

Chaim Gilon,

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Short CV: Date of start as faculty member in HUJI: 1976

Current academic degree: Professor Emeritus Active. Born: 17-11-1937

Research activities.

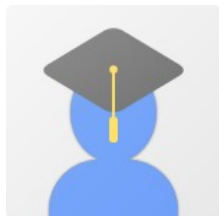
Molecular mechanism of Memory Recently, based on existing literature and basic principles of chemistry and biology, we suggest a credible model that describes the molecular basis of memory.

Development and application of technologies for the conversion of bioactive peptides and active regions in proteins into drugs. Over the years we have developed technologies such as: Backbone Cyclization, Cycloscan, Combinatorial Cycloscan and Helix Walk. These technologies are based on the design and synthesis of libraries with conformational diversity based on a parent active peptide or active region in protein and screening them for their biological activity, metabolic stability and intestinal bioavailability. From these libraries the most active, selective, metabolically stable and orally bioavailable peptidomimetic with drug like properties is selected for in vivo preclinical studies. Few recent examples for the application of these technologies: (1) discovery of a novel macrocyclic, orally available, potent inhibitor of HIV-1 replication in cells, a drug lead for AIDS (2) potent orally available, mimetic of α -MSH that inhibits weight gain in mice. (3) Extremely highly potent (pictogram/animal) drug lead that cure rheumatoid arthritis in mice. (4) Development of agonist and antagonists based on NK peptides that enhance or block fish reproduction

Signal Transduction Therapy. We have invented this concept in 1985. Recent applications: (1) in-vivo active inhibitor of the GPCR CC2 receptor dimerization which is the key protein in multiple sclerosis (2) potent

substrate inhibitor of PKB, a key protein in the signal transduction of many cancers.

Publications and Patents. 200 publications in peer review journals. 40 patents. 8 articles were cited more than 250 times.



Chaim Gilon

Professor Emeritus Active, Institute of Chemistry,
HUJI
Chemistry of memory, peptide and protein drugs

Google Scholar

Citation indices	All	Since 2011
Citations	8950	2060
h-index	49	22
i10-index	139	54

Title	1–20	Cited by	Year
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Superiority of the S, S conformation in diverse pharmacological processes: Intestinal transport and entry inhibition activity of novel anti-HIV drug lead			
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S Ling, Y Liu, J Fu, A Colletta, C Gilon, J Holoshitz			2015
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I Levi, Y Eskira, M Eisenstein, C Gilon, A Hoffman, Y Tal-Gan, J Fanous, ...			2015
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Title	1–20	Cited by	Year
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Allosteric inhibition of g-protein coupled receptor oligomerization: strategies and challenges for drug development	M Hurevich, A Talhami, D E Shalev, C Gilon Current topics in medicinal chemistry 14 (15), 1842-1863	1	2014
Stabilized Peptide Helices For Inhibiting Dimerization Of Chemokine C Motif Receptor 2 (CCR2)	C Gilon, M Ratner-Hurevich, M Hurevich US Patent App. 14/339,027		2014
Compositions and methods for inducing an immune response	J Holoshitz, S Ling, X Pi, D De Almeida, C Gilon, A Hoffman US Patent 8,658,603	1	2014
The molecular basis of memory. Part 3: tagging with “emotive” neurotransmitters	G Marx, C Gilon Frontiers in aging neuroscience 6	2	2014
A highly efficient in situ N-acetylation approach for solid phase synthesis	K Chandra, TK Roy, JN Naoum, C Gilon, RB Gerber, A Friedler Organic & biomolecular chemistry 12 (12), 1879-1884	7	2014
Inhibition of inositol monophosphatase (IMPase) at the calbindin-D28k binding site: Molecular and behavioral aspects	I Levi, Y Eskira, M Eisenstein, C Gilon, A Hoffman, Y Talgan, J Fanous, ... European Neuropsychopharmacology 23 (12), 1806-1815	1	2013
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