



Eli Sercarz

1934–2009

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Eli Sercarz died 3 November 2009 at the age of 75. His life was full. We his friends and colleagues are thankful for his having been with us and we grieve his loss. He has enlightened us with the questions his curiosity taught us to ask, with the results of his experiments and with the nobility of his person.

Eli was born in New York, earned his PhD in immunology in 1960 at Harvard, and did post-graduate research at Harvard (A.H. Coons) and the Massachusetts Institute of Technology (Salvador Luria). He was a Guggenheim Fellow in the laboratory of N.A. Mitchison at Mill Hill, 1970–1971, and in the laboratory of Pierre Golstein at Marseille-Luminy, 1977–1978. He held academic positions in immunology at the University of California Los Angeles, 1963–1997, and was Head of Immune Regulation at the La Jolla Institute of Allergy and Immunology, 1997–2002, and at Torrey Pines Institute for Molecular Studies from 2002 until his death.

The comprehensive studies carried out by Eli Sercarz and his colleagues on the T cell and B cell responses to defined determinants of lysozyme molecules greatly influenced the thinking of many immunologists. The results of these pioneering investigations touched upon key issues in antigen processing and presentation, major histocompatibility complex immune response gene function, [Author: Please clarify the preceding (can the word order be rearranged a bit?). Is it the function of those genes (or maybe the proteins they encode?) in the immune response?] epitope competition, receptor repertoires and immune response phenotypes. Eli introduced basic concepts and terminology related to antigen determinants; dominant and cryptic epitopes and determinant spreading are now standard concepts in immunology discourse.

Determinant dominance describes the fact that the T cell or B cell immune response induced by immunization to a large protein molecule [Author: Should that be “immunization “with” the large protein molecule? Or is it response to the large protein molecule, induced by immunization?] will tend to focus on only one or a few dominant epitopes among the potential antigenic determinants borne by the immunogenic molecule; the other, ignored determinants are cryptic. Cryptic determinants, however, can be made to become immunogenic by specific modifications to the immunogen or to the immunization procedure. Dominance and crypticity also relate to an epitope's ability to induce tolerance. Thus, dominance and crypticity are important in both vaccination and autoimmunity. Determinant spreading refers to the observation that epitopes that are initially cryptic may become dominant during the natural history of an autoimmune disease. The more recent research of Eli and his colleagues on the complexities of T cell antigen receptor–centered immune regulation is critical to understanding the regulation of autoimmunity, both spontaneous and that induced by T cell vaccination. In this chain of lymphocyte interactions, CD8⁺ regulatory T cells collaborate with regulatory CD4⁺ T cells to downregulate the

effector T cells that mediate the autoimmune disease experimental autoimmune encephalomyelitis.

Together with his colleagues, Eli Sercarz authored over 370 publications. The ISI Web of Knowledge reports that the works of Eli Sercarz have been cited over 10,700 times, with a Hirsch index of 49 (49 papers have been cited at least 49 times each; http://apps.isiknowledge.com/CitationReport.do?product=WOS&search_mode=CitationReport&SID=N1CbFjmgkP2G7Kpfjhb&page=1&cr_pqid=2). [Author: (a) The preceding url elicits an error response from ISI; please ensure it is correct. Also note we cite links to specific pages with information related to the text preceding (not links to general informational websites); is this intended to link to a page listing those 49 papers? Also note that ISI seems to exclude anyone without the appropriate authentication (and many of our readers may lack that). (b) Is the following prize name revised correctly? Or is it the Carol-Nachman Prize for Rheumatology?] His academic honors include the Nachman International Prize in Rheumatology (1977), and Lifetime Achievement Awards given by the Keystone Symposia (2006) and by the Federation of Clinical Immunology Societies (2007). The innovative research output of Eli Sercarz has been considerable indeed. But Eli Sercarz radiated an output of the spirit, as well that of the intellect.

The twinkling blue eyes of Eli Sercarz probed the world with lively curiosity, but all could see that his gaze reflected a good heart. Eli was indeed a kind man; he gave freely of his hope, time and energies to students, fellows, colleagues, even to strangers. He nurtured and protected the dependent, the troubled and the disadvantaged, without minding his own inconvenience. The confidence of his strong intellect was mellowed by his endearing hesitation and modesty. His demeanor was marked by a joy in living, which he expressed with spirited dancing whenever the occasion arose. I recall a moment at a conference we held in 2001, high in the Galilee near the mystical village of Safed: a klezmer clarinetist was playing at the closing dinner, when suddenly Eli rose to his feet to summon the assembled immunologists to join hands in a spontaneous dance of the spirit.

The circle of immunologists and other scientists trained by Eli is over 100 strong, and they, like his research colleagues, have maintained deep personal ties with him. The American Association of Immunologists recognized this unique personal contribution and awarded Eli Sercarz an Excellence in Mentoring Award (2007).

My own children, upon first meeting Eli Sercarz many years ago, perceived him as a type of Noah—a figure bearing the locks and beard of a prophet, princely yet naive, with a mission to build an ark to carry us, and the other beasts of the field, across troubled waters and into safe harbor. Eli is now safely at anchor. The legacy of both his science and his person remain with us.

Eli Sercarz is survived by his wife Rabyn Blake, a noted artist, and three children.

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