative Splicing Modulations in Brain and Periphery: Acetylcholinesterase as a Case Study. In **Ann N Y Acad Sci**, **1148**, 269-281.
32. Diamant, S., Podoly, E., Bruck, T., Langermann S., Wilgus, H. and Soreq H. (2008) The Helical C-terminal domain of human Butyrylcholinesterase attenuates β-Amyloid fibrils in vitro formation. In **New Trends in Alzheimer and Parkinson Related Disorders: ADPD 2007 Conference Proceedings**. Hanin I., Windisch M., Poewe W., Fisher A. Eds.:Medimond, Bologna pp. 85-89.
33. Soreq, H. and Gazit, E. (2008) The Structural Basis of Amyloid Formation.(Editorial) **Cur. Alzheimer Res.**, **5**, 232.
34. Soreq, H. (2008) Cholinesterases, from molecular complexity to non-hydrolytic functions. Preface to Minireview Series. **FEBS 275**, 603 (Cover illustration).
35. Zimmerman, G. and Soreq, H. (2007) Remembering Trauma: The role of acetylcholinesterase in the formation of fear memories. In D. Mendels (ed.) ***On memory: An interdisciplinary approach,*** Peter Lang (publ) Oxford, pp.319-329.
36. Podoly, E., Diamant, S., Friedler, A., Livnah, O. and Soreq, H. (2008) Long-term neuroprotection by Butyrylcholinesterase and its C-terminal peptide Confer In Vitro Suppression of Amyloid Fibril Formation. **2nd Edition of "Chemical Warfare Agents: Chemistry Pharmacology, Toxicology and Therapeutics**. Ed B. Lukey, S. M. Somani and J. A. Romano, Eds. CRC Press, Boca Raton. pp. 203-218.
37. Soreq, H. and Podoly, E. (2008) Cholinesterases. ***Encyclopedia of Molecular Pharmacology*, 2nd Edition**, Eds. Offermanns, S. and Rosenthal, W. Springer-Verlag GmbH, Heidelberg. pp. 356-361.
38. Soreq, H. (2007). Caught between the need to publish and the requirement to conceal. In: Landau, R and Shefler, G. (ed.s) ***Research Ethics,*** Magnes Press, Jerusalem, pp. 97-111 (Hebrew).
39. Soreq, H and Honigman, A. (2007). It is all about resolution. Meeting review. **FEBS Journal**, **274**, 924-927 (cover).
40. Soreq, H. (2007). Gulf War Syndrome, Psychological and Chemical Stressors. In **Encyclopedia of Stress - 2nd Edition**, Editor-in-Chief George Fink, Elsevier. Academic Press, Oxford. pp. 248-254.
41. Meshorer, E. and Soreq, H. (2006) Virtues and woes of AChE alternative splicing in stress-related neuropathologies. **Trends in neurosciences** 29, 216-224.
42. Zimmerman, G. and Soreq, G. (2006) "Readthrough" Acetylcholinesterase: A Multifaceted Inducer of Stress Reactions. **Journal of molecular neuroscience**, **30**, 197-200.
43. Dori, A. and Soreq H. (2006) Neuromuscular Therapeutics by RNA-targeted Suppression of *ACHE* Gene Expression. **NY Academy of Science**, **1082**, 77-90.
44. Shaked, I. and Soreq, H. (2006) Studying cholinergic features by transgenic manipulations of AChE gene expression. **The Brain Cholinergic System in Health and Disease** E. Giacobini, G. Pepeu, Eds. Informa Healthcare, London. pp 125-140.
45. Meshorer, E. and Soreq, H. (2005). mRNA modulations in stress and aging. In: Abel Lajtha (ed.) ***Handbook of Neurochemistry and Molecular Neurobiology, Volume 7***, Kluwer, New York. pp.585-608.
46. Soreq, H., Yirmiya, R., Cohen, O. and Glick, D. (2005). Acetylcholinesterase as a window onto stress responses. ***Handbook on Stress in the Brain Part 1, Neurobiology and Stress***. Elsevier Science, Amsterdam. Eds Steckler, Kalin and Reul Vol. 1, pp. 585-608.
47. Ben-Shaul, Y., Bergman, H. and Soreq, H. (2005) AChE and Parkinson's disease. **Recent Progress in Alzheimer's and Parkinson's Diseases**, Hanin I, Cacabelos R, Fisher A, editors. London and New York: Taylor & Francis; pp.33-44.
48. Sklan E.H., Shoham S. and Soreq H. (2004) Interaction of "Readthrough" Acetylcholinesterase with the PKC Scaffold Protein Rack1 Facilitates Antisense-Suppressible Contextual Fear Responses. In: Inestrosa, N.C. and Campos, E.O. (eds.), ***Cholinesterases in the Second Millennium: Molecular and Pathological Aspects*** P. Univ. Católica de Chile, Santiago, Chile, pp 65-74.

