

Stanford



Menashe Elazar

Sr Res Scientist-Basic Ls, Medicine - Med/Gastroenterology and Hepatology

SUPERVISORS

- Jeffrey Glenn

Bio

BIO

I graduated with a Ph.D from the laboratory of Prof. Eliahu Zlotkin at the Hebrew University of Jerusalem, where my research focused on Insect-selective neurotoxins expressing Baculoviruses. In December 2000 I joined the laboratory of Professor Jeffrey Glenn's at Stanford School of Medicine as a postdoctoral fellow. Here my research focused on HCV membrane association, specifically the association of NS5A and NS4B with host cell membranes and its role in HCV replication.

As a Senior Research Scientist at Professor Glenn's lab my interests focus around three major themes:

1. Broad spectrum antivirals targeting host functions
2. Viral genome RNA structures as antiviral targets
3. None Alcoholic Steatohepatitis (NASH) and its progression to hepatocellular carcinoma (HCC)

CURRENT ROLE AT STANFORD

Senior Research Scientist

EDUCATION AND CERTIFICATIONS

- Ph.D., The Hebrew University of Jerusalem , Cell Biology (2000)
- M.Sc., The Hebrew University of Jerusalem , Life Science (1994)
- B.Sc., The Hebrew University of Jerusalem , Biology (1993)

Publications

PUBLICATIONS

- **Combination of Novel Therapies for HDV.** *Viruses*
Elazar, M., Glenn, J. S.
2022; 14 (2)
- **Letter to the Editor regarding article "Emerging concepts for the treatment of hepatitis delta" [Menashe Elazar and Jeffrey S Glenn, Curr Opin Virol 24 (2017) 55-59] Reply** *CURRENT OPINION IN VIROLOGY*
Elazar, M., Glenn, J.
2018; 28: 169
- **Quantitative Evaluation of Viral Protein Binding to Phosphoinositide Receptors and Pharmacological Inhibition** *ANALYTICAL CHEMISTRY*
Kim, S., Jackman, J. A., Elazar, M., Cho, S., Glenn, J. S., Cho, N.
2017; 89 (18): 9742–50

