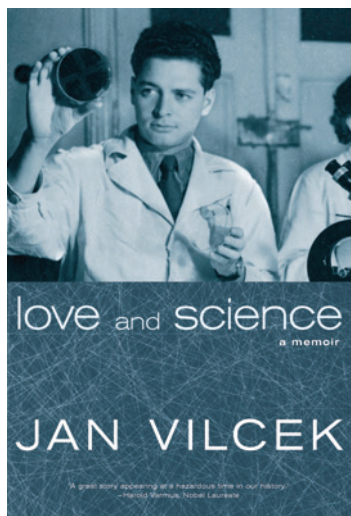


From Bratislava to New York: A Scientist's Tale

Sir Marc Feldmann



Love and Science: A Memoir

Jan Vilcek

New York: Seven Stories Press,
2016 | 272 pp (\$20.96; cloth).

ISBN: 9781609806682

Jan Vilcek has given us a wonderful autobiographical book that illustrates the challenges, pain, but also the joys, of science. But it is far more than that—it is a social treatise about the difficulties of life under different autocratic regimes, from the Nazis through the Communists, and then the chal-

lenges and opportunities of immigration, of making a new life for oneself, based on hard work, and a bit of luck.

Love and Science is remarkably detailed about the personal travails of life under the Nazis, when Jan was put into a Catholic orphanage to give him, a Jewish child, a greater chance of survival. Fortunately, his parents also survived. There are entertaining stories about Jan's relationship with his wife Marica, starting from their courting days. Marica also did very well in the United States, becoming a respected curator at the Metropolitan Museum of Art.

A recurring theme in the book is of opportunities that were well taken, such as the choice to work on interferon, which at the time was a poorly studied and controversial molecule. This was a risky bet, but of course it paid off. Jan showed leadership at a young age, by organizing the first scientific conference devoted to interferon. At that conference, he met and impressed Alick Isaacs and Albert Sabin, both leaders in the field, which had a marked effect on his subsequent career. But most important was his seizing the opportunity to leave Bratislava and take his chances in the wider world. The story of Jan and Marica's escape makes an exciting tale. Jan's willingness to take risks and seize opportunities led him to accept a job offer at NYU, an independent post, rather than work in a subservient role with existing leaders in the field.

It is in the field of interferon research that Vilcek has made his most important scientific contributions, being a leader in the definition of the subtypes of interferon, then in their purification and helping in their cloning, and then using the pure recombinant products to elucidate their very complex biology.

The book also describes how interest in one potential anticancer mediator (interferon) led to work on another, TNF, and this

led to a major contribution, with his laboratory making a very effective monoclonal antibody to TNF. This antibody was genetically engineered by John Ghrayeb at Centocor, and although the antibody was made to treat sepsis, at which it failed (as did several other antibodies), it subsequently found considerable use in the treatment of autoimmune diseases, first rheumatoid arthritis, then Crohn's disease, psoriasis, and ankylosing spondylitis. This work was led and performed by others, including myself, and now antibodies to TNF (or TNF fusion proteins) are the world's best-selling medicines.

Vilcek had the good fortune of being so well rewarded financially for generating the antibody that he and his wife, Marica, could embark on another career, as philanthropists. Again, this has been a success, with the Vilceks' initial donations being to research at NYU, his workplace of 50+ years. They made a gift of well over \$100 million, one of the largest donations ever made by a faculty member anywhere. The Vilceks are also patrons of the arts and have built a very impressive collection of the work of American painters from the early 20th century, especially Stuart Davis and Marsden Hartley. This work has been documented in a fine book, *Masterpieces of American Modernism: From the Vilcek Collection* (by Lewis Kachur with an introduction by William C. Agee; London, UK: Merrell Publishers; 2013.)

A huge contribution of the Vilceks and their foundation has been to champion the value of immigrants to society, especially in the United States. Since 2006, the Vilcek Foundation has awarded annual prizes for immigrant biomedical scientists and also for leaders in the arts and humanities, in which a different cultural or artistic area is the focus each year. The prizes are awarded to top-tier scientists; for example, Joan Massague and Inder Verma were early recipients, and Dan Littman received the prize this year. The Vilcek Foundation also awards prizes for younger talented immigrant scientists and artists. Vilcek was a recipient of the National Medal of Technology and Innovation in 2013, given by the President of the United States in recognition of the importance of his contributions.

The Vilceks' promotion of the value of immigration at a time when the general press and current political climate ("we will build a wall," quoting the Republican party presidential candidate) is so anti-immigrant is invaluable, as so few are willing to make that case. This is especially true because these prizes highlight the numerous leading figures in the United States who are foreign born, which many do not realize.

I highly recommend this book as valuable holiday reading for young scientists. It provides insights into how challenging decisions need to be made for opportunities to be seized. But it also highlights the major importance of interpersonal relationships in science, how what you can achieve depends on much more than your intellect—it depends on your whole personality.

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doi: 10.1158/2326-6066.CIR-16-0172

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