49. Pick, M., Flores-Flores, C. and Soreq H. (2004). From brain to blood: Alternative splicing evidence for the cholinergic basis of mammalian stress responses. In Pacak K., Aguilera G., Sabban E.L., Kvetnansky R. (eds.) ***Stress: Neuroendocrine and Generic Approaches*****,** Vol. 1018 pp. 85-98, **Ann. NY Acad. Sci., N.Y. Annals** *Review*. Online, www.annalsnyas.org.
50. Mor, T.S. and Soreq, H. (2004). Human cholinesterases from plants for detoxification. In: ***Encyclopedia of Plant and Crop Science,*** Goodman R.M. (ed); (Joshi L.section ed.), Marcel Dekker, New York. pp. 564-567.
51. Glick, D. and Soreq. H. (2003). Ethics, Public Policy and Behavioral Genetics. ***IMAJ* 5**: February: 83-86.
52. Shoham, S., Kovalev, E., Sklan, E. and Soreq, H. (2004). Readthrough acetylcholinesterase and cholinergic transmission. In Silman, I., Fisher, A., Anglister, L. Michaelson, D. and Soreq, H. (eds.) ***Cholinergic Mechanisms,*** Martin Dunitz , London, pp. 697-700.
53. Sklan, E.H., Birikh, K. and Soreq H. (2004) Two hybrid approach to the intracellular function(s) of readthrough acetylcholinesterase. In: Silman, I., Fisher, A., Anglister, L. Michaelson, D. and Soreq, H. (eds.) ***Cholinergic Mechanisms,*** Martin Dunitz , London, pp. 707-709.
54. Evron, T. and Soreq, H. (2004) Transgenic manipulations of neuromuscular junction maintenance. In: Silman, I., Fisher, A., Anglister, L. Michaelson, D. and Soreq, H. (eds.) ***Cholinergic Mechanisms,*** Martin Dunitz , London, pp. 567-569.
55. Soreq, H. Meshorer, E., Cohen, O., Yirmiya, R., Ginzberg, D. and Glick, D. (2004). The molecular neurobiology of acetylcholinesterase variants: from stressful insults to antisense intervention. In: Silman, I., Fisher, A., Anglister, L. Michaelson, D. and Soreq, H. (eds.) ***Cholinergic Mechanisms,*** Martin Dunitz , London, pp.119-124.
56. Glick, D., Ben Moyal, L. and Soreq, H. (2003) Genetic variation in butyrylcholinesterase and the physiological consequences for acetylcholinesterase function. In: Giacobini, E. (ed.) ***Butyrylcholinesterase*: *Function and Inhibition***, Martin Dunitz , London, pp.55-67.
57. Meshorer, E. and Soreq, H. (2002) Pre-mRNA splicing modulations in senescence. **Aging Cell**, 1, 10-16.
58. Perry, C. and Soreq, H. (2002). Transcriptional regulation of erythropoiesis: fine tuning of combinatorial multi-domain elements. **EJB**, 269, 3607–3618.
59. Perry, C. and Soreq, H. (2002). Runx1/AML1 in leukemia: disrupted association with diverse protein partners. **Leukemia Research**, 26, 221-228.
60. Meshorer, E. and Soreq, H. (2002) Antisense Intervention with Cholinergic Impairment Associated with Neurodegenerative Disease. **Mapping the Progress of Alzheimer's and Parkinson's Disease**. Y. Mizuno, A. Fisher, I. Hanin, Eds. Kluwer Academic/Plenum Publisher. pp. 45-48.
61. Soreq, H., Kaufer, D., Glick, D. and Friedman, A. (2002). The molecular biology of Blood Brain Barrier disruption under stress. In: **Brain Disease: Therapeutic Strategies and Repair**. O. Abramsky, D. Alastair, A. Miller and G. Said, Eds. Martin Dunitz, Publishers, pp.231-238.
62. Soreq, H. and Glick, D. (2002) Acetylcholinesterase. In: **The Encyclopedia of Molecular Medicine**.Thomas E. Creighton, Ed. Wiley pp. 14-16.
