BIOGRAPHICAL SKETCH

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NAME	POSITION TITLE
David H. Sherr	Professor of Environmental Health, Professor of Pathology and Laboratory Medicine
eRA COMMONS USER NAME DSHERR@BU.EDU	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
Brandeis University, Waltham, MA	BA	1973	Biology
Cornell University	PhD	1978	Microbiology

A. Personal Statement

The goal of our studies is to develop peptide vaccines for treatment of hematologic malignancies including AL amyloidosis and multiple myeloma. We have identified a series of peptide antigens derived from proteins hyper-expressed in malignant plasma cells and/or mature B cells, which bind with high avidity to human MHC class I antigen. Each of these peptides induces anti-tumor responses in HLA-transgenic mice and, therefore, represent potential clinical vaccines. Our most recent data indicate that the strength of this response is limited by the suppressive effects of $CD25^{+}$ Treg cells. Importantly, the environmental chemical receptor known as the aryl hydrocarbon receptor (AhR) which we have studied for many years, controls development of Tregs through its activity as a transcription factor. Therefore, one of our projects is directed towards evaluating the molecular pathways through which the AhR controls Treg formation and towards the development of AhR modulators which are predicted to enhance anti-tumor CTL responses through Treg down-regulation. The data generated will facilitate translation of the work to the clinic.

B. Positions and Honors:

Postdoctoral Fellow, Harvard Medical School, 1978-1980 (Sponsors: Baruj Benacerraf, M.D., Nobel Laureate, Martin Dorf, Ph.D.); Instructor in Pathology, Harvard Medical School, 1981-1982; Assistant Professor of Pathology, Harvard Medical School, 1982-1987; Associate Professor of Pathology, Harvard Medical School, 1987-1993; Professor of Environmental Health, Professor of Pathology, Boston University School of Public Health, 1993- present; Director, Boston University Flow Cytometry Core Facility, 2006-present; Director, Boston University Immunology Training Program.

National Advisory:

Study Section, Pathology B, NIH, 1990; Study Section RFP #91-34 NIH/NIAID/DMID, 1991; Source Selection Committee, RFP #91-34. NIH/NIAID/DMID, 1991; The Israel Science Foundation, 1993; Study Section NIH/NINDS, RFA 2000-2001, Toxicogenomics Study Section, RFA ES 01-002, NIH/PHS, 2001. 2004 Study section ZES1 LWJ-B-AR, NIH/PHS, NIEHS SBRP Study Section, 2008, UTMB NIEHS Center Advisory, 2008

C. Selected full length peer-reviewed publications (From total of 99)

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Okuda K, Minami M, **Sherr DH**, Dorf ME. Hapten-specific T cell responses to 4-hydroxy-3-nitrophenyl acetyl. XI.Pseudogenetic restrictions of suppressor factors. J. Exp Med. 1981; 154:468.

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Sherr DH, Vietor HE, Liu Y-N, Dorf ME. Hapten-specific T cell responses to 4-hydroxy-3-nitrophenyl acetyl. XIV. Carrier requirement for suppressor cell induction. J I. 1984; 133:2417.

Hausman PB, **Sherr DH**, Dorf ME. An *in vitro* system for the generation of suppressor cells and the requirement for B cells in their induction. J I. 1985; 134:1388.

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Hausman PB, **Sherr DH**, Dorf ME. Anti-idiotypic B cells are required for the induction of suppressor T cells. J I. 1986; 136:48.
Hausman PB, Kawasaki H, O'Hara RM Jr, Minami M, **Sherr DH**, Dorf ME. The role of adherent accessory cells in the generation of effector suppressor T cells. J I. 1986;137:3717
Sherr DH, Braun J, Dorf ME. B helper cell hybridomas. Idiotype specific Ly-1 B cell mediated helper activity. J I. 1987. 138:2057.
Sherr DH, Dorf ME, Gibson M, Sidman CL. Ly-1 B helper cells in autoimmune "viable motheaten" mice. J I. 1987 138:1811.
O'Hara RM, **Sherr DH**, Dorf ME. *In vitro* generation of suppressor T cells: Induction of $CD3^+$, IgH-restricted suppressor cells. 1988. J.I. 141:2935.
Gibson M, Hardin JA, **Sherr DH**, $CD5^+$ B helper cell hybridomas produce a lymphokine which induces $CD5^+$ B helper cell populations. 1990, J. Mole. and Cell. Biol. 4:241.
Hardin JH, Gibson M, Kawano Y, Spielberg S, Martin C, Collins M, Dorf ME, **Sherr DH**. Characterization of a B cell helper factor(s) derived from CD5 B cell hybridomas. 1990, Cell. Immunol. 126:304.
Hinoshita, F, Hardin, J, **Sherr DH**. 1992. Fluoranthene induces programmed cell death in and alters growth of immature B cell populations in bone marrow cultures. Toxicology, 73:203.
Hardin J., **Sherr DH**, DeMaria M, and Lopez P. 1992. A simple fluorescence method for detecting apoptosis in cell subsets stained for surface antigen expression. J.I. Meth. 154:99.
Hardin J, Hinoshita F, **Sherr DH**. 1992. Mechanisms by which benzo(a)pyrene, an environmental carcinogen, suppresses B cell lymphopoiesis. Toxicol. and Applied Pharmacol. 117:155
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Ju S-T, Panka DJ, Cui H, Ettinger R, El-Khatib M, **Sherr DH**, Stanger BZ, Marshak-Rothstein A. 1995. The molecular mechanism of programmed cell death following T cell activation requires Fas/FasL interactions. Nature. 373:444.
Cui H, **Sherr DH**, El-Khatib M, Matsui K, Panka DJ, Marshak-Rothstein A, Ju S-T. 1996. Regulation of T-cell death genes: Selective inhibition of FasL- but not Fas-mediated function. Cell. Immunol.167:276
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Yamaguchi K, Near R, Shneider A, Cui, H., Ju S-T, and **Sherr DH**. 1996. Fluoranthene mediated apoptosis in murine T cell hybridomas is aryl hydrocarbon receptor independent. Toxicol. and Appl. Pharmacol. 139:144.
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Maecker B, von Bergwelt-Baildon MS, **Sherr DH**, Nadler LM, Schultze JL. Identification of a new HLA-A*0201 restricted cryptic epitope from CYP1B1. 2005. International Journal of Cancer. 115:333

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