**Daniel S. Goldenberg, Ph.D.**

## Education

1990 – 1994 Post-doctorate course of The Hebrew University, Jerusalem, Israel.

1984 – 1987 Post-graduate course of the Institute for genetics and selection of industrial microorganisms (“VNIIGenetica”), Moscow, USSR. Ph.D. thesis: “The host genetic control of the lysis-lysogeny decision of lambdoid phages”.

1975 – 1980 Master of Science (M.S.). Major: Applied Mathematics. Department of the Applied Mathematics, Moscow Technology Institute of Transport, Moscow, USSR. M.S. thesis: “The database management system on minicomputer for collections of microorganisms”.

### Research and work experience

2007 – now Senior Researcher, Goldyne Savad Institute for Gene Therapy, Jerusalem, Israel. Head of the group studying the molecular mechanisms of primary liver carcinogenesis. Supported by the Kamea Scientific Foundation of the Israeli Government.

1999 – 2007 Researcher, Goldyne Savad Institute for Gene Therapy, Jerusalem, Israel. Head of the group studying the molecular mechanisms of primary liver carcinogenesis.

1998 – 1999 Senior scientist, QBI Enterprises Ltd., Nes-Ziona, Israel. Developing cell culture-based selection systems for functional analysis of genes.

1994 – 1998 Laboratory of NeuroVirology, Department of Neurology, Hadassah University Hospital, Jerusalem. Developing methods to deliver genes into nervous system for gene therapy in neurological diseases. Studying the molecular mechanisms of the HSV type 1 latent infection in, and reactivation from, the nervous system.

1990 – 1994 Postdoctoral fellow in the Department of Molecular Genetics (lab. of Prof. Amos Oppenheim), Hebrew University, Jerusalem. Studying the structure-function relationships of DNA binding proteins, and regulation of expression of the *cspA* gene, encoding the cold shock protein of *E. coli*.

1981 – 1990 Researcher in the bacterial genetics group of the National Collection of Industrial Microorganisms (Head – Dr. S.P. Sineoky), “VNIIGenetica”, Moscow, USSR. Mapping and studying new *E. coli* genes that affect the lysis-lysogeny decision of different lambdoid phages.

1980 – 1981 Programmer, Laboratory of Computational Biology (Head – Dr. A.A. Mironov), “VNIIGenetica”. Developing a bioinformatic software.

1978 – 1980 M.S. trainee, Laboratory of Computational Biology (Head – Dr. A.A. Mironov), “VNIIGenetica”. Developing the first in USSR database for collections of genetic microorganisms on a minicomputer.

### Special skills: Molecular and cell biology, virology, bioinformatics.

Languages: Russian (mother tongue), English (fluently), Hebrew (fluently).

### Personal

Date of birth: April, 9, 1957. Place of birth: Lvov, Ukraine, former USSR.

Marital status: Married, 3 children. Moved to Israel: August, 27, 1990.

**Publications of Daniel S. Goldenberg, Ph.D, in Israel**

1. Gamaev L, Mizrahi L, Friehmann T, Rosenberg N, Pappo O, Olam D, Zeira E, Bahar Halpern K, Caruso S, Zucman-Rossi J, Axelrod JH, Galun E, Goldenberg DS. The pro-oncogenic effect of the lncRNA H19 in the development of chronic inflammation-mediated hepatocellular carcinoma. Oncogene **2021**, 40(1):127-139.
2. Harari-SteinfeldR, Gefen M, Simerzin A, Zorde-Khvalevsky E, Rivkin M, Ella E, Friehmann T, Gerlic M, Zucman-Rossi J, Caruso S, Leveille M, Estall J, Goldenberg DS, Giladi H, Galun E, Bromberg Z. The lncRNA H19-derived microRNA-675 promotes liver necroptosis by targeting FADD. Cancers **2021**, 13(3):411.
3. Potikha T, Pappo O, Mizrahi L, Olam D, Maller SM, Rabinovich GA, Galun E, Goldenberg DS. Lack of galectin-1 exacerbates chronic hepatitis, liver fibrosis and carcinogenesis in murine hepatocellular carcinoma model. FASEB Journal **2019**, 33(7):7995-8007.
4. Portier I, Vanhoorelbeke K, Verhenne S, Pareyn I, Vandeputte N, Deckmyn H, Goldenberg DS, Sama lHB, Singh M, Ivics Z, Izsvak Z and De Meyer SF. High and long-term VWF expression after *Sleeping Beauty* transposon-mediated gene therapy in a mouse model of severe von Willebrand disease. Journal of Thrombosis and Haemostasis **2018**, 16(3):592-604.
5. Lanton T, Shriki A, Nechemia-Arbely Y, Abramovitch R, Levkovitch O, Adar R, Rosenberg N, Paldor M, Goldenberg D, Sonnenblick A, Peled A, Rose-John S, Galun E, Axelrod JH.

Interleukin 6-dependent genomic instability heralds accelerated carcinogenesis following liver regeneration on a background of chronic hepatitis. Hepatology **2017** May 65(5):1600-1611.

1. Stoyanov E, Mizrahi L, Olam D, Schnitzer-Perlman T, Galun E, Goldenberg DS. Tumor-suppressive effect of S-adenosylmethionine supplementation in a murine model of inflammation-mediated hepatocarcinogenesis is dependent on treatment longevity.

Oncotarget **2017**, 8(62): 104772-104784.

1. Potikha T, Ella E, Cerliani JP, Mizrahi L, Pappo O, Rabinovich GA, Galun E, Goldenberg DS. Galectin-1 is essential for efficient liver regeneration following hepatectomy.