63. Soreq, H., Kaufer, D., Friedman, A. and Glick, D. (2002) Blood-Brain Barrier modulations and low-level exposure to Xenobiotics. In: "**Chemical Warfare Agents: Low Level Toxicity**". S. M. Somani and J. A. Romano, Eds. CRC Press, Boca Raton, FL pp. 121-144.
64. Soreq, H. and Glick, D. (2002). Novel roles for cholinesterases in stress and inhibitor responses. Ezio Giacobini (Ed.) In: **Cholinesterases and cholinesterase inhibitors: basic, preclinical and clinical aspects**. Martin Dunitz Ltd. pp. 47-61.
65. Glick, D., Shapira, M., and Soreq, H. (2002). Molecular neurotoxicology implications of acetylcholinesterase inhibition. In: **Site-Selective Neurotoxicology**, D. S. Lester, W. Slikker, Jr. and P. Lazarovici, Eds. Plenum Press, New York, pp. 116-133.
66. Lev-Lehman, E., Seidman, S., Ginzberg, D. and Soreq, H. (2002) Antisense oligomers in vitro and in vivo. In **Antisense Therapeutics**, A. Cohen and S. Smisek, Eds. Plenum Press.
67. Shapira, M., Glick, D., Gilbert, J.P., and Soreq, H. (2001). Autism, stress and chromosome 7 genes. In: **The Research Basis of Autism Intervention**. Kluwer Academic/Plenum Publishers, NY. E. Schloper, L. Marcus, C. Shulman and N. Yirmiya, Eds. pp. 103-113.
68. Soreq, H. and Seidman, S. (2001). Acetylcholinesterase – new roles for an old actor. **Nature Neuroscience Reviews 2**, 294-302.
69. Soreq, H. and Glick, D. (2001). Readthrough acetylcholinesterase is an antisense-suppressible stress-responding element. In: **Conformational Diseases – a compendium**. The Bialik Institute, Jerusalem. E. Katzir, B. Solomon and A. Taraboulos, Eds. pp. 226-231.
70. Perry, C. and Soreq, H. (2001). The Leukemic effect of anticholinesterases. **Leukemia Research**, 25, 1027-1028.
71. Shapira, M., Grant, A., Korner, M., and Soreq, H. (2000) Genomic and transcriptional characterization of the human ACHE locus indicates complex involvement with acquired and inherited diseases. **Israel Medical Assoc. J.**, 2, 470-473
72. Soreq, H. and Seidman, S. (2000). Antisense approach to anticholinesterase therapeutics. **Israel Med. Assoc. J.**,2, 81-85.
73. Soreq, H. and Seidman, S. (2001). Antisense approach to isoform – specific blockade of acetylcholinesterase. In: **Antisense Drug Technology: Principles, Strategies and Applications**. S. T. Crooke, Ed. Marcel Dekker, Inc., Carlsbad, CA. pp. 565-586.
74. Soreq, H. (2000). Psychological and chemical stressors and the Gulf War syndrome. **Encyclopedia of Stress**. Academic Press, San Diego pp. 302-312.
75. Soreq, H., Kaufer, D. and Friedman, A. (2000). The molecular biology of post-traumatic disorder. **Harefuah**, 138, 864-870 (Hebrew).
76. Sternfeld, M. and Soreq, H., (2000) Acetylcholinesterase variants in mammalian stress: catalytic short-term and structural long-term roles. In : **Molecular Genetics of Mental Disorders**, M. Briley, Ed Martin Dunitz London. pp. 133-154.
77. Kaufer, D. and Soreq, H. (1999) Tracking cholinergic pathways from psychological and chemical stressors to variable neurodegeneration paradigms. **Current Opinion in Neurology** 12, 739-743.
78. Glick, D. and Soreq, H. (1999). Brain research at the end of the millenium: New Horizons. **ID Drugs** 2, 983-987.