- **Long-term culture of human liver tissue with advanced hepatic functions.** *JCI insight*
Ng, S. S., Xiong, A., Nguyen, K., Masek, M., No, D. Y., Elazar, M., Shteyer, E., Winters, M. A., Voedisch, A., Shaw, K., Rashid, S. T., Frank, C. W., Cho, et al
2017; 2 (11)
- **Hepatitis delta infection - Current and new treatment options** *BEST PRACTICE & RESEARCH CLINICAL GASTROENTEROLOGY*
Elazar, M., Koh, C., Glenn, J. S.
2017; 31 (3): 321–27
- **Emerging concepts for the treatment of hepatitis delta.** *Current opinion in virology*
Elazar, M., Glenn, J. S.
2017; 24: 55-59
- **A novel quantitative microarray antibody capture (Q-MAC) assay identifies an extremely high HDV prevalence amongst HBV infected Mongolians.** *Hepatology*
Chen, X., Oidovsambu, O., Liu, P., Grosely, R., Elazar, M., Winn, V. D., Fram, B., Boa, Z., Dai, H., Dashtseren, B., Yagaanbuyant, D., Genden, Z., Dashdorj, et al
2016
- **Phosphatidylinositol 4,5-Bisphosphate Is an HCV NS5A Ligand and Mediates Replication of the Viral Genome.** *Gastroenterology*
Cho, N., Lee, C., Pang, P. S., Pham, E. A., Fram, B., Nguyen, K., Xiong, A., Sklan, E. H., Elazar, M., Koytak, E. S., Kersten, C., Kanazawa, K. K., Frank, et al
2015; 148 (3): 616-625
- **The interaction between the Hepatitis C proteins NS4B and NS5A is involved in viral replication.** *Virology*
David, N., Yaffe, Y., Hagoel, L., Elazar, M., Glenn, J. S., Hirschberg, K., Sklan, E. H.
2015; 475: 139-149
- **HCV NS5A Inhibitors: The Devil Is in the Details** *GASTROENTEROLOGY*
Elazar, M., Glenn, J. S.
2014; 147 (2): 273–77
- **The Anti-Genomic (Negative) Strand of Hepatitis C Virus Is Not Targetable by shRNA**
Lisowski, L., Elazar, M., Chu, K., Glenn, J. S., Kay, M. A.
NATURE PUBLISHING GROUP.2013: S75
- **The anti-genomic (negative) strand of Hepatitis C Virus is not targetable by shRNA.** *Nucleic acids research*
Lisowski, L., Elazar, M., Chu, K., Glenn, J. S., Kay, M. A.
2013; 41 (6): 3688-3698
- **Using Chimeric Mice with Humanized Livers to Predict Human Drug Metabolism and a Drug-Drug Interaction** *JOURNAL OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS*
Nishimura, T., Hu, Y., Wu, M., Pham, E., Suemizu, H., Elazar, M., Liu, M., Idilman, R., Yurdaydin, C., Angus, P., Stedman, C., Murphy, B., Glenn, et al
2013; 344 (2): 388-396
- **Structural Map of a MicroRNA-122: Hepatitis C Virus Complex** *JOURNAL OF VIROLOGY*
Pang, P. S., Pham, E. A., Elazar, M., Patel, S. G., Eckart, M. R., Glenn, J. S.
2012; 86 (2): 1250-1254
- **Simplified RNA secondary structure mapping by automation of SHAPE data analysis** *NUCLEIC ACIDS RESEARCH*
Pang, P. S., Elazar, M., Pham, E. A., Glenn, J. S.
2011; 39 (22)
- **Using 'Humanized' TK-NOG mice to predict human drug metabolism and drug-drug interactions** *17th North American Regional International-Society-for-the-Study-of-Xenobiotics (ISSX) Meeting*
Hu, Y., Nishimura, T., Wu, M., Suemizu, H., Elazar, M., Glenn, J., Hasegawa, M., Nakamura, M., Nomura, T., Chen, Y., Zheng, M., Fitch, W. L., Peltz, et al
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- **NOVEL ANTI-HCV THERAPY: SINGLE SHRNA TARGETING BOTH STRANDS OF HCV**
Lisowski, L., Elazar, M., Chu, K., Glenn, J. S., Kay, M. A.
WILEY-BLACKWELL.2011: 418–19
- **The hepatitis C virus NS5A inhibitor (BMS-790052) alters the subcellular localization of the NS5A non-structural viral protein** *VIROLOGY*

