

RAF Bio for 50th Reunion

Robert A. Freitas Jr.
Physics 1974

I graduated HMC in 1974 with a double major in Physics and Psychology, followed by a JD from Santa Clara School of Law in 1978. I kept sane during law school by doing three (published) SETI searches with my HMC roommate Frank Valdes at Leuschner Observatory in Berkeley, Kitt Peak National Observatory near Tucson, and the Hat Creek Radio Observatory in Northern California. I worked as a NASA contractor from 1980-1984, in one case serving as the editor for NASA's first theoretical study of self-replicating factories on the Moon. I've been Senior Research Fellow at the Institute for Molecular Manufacturing since 1994, but did a brief stint as a nanotechnology research scientist at Zyvex Corporation during 2000-2004. In 2008 I founded (and still serve as CEO of) a stealth nanotech company which had 101 employees (60% PhDs, 20% MS) at the end of 2023. I've published lots of articles, papers and books over the last 48 years (<http://www.rfreitas.com/index.htm>), have 45 issued U.S. and foreign patents, served as nanotech advisor for a small movie production, and appeared in Ray Kurzweil's 2010 movie *The Singularity Is Near*. (I actually have an IMDb listing as an actor!) In 2009 I won the Feynman Prize in Nanotechnology for Theory for my nanomedicine and mechanosynthesis work, which was described very nicely in a 2017 article in HMC Magazine (<https://magazine.hmc.edu/summer-2017/science-fiction-medical-reality/>). I'm having too much fun to ever retire!



On the personal side, after getting seal-ponded by "30 of my closest friends" in May 1974, I married Nancy, my childhood sweetheart, in Aug 1974, with my three HMC roommates (Frank Valdes, Tim Quilici, and Jon Boswell) standing with me as groomsmen. Next week, Nancy and I are vacationing in Italy for 3 weeks to celebrate our 50th wedding anniversary. Nancy is Director of the Nutrition and Food Service Department at Sutter Roseville Medical Center, where her crew of 114 employees serves over 1 million meals/year to patients and cafeteria visitors and handles all dietary issues for this 382-bed hospital. In 1993, Nancy and I owner-buildered and still inhabit our

three-story dream house overlooking Folsom Lake in California, near Sacramento. We have a beautiful golden retriever, good health, lots of friends and relatives, but no kids. I'm also signed up with Alcor Life Extension Foundation to be cryopreserved when death is pronounced (an increasing concern now that I'm 71), giving me another shot at the future once the cryostasis revival technology matures.