79. Soreq, H. (1999). The Molecular biology of post-traumatic stress and antisense technology. **Geriatric Medicine** 37, 1323-1328 [Japanese].
80. Seidman, S., Eckstein, F., Grifman, M., and Soreq, H. (1999). Antisense technologies have a future fighting Neurodegenerative diseases. **Antisense Research and Nucleic Acids Drug Development** 9, 333-340.
81. Seidman, S., Cohen, O., Ginzberg, D., Eichengreen, E., Pollak, Y., Yirmiya, R. and Soreq, H. (1999). Multilevel approaches to AChE-induced impairments in learning and memory. In: **Cholinesterases and Related Proteins**, Quinn, D.M., Doctor, B.P. and Taylor, P. Eds. Plenum Press, New York. pp 183-184.
82. Shapira, M., Korner, M., Bosgraaf, L., Tur-Kaspa, I. and Soreq, H. (1999). The human ACHE locus includes a polymorphic enhancer domain 17 kb upstream from the transcription start site. In: **Cholinesterases and Related Proteins**, Quinn, D.M., Doctor, B.P. and Taylor, P. Eds. Plenum Press, New York. pp 111.
83. Kaufer, D., Friedman, A. and Soreq, H. (1999). The vicious circle of stress and anticholinesterase exposure. **The Neuroscientist** 5, 173-183.
84. Soreq, H. (1998) Genetic manipulations of catalytic and non-catalytic functions of human cholinesterases. In: **Structure and Function of Cholinesterases and Related Proteins**, Quinn, D.M., Doctor, B.P. and Taylor, P. Eds. Plenum Press, New York. pp 35-39.
85. Soreq, H. (1998). Cholinergic Mechanisms. In: **ID Drugs** 1, 787-793.
86. Soreq, H. and Seidman, S. (1998) The non-catalytic role and complex management of acetylcholinesterase in the mammalian brain call for RNA-based therapies. In: **Progress in Alzheimer's and Parkinson's Diseases: Recent Advances**. Fisher, A., Hanin, I. and Yoshida, M. Eds. Plenum Press, New York and London. pp. 551-556.
87. Grifman, M. Ginzberg, D. and Soreq, H. (1998) Antisense oligodeoxynucleotide-dependent suppression of acetylcholinesterase expression reduces process extension from primary mammalian neurons. In: **Progress in Alzheimer's and Parkinson's Diseases: Recent Advances**. Fisher, A., Hanin, I. and Yoshida, M. Eds. Plenum Press, New York and London. pp. 557-562.
88. Soreq, H., Kaufer, D., Beeri, R. and Friedman A. (1997) Short and long term manipulations of cholinergic functions under stress conditions and in transgenic animals. **Chemistry** 34 (Hebrew):102-103.
89. Soreq, H. and Glick, D. (1997). Transgenic manipulations of cholinergic functions in vertebrates. In: **Proceedings of the Second Chemical and Biological Medical Treatment Symposium**, NC-Laboratory of Spiez, Spiez, Switzerland, 7-12 July 1966, B. Price, Ed. Applied Science and Analysis, Portland, Maine, USA, 152-154.
90. Sternfeld, M., Sela, K., Seidman, S., Timberg, R. and Soreq, H. (1997) Molecular dissection of protein domains directing the tissue targetting of Acetylcholinesterase isoforms. In: **Neurotransmitter Release and Uptake, NATO ASI Series. Vol. H100**, S. Pogun, Ed., Springer, Berlin, pp 309-316.
91. Sternfeld, M., Seidman, S., Beeri, R. and Soreq, H. (1997) Catalytic and non-catalytic acetylcholinesterase implied from Transgenic ACHE Expression in vertebrates. In: **Neurotransmitter Release and Uptake, NATO ASI Series. Vol. H100**, S. Pogun, Ed., Springer, Berlin, pp 301-308.
