Fred Wan, Theta Deuteron of Theta Delta Chi, class of 1959. The following notes were in the MIT News online in in 2022. These were posted here by Harry Baya in September, 2022.

**Fred Wan** (Course 18) sent an update: “I don’t recall submitting any personal news in all these years. But it’s never too late.” Absolutely right, Fred. After receiving his SB in mathematics, he worked at MIT’s Lincoln Lab. In 1960, he married Julia Chang (a Wellesley grad); they celebrated their 60th anniversary in September. Working at Lincoln Lab stimulated Fred’s interest in the mechanics of shell structures, so he returned to MIT for his SM ’63 and PhD ’65 in mathematics, then joined the mathematics department as instructor, assistant professor, and then associate professor until 1974. At MIT, his expertise in plate and shell theories led him to consultant work, most notably a design study of and patent application for Tupperware’s corrugated Astro-Flex seal as air-tight lids.

In addition to theoretical mechanics, Fred also worked with Nobel laureate Robert Solow on the economics of exhaustible resources such as fossil fuel. His interdisciplinary background was a factor in his appointment as the first director of the new Institute of Applied Mathematics at the University of British Columbia (UBC), in 1974. While there, he helped found the Canadian Applied and Industrial Mathematics Society, serving as president from 1983 to 1985. He also chaired the Mathematics Committee of the Canadian NSERC for funding mathematics research in Canada.

In 1983, Fred was appointed founding chair of the new department of applied mathematics at the University of Washington and became the divisional dean of natural and mathematical sciences in 1988. On leave from UW in 1992–’94, he was the division director of mathematical sciences at the National Science Foundation and became the only person to have headed the civilian funding agency for research in mathematics in both Canada and the US.

Fred and Julia moved to Southern California in 1995 when he became vice chancellor for research and dean of graduate studies at the University of California, Irvine. In 2000, Fred began research in developmental and cell biology, initiating new undergraduate and graduate programs in the emerging area of mathematical and computational biology. He has published two graduate texts on mathematical models for the life sciences. His first book was republished in the Society of Industrial and Applied Mathematics (SIAM) series on Classics in Applied Mathematics.

For his contributions to theoretical mechanics, Fred was elected a fellow (and president) of the American Academy of Mechanics and a life fellow of the American Society of Mechanical Engineers (ASME). For his broader contributions to mathematical sciences, he was elected a fellow to the American Association for Advancement of Science (AAAS), a foreign member of the Russian Academy of Natural Sciences, and a fellow of the SIAM.

Retired since 2017, Fred plays bridge and cribbage while continuing to research and write in applied mathematics. During the pandemic, he has organized a group of fellow residents of his Seattle retirement community to play bridge online for virtual social interaction and to maintain mental agility.