- Lee, C., Ma, H., Hang, J. Q., Leveque, V., Sklan, E. H., Elazar, M., Klumpp, K., Glenn, J. S.
2011; 414 (1): 10-18
- **NS4B Targets and Inhibitors** *HEPATITIS C: ANTIVIRAL DRUG DISCOVERY AND DEVELOPMENT*
Elazar, M., Glenn, J. S., Tan, S. L., He, Y. P.
2011: 257-69
 - **Identification of a Class of HCV Inhibitors Directed Against the Nonstructural Protein NS4B** *SCIENCE TRANSLATIONAL MEDICINE*
Cho, N., Dvory-Sobol, H., Lee, C., Cho, S., Bryson, P., Masek, M., Elazar, M., Frank, C. W., Glenn, J. S.
2010; 2 (15)
 - **The Anti-Hepatitis C Agent Nitazoxanide Induces Phosphorylation of Eukaryotic Initiation Factor 2 alpha Via Protein Kinase Activated by Double-Stranded RNA Activation** *GASTROENTEROLOGY*
Elazar, M., Liu, M., Mckenna, S. A., Liu, P., Gehrig, E. A., Puglisi, J. D., Rossignol, J., Glenn, J. S.
2009; 137 (5): 1827-1835
 - **AAV Based RNAi Therapies To Treat and/or Prevent HCV in Animal Models**
Lisowski, L., Elazar, M., Grompe, M., Glenn, J. S., Kay, M. A.
NATURE PUBLISHING GROUP.2009: S14
 - **A Role for Nitazoxanide in Combination with STAT-C Agents for Inhibition of HCV Replication and the Potential for the Prevention of Viral Resistance**
Korba, B., Glenn, J., Elazar, M., Rossignol, J.
ELSEVIER SCIENCE BV.2009: A20
 - **Viral infection of human progenitor and liver-derived cells encapsulated in three-dimensional PEG-based hydrogel** *BIOMEDICAL MATERIALS*
Cho, N., Elazar, M., Xiong, A., Lee, W., Chiao, E., Baker, J., Frank, C. W., Glenn, J. S.
2009; 4 (1)
 - **Potential for Hepatitis C Virus Resistance to Nitazoxanide or Tizoxanide** *ANTIMICROBIAL AGENTS AND CHEMOTHERAPY*
Korba, B. E., Elazar, M., Lui, P., Rossignol, J., Glenn, J. S.
2008; 52 (11): 4069-4071
 - **PHARMACOLOGICAL INHIBITORS OF A NEW HEPATITIS C TARGET-RNA BINDING BY NS4B-DISCOVERED BY MICROFLUIDIC AFFINITY ANALYSIS** *59th Annual Meeting of the American-Association-for-the-Study-of-Liver-Diseases*
Einav, S., Gerber, D., Bryson, P. D., Sklan, E., Elazar, M., Maerkl, S., Dvory, H. S., Machlin, E., Gu, W., Quake, S., Glenn, J. S.
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 - **POTENTIAL ROLE FOR NITAZOXANIDE IN COMBINATION WITH STAT-C AGENTS FOR THE INHIBITION OF HCV REPLICATION WITHOUT THE DEVELOPMENT OF RESISTANCE**
Korba, B., Elazar, M., Liu, P., Glenn, J. S., Rossignol, J.
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 - **Discovery of a hepatitis C target and its pharmacological inhibitors by microfluidic affinity analysis** *NATURE BIOTECHNOLOGY*
Einav, S., Gerber, D., Bryson, P. D., Sklan, E. H., Elazar, M., Maerkl, S. J., Glenn, J. S., Quake, S. R.
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 - **Isolation and transcriptional profiling of purified hepatic cells derived from human embryonic stem cells** *STEM CELLS*
Chiao, E., Elazar, M., Xing, Y., Xiong, A., Kmet, M., Millan, M. T., Glenn, J. S., Wong, W. H., Baker, J.
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 - **A Rab-GAP TBC domain protein binds hepatitis C virus NS5A and mediates viral replication** *JOURNAL OF VIROLOGY*
Sklan, E. H., Staschke, K., Oakes, T. M., Elazar, M., Winters, M., Aroeti, B., Danieli, T., Glenn, J. S.
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 - **Bj alpha IT: a novel scorpion alpha-toxin selective for insects - unique pharmacological tool** *INSECT BIOCHEMISTRY AND MOLECULAR BIOLOGY*
Amon, T., Potikha, T., Sher, D., Elazar, M., Mao, W. F., Tal, T., Bosmans, F., Tytgat, J., Ben-Arie, N., Zlotkin, E.
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 - **A nucleotide binding motif in hepatitis C virus (HCV) NS4B mediates HCV RNA replication** *JOURNAL OF VIROLOGY*
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- **Amphipathic helix-dependent localization of NS5A mediates hepatitis C virus RNA replication** *JOURNAL OF VIROLOGY*
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- **The pharmacologic versatility of a neurotoxic polypeptide.** *Postepy higieny i medycyny doswiadczalnej*
Elazar, M., Shichor, I., Zlotkin, E.
2002; 56 (3): 411-20
- **Targeting of an expressed neurotoxin by its recombinant baculovirus** *JOURNAL OF EXPERIMENTAL BIOLOGY*
Elazar, M., Levi, R., Zlotkin, E.
2001; 204 (15): 2637-45
- **AaIT: From neurotoxin to insecticide** *BIOCHIMIE*
Zlotkin, E., Fishman, Y., Elazar, M.
2000; 82 (9-10): 869-81