92. Grifman, M., Lev-Lehman, E., Ginzberg, D., Eckstein, F., Zakut, H. and Soreq, H. (1997). Potential antisense oligonucleotide therapies for neurodegenerative diseases. In: **Concepts in Gene Therapy**, M. Strauss and J.A. Barranger, Eds. Walter de Gruyter & Co., Berlin. pp. 141-167.
93. Soreq, H. (1996). Synaptic transmission - cellular and molecular basis. **A book review on H. Zimmermann's Monography** (Thieme, Stuttgart, 1994). J. Neurochem. **66**, 2626.
94. Kaufer-Nachum, D., Friedman, A., Sternfeld, M., Seidman, S., Beeri, R., Andres, C. and Soreq, H. (1996). Central and peripheral consequences of cholinergic imbalance in Alzheimer's disease. In: **Alzheimer Disease: From Molecular Biology to Therapy**. Giacobini, E. and Becker, R. eds. Birkhauser, Boston, pp. 153-158.
95. Andres, C., Beeri, R., Huberman, T., Shani, M. and Soreq, H. (1996) Cholinergic drug resistance and impaired spatial learning in transgenic mice overexpressing human brain acetylcholinesterase. **Progress in Brain Res. 109**, 265-272.
96. Soreq, H., Lev-Lehman, E., Patinkin, D., Grifman, M., Ehrlich, G., Ginzberg, D., Eckstein, F. and Zakut, H. (1995) Antisense oligonucleotides suppressing expression of cholinesterase genes modulate hematopoiesis in /vivo and ex-vivo. In: **Enzymes of the Cholinesterases Family**. Quinn, D.M., Balasubramanian, A.S., Doctor B.P. and Taylor, P. Eds. Plenum Press, New York, pp 1-6.
97. Schwarz, M., Glick, D., Loewenstein, Y. and Soreq, H. (1995) Engineering of human cholinesterases explains and predicts diverse consequences of administration of various drugs and poisons. **Pharmac. Ther. 67**, 283-322.
98. Hanin, I., Yaron, A., Ginzberg, D. and Soreq, H. (1995) The cholinotoxin AF64A differentially attenuates the in vitro transcription of human cholinesterase genes. In: **Alzheimer's and Parkinson's Diseases: Recent Advances**, Hanin, I., Yoshida, M. and Fisher, A. Eds. Plenum Press, New York, pp. 339-345.
99. Lev-Lehman, E., El-Tamer, A., Ginzberg, D., Hanin, I. and Soreq, H. (1995) Transient alterations in the in vivo levels of cholinesterase mRNAs suggest differential adjustment to cholinotoxic stimuli. In: **Alzheimer's and Parkinson's Diseases: Recent Advances**, Hanin, I., Yoshida, M. and Fisher, A. Eds. Plenum Press, New York, pp. 347-352.
100. Ehrlich, G., Ginzberg, D., Schwarz, M., Loewenstein, Y., Glick, D., Kerem, B., Ben-Ari, S., Zakut, H. and Soreq, H. (1995) Population diversity of point mutations in the human ACHE and BCHE genes predicts variable responses to anti-cholinesterase drugs. In: **Alzheimer's and Parkinson's Diseases**, Hanin, I. et al. eds. Plenum Press, New York, pp. 661 - 667.
101. Soreq, H., Beeri, R., Seidman, S., Timberg, R., Loewenstein, Y., Sternfeld, M. and Andres, C. (1994) Modulating cholinergic neurotransmission through transgenic overexpression of human cholinesterases. In: **Alzheimer Therapy: Therapeutic Strategies**, E. Giacobini and R. Becker, Eds. Birkhauser, Boston. pp. 84-87.
102. Ben Aziz-Aloya, R., Sternfeld, M. and Soreq, H. (1993) Promoter elements and alternative splicing options in the human ACHE gene. In: **CNS cholinergic Function and Dysfunction**. Prog. Brain Res. **48**, 147-153.