Oncotarget **2016** May 31;7(22):31738-54.

1. Stoyanov E, Ludwig G, Mizrahi L, Olam D, Schnitzer-Perlman T, Tasika E, Sass G, Tiegs G, Jiang Y, Nie T, Kohler J, Schinazi RF, Vertino PM, Cedar H, Galun E, Goldenberg D.

Chronic liver inflammation modifies DNA methylation at the precancerous stage of murine hepatocarcinogenesis. Oncotarget **2015** May 10;6(13):11047-60.

1. Ella E, Heim D, Stoyanov E, Harari-Steinfeld R, Steinfeld I, Pappo O, Schnitzer-Perlman T, Nachmansson N, Rivkin L, Olam D, Abramovitch R, Wege H, Galun E, Goldenberg D. Specific genomic and transcriptomic aberrations in tumors induced by partial hepatectomy of a chronically inflamed murine liver. Oncotarget **2014**, Nov 15:5(21):10318-31.
2. Goldenberg D, Eferl R. p21Waf1/Cip1 revisited: oncogenic Function in Hepatocellular Carcinoma (Commentary). Gut **2014** Sep;63(9):1372-3.
3. Condiotti R, Goldenberg D, Giladi H, Schnitzer-Perlman T, Waddington SN,

Buckley SM, Heim D, Cheung W, Themis M, Coutelle C, Simerzin A, Osejindu E, Wege H, Themis M, Galun E. Transduction of fetal mice with a feline lentiviral vector induces liver tumors which exhibit an E2F activation signature. Molecular Therapy **2014,** 22(1):59-68.

1. Potikha T, Stoyanov E, Pappo O, Frolov A, Mizrahi L, Olam D, Shnitzer-Perlman T, Weiss I, Barashi N, Peled A, Sass G, Tiegs G, Poirier F, Rabinovich GA, Galun E, Goldenberg D. Interstrain differences in chronic hepatitis and tumor development in a murine

model of inflammation-mediated hepatocarcinogenesis. Hepatology **2013**, 58(1):192-204.

1. Barashi N, Weiss ID, Wald O, Wald H, Beider K, Abraham M, Klein S, Goldenberg D, Axelrod J, Pikarsky E, Abramovitch R, Zeira E, Galun E, Peled A. Inflammation induced hepatocellular carcinoma is dependent on CCR5. Hepatology **2013**, 58(3):1021-1030.
2. Merquiol E, Uzi D, Mueller T, Goldenberg D, Nahmias Y, Xavier RJ, Tirosh B,

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and interference with the unfolded protein response. PLoS One **2011**; 6(9):e24660.

1. Baras H,  Gross E, Edrei Y, Ella E, Israel A, Cohen I, Corchia N, Ben-Moshe T, Pappo O, Pikarsky E, Goldenberg D, Shiloh Y, Galun E, Abramovitch R. The accelerated carcinogenesis following liver regeneration is associated with chronic inflammation-induced double strand DNA breaks.

PNAS **2010,** 107, 5, 2207-2212.

1. Klopstock N, Katzenellenbogen M, Pappo O, Sklair-Levy M, Olam D, Mizrahi L, Potikha T, Galun E, Goldenberg D. HCV tumor promoting effect is dependent on host genetic background. PLoS One **2009**; 4(4):e5025.
2. Katzenellenbogen M, Mizrahi L, Pappo O, Klopstock N, Olam D, Jacob-Hirsch J, Amariglio N,

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2. Klopstock N, Levy C, Olam D, Galun E, Goldenberg D. Testing transgenic regulatory elements through live mouse imaging. FEBS Letters **2007**, 581, 3986-3990.
3. Katzenellenbogen M, Pappo O, Barash H, Klopstock N, Mizrahi L, Olam D, Jacob-Hirsch J, Amariglio N, Rechavi G, Mitchell LA, Kohen R, Domany E, Galun E, Goldenberg D. Multiple adaptive mechanisms to chronic liver disease revealed at early stages of liver carcinogenesis in the Mdr2-knockout mice. Cancer Research **2006**, 66, 8, 4001-4010.
4. Ben-Dor I, Itsykson P, Goldenberg D, Galun E, Reubinoff BE. Lentiviral Vectors Harboring a Dual-Gene System Allow High and Homogeneous Transgene Expression in Selected Polyclonal Human Embryonic Stem Cells. Molecular Therapy **2006**, 14, 2, 255-267.
5. Goldenberg D., Ayesh, S., Schneider T., Pappo O., Jurim O., Eid A., Fellig Y., Dadon, T., Ariel I., de Groot N., Hochberg A., Galun E. Identification of differentially expressed genes in hepatocellular carcinoma using AtlasTM cDNA arrays. Molecular Carcinogenesis **2002**, 33, 2, 113-124.
6. Goldenberg D., Mador N., Panet A., Steiner I. Tissue-specific distribution of the herpes simplex virus type 1 latency-associated transcripts on polyribosomes during latent infection.

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7. Giladi H., Goldenberg D., Koby S., Oppenheim A. B., “Enhanced activity of the bacteriophage  PL promoter at low temperature”. Proc. Natl. Acad. Sci. USA, **1995**, 92, 2184-2188.
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9. Mengeritsky G.,Goldenberg D., Mendelson I., Giladi H., Oppenheim A. B. “Genetic and biochemical analysis of the integration host factor of *Escherichia coli*”. J. Mol. Biol., **1993**, 231, 646-657.