103. Zakut, H., Lapidot-Lifson, Y., Patinkin, D., Ginzberg, D., Ehrlich, G., Eckstein, F. and Soreq, H. (1992) Clinical implications of cholinesterase aberrations in syndromes of hemopoietic cell division. In: **Multidisciplinary approaches to cholinesterase functions**. A. Shaefferman and B. Velan, Eds. Plenum Press, New York pp. 269-276.
104. Gnatt, A., Loewenstein, Y., Ben Aziz - Aloya, R. and Soreq, H. (1992) Molecular dissection of functional domains in human cholinesterases expressed in microinjected Xenopus oocytes. **Multidisciplinary approaches to cholinesterase functions**. A. Shaefferman and B. Velan, Eds. Plenum Press, New York pp. 157-164.
105. Beeri, R., Gnatt, A. Lapidot-Lifson, Y., Ginzberg, D., Shani, M., Zakut, H. and Soreq, H. (1992) Testicular Gene Amplification and impaired BCHE transcription induced in transgenic mice by the human BCHE coding sequence. **Multidisciplinary approaches to cholinesterase functions**. A. Shaefferman and B. Velan, Eds. Plenum Press, New York pp. 91-94.
106. Soreq, H. and Seidman, S. (1992) Xenopus oocyte microinjection: from genes to proteins. **Methods Enzymol. 207**, 225-265.
107. Soreq, H., Ehrlich, G., Gnatt, A., Neville, L., Ben-Aziz-Aloya, R., Seidman, S., Ginzberg, D. Lapidot-Lifson, Y. and Zakut, H. (1992) Amplification and mutagenesis of the acetylcholinesterase and butyrlcholinesterase genes in primary human tumors. In: **Gene Amplification in Mammalian Cells**. R.E. Kellems, ed. Marcel Dekker, Inc., New York pp. 417-428.
108. Soreq, H., Lapidot-Lifson, Y. and Zakut, H. (1991) Role for cholinesterases in Tumorigenesis? **Cancer Cells**, **3**, 511-516.
109. Soreq, H., Loewenstein, Y., Neville, L.F., Seidman, S., Ben-Aziz, R., Ehrlich, G., Gnatt, A. and Ginzberg, D. (1991) Structure-function relationship studies in human cholinesterases as an approach for evaluating potential pharmacotherapeutic and/or toxicity effects of cholinergic drugs. In: **Cholinergic Basis for Alzheimer Therapy**. R.E. Becker and E. Giacobini, Eds. Birkhauser, Boston. pp. 46-52.
110. Soreq, H., Neville, L., Gnatt, A., Ben-Aziz, R., Lapidot-Lifson, Y., Ehrlich, G., Seidman, S., Lev-Lehman, E., Beeri, R., Ginzberg, D. and Zakut, H. (1991) Structure-function relationships, in vivo mutability and gene amplification in human cholinesterases, targets for organophosphorous poisons. In: **Biotechnology: Bridging Research and Applications**, Kamely D, Chakrabarty A.M., Kornguth S.E., eds. Kluwer Academic Publishers, Boston pp. 153-166.
111. Neville, L.F., Gnatt, A., Seidman, S., Loewenstein, Y., Padan, R. and Soreq, H. (1991) Modified ligand-binding properties of butyrylcholinesterase muteins produced in microinjected Xenopus oocytes. In: **Proceedings of the Third International Meeting on Cholinesterases**. ACS books, Washington, D.C. J. Massoulie, F. Bacou, E. Barnard, A. Chatonnet, B.P. Doctor and D.M. Quinn, eds. pp. 197-198.
112. Ben Aziz, R., Gnatt, A., Prody, C.A., Lev-Lehman, E., Neville, L., Seidman, S., Ginzberg, D., Soreq, H., Lapidot-Lifson, Y. and Zakut, H. (1991) Differential codon usage and distinct surface probabilities in human acetylcholinesterase and butyrylcholinesterase. In: **Proceedings of the Third International Meeting on Cholinesterases**. ACS books, Washington, D.C. J. Massoulie, F. Bacou, E. Barnard, A. Chatonnet, B.P. Doctor and D.M. Quinn, eds. pp. 172-178.
113. Dreyfus, P.A., Pincon-Raymond, M., Zakut, H., Seidman, S. and Soreq, H. (1991) Search for the molecular origins of butyrylcholinesterase polymorphism by cDNA screening, deletion mutagenesis and Xenopus oocytes co-injections. In: **Proceedings of the Third International Meeting on Cholinesterases**. ACS books, Washington, D.C., J. Massoulie, F. Bacou, E. Barnard, A. Chatonnet, B.P. Doctor and D.M. Quinn, eds. pp. 162-167.
114. Soreq, H. (1990) Cholinesterases in cellular and molecular neurobiology. **Cell. Mol. Neurobiol.** 11, 3-5.
115. Soreq, H. and Zakut, H. (1990) Expression and in vivo amplification of the human cholinesterase genes. **Progress in Brain Research**. Vol. 84 S.-M. Aquilonius and P.-G. Gillberg, Eds. Elsevier Science Publishers B.V. (Amsterdam) pp. 51-61.
116. Ayalon, A., Zakut, H., Prody, C.A. and Soreq, H. (1990) Preferential transcription of acetylcholinesterase over butyrylcholinesterase mRNAs in fetal human cholinergic neurons. In: **Gene Expression in the nervous system**. (A.M. Giuffrida-Stella, Ed.) Alan R. Liss, New York pp. 191-203.
117. Soreq, H. (1990) Elements of Molecular Neurobiology (an invited Book Review) **Trends in Neurosci.**, **13**, 351-352.
118. Ehrlich, G., Soreq, H. and Zakut, H. (1990) Gene amplification in primary human tumors. **HaRefuah**, **11**8, 579-586 (Hebrew).
119. Seidman, S. and Soreq, H. (1990) Co-injection of Xenopus oocytes with cDNA-produced and native mRNAs: a Molecular Biological approach to the tissue specific processing of human cholinesterases. **Int. Rev. in Neurobiology**, **32**, 107-139.
120. Soreq, H. and Zakut, H. (1990) Amplification of butyrylcholinesterase and acetylcholinesterase genes in normal and tumor tissues: Putative relationship to organophosphorous poisoning. **Pharmaceutical Research**, 7, 1-7.
121. Soreq, H. and Prody, C. (1989) Sequence similarities between human acetylcholinesterase and related proteins: Putative implications for therapy of anticholinesterase intoxication. In: **Computer-assisted modeling of receptor-ligand interactions, theoretical aspects and applications to drug design**. (Golombek, A. and Rein, R., eds.), Alan R. Liss, New York, pp. 347-359.
122. Soreq, H. (1987) The case of the human pink spider toxinase. **Trends in Biotechnology** 5, 183-185.
123. Gnatt, A. and Soreq, H. (1987) Molecular cloning of human cholinesterase genes: Potential applications in neurotoxicology. In: **Model systems in Neurotoxicology: Alternative approaches to Animal Testing**. Eds. A. Shahar and A. M.. Goldberg, Alan R Liss, Inc. New York, pp. 111-119.
124. Soreq, H., Livneh, A. and Zakut, H. (1987) The role of human antibodies towards acetylcholinesterase in neuromuscular dysfunction. **Ann. N.Y. Acad. Sci. 505**, 769-772.
125. Soreq, H. and Gnatt, A. (1987) Molecular Biological Search for human genes encoding cholinesterases. **Molecular Neurobiology 1**, 47-80.
126. Soreq, H. and Zakut, H. (1986) Regulation and biosynthesis of cholinesterases in the human brain. In: **New concepts in Alzheinmer's disease**. Briley, M., Kato, A. C. and Weber, M., eds., Pierre Fabre Monograph Series, Vol. I, pp. 140-156.
127. Soreq, H., Zevin-Sonkin, D., Goldberg, O. and Prody, C. (1987) Molecular biology approach to the expression and properties of mammalian cholinesterases. In: **Current Topics in Neurobiology: Molecular Neurobiology**. S. Heinemann and J. Patrick, eds. Plenum Publishing Corp., pp. 191-224.

128. Soreq, H. (1985) Biosynthesis of biologically active proteins in mRNA-microinjected Xenopus oocytes. **Critical Reviews in Biochemistry**, **18**, 199-238.

129. Soreq, H., Zevin-Sonkin, D., Avni, A., Hall, L. H. C. and Spierer, P. (1984) Human cholinesterase gene is homologous to the Ace locus in Drosophila. In: **Dev. Neurosci: Physiological, Pharmacological and Clinical Aspects**, F. Caciagli, E. Giacobini and R. Paoletti, eds. Elsevier Science Publishers B. V., pp. 95-99.

130. Soreq, H. (1984) Post-transciptional regulation of ontogenetically modulated proteins in the nervous system. In: **The Role of cell interactions in early neurogenesis**. A. M. Dupart, A. C. Kato and M. Weber, eds., Plenum Press, pp. 131-138.

131. Miskin, R. and Soreq, H. (1983) Human and rat mRNAs are translated into Urokinase-type and tissue plasminogen activators in microinjected Xenopus oocytes. In: **Progress in Fibrionolysis, Vol. 6**, F. Davidson, F. Brachman, C. A. Bouvier and E. K. O. Kruith, eds. Churchill Livingstone, Edinburgh, pp. 257-269.

132. Parvari, R., Silman, I. and Soreq, H. (1983) Ontogenetic and agranulation-induced alterations in cholinesterases and in cholinesterase mRNA in the rodent cerebellum. In: **Cholinesterases - Fundamental and Applied aspects**. M. Brzin, ed. W. de Groyter, Berlin, New York, pp.219-228.

133. Burmeister, M. and Soreq, H. (1984) Production and analysis of radioactivity labeled translation products in microinjected oocytes. **IBRO Handbook Series, methods in the neurosciences. Vol. 7**. John Wiley and Sons (London, New York). Soreq, H. (ed.) pp. 195-211.

134. Soreq, H. (1984) Bioassays of oocyte-produced brain enzymes. In: **Molecular Biology Approach to the Neurosciences. IBRO Handbook Series, methods in the neurosciences. Vol. 7**. John Wiley and Sons (London, New York). Soreq, H. (ed.) pp. 187-194.

135. Soreq, H., Parvari, R. and Silman, I. (1982) Biosynthesis of acetylcholinesterase in rat brain and Torpedo electric organ is directed by scarce mRNA species. **Prog. in Br. Res. 58**, 107-115.

136. Littauer, U. Z. and Soreq, H. (1982) Polynucleotide Phosphorylase. In: **The Enzymes, Vol. XV**, pp. 517-553.

137. Littauer, U. Z. and Soreq, H. (1982) Regulatory function(s) of 3'-end sequences in translatable RNA. **Prog. Nuc. A. Res.** 27 (Waldo E. Cohen, ed.). Academic Press, New York, pp. 53-83.

138. Soreq, H. and Miskin, R. (1980) Screening of the protease plasminogen activator in the developing mouse brain. In: **Neurotransmitters and Their Receptors**. (U. Z. Littauer et al., eds.). Wiley, London, p. 559-563.

139. Littauer, U. Z., Soreq, H. and Cornelis, P. (1980) Polynucleotide phosphorylase as a probe for the regulatory function of the 3'-OH region of mRNA and viral RNA in translation. In: **Enzyme Regulation and Mechanism of Action**. (P. Mildner and B. Reis, eds.). Pergamon Press, New York, pp. 233-243.

140. Marbaix, G., Huez, G., Soreq, H., Gallwitz, D., Weinberg, E., Devos, R., Hubert, E. and Cleuter, Y. (1979) Role of the polyadenylate segment in the stability of eukaryotic messenger RNAs. In: **Gene Functions - 12th FEBS Meeting**, Dresden, 1978 (S. Rosenthal, ed.). Pergamon Press, Oxford, pp. 427-432.

141. Marbaix, G., Huez, G. and Soreq, H. (1977) A role for the polyadenylate segment in the stability of eukaryotic messenger RNAs. **Trends in Biochemical Sciences 11**, 106-107.

142. Littauer, U. Z., Salomon, R., Soreq, H., Fleischer, G. and Sela, I. (1975) Characterization of the aminoacylated region at the 3'-terminus of TMV RNA. In: Organization and Expression of the Viral Genome. ***Molecular Interaction in Genetic Translation*. Proc. 10th FEBS Meeting**, Paris, Amsterdam, Elsevier **39**, 133-139.