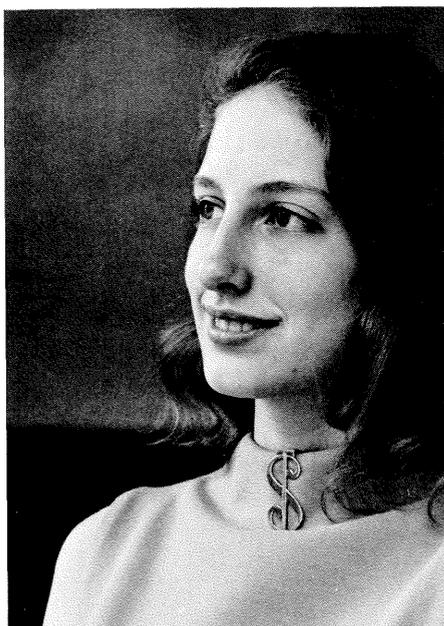


# Pioneer Women

Stephanie Charles, Deborah Chung, Sharon Long, and Flora Wu are the first women undergraduates to receive BS degrees from Caltech.

The girls have only a few things in common—most of them academic. They all wanted to come to Caltech because of its research atmosphere, and because they wanted to be around intelligent students with interests like theirs. They all wanted to come to Caltech as freshmen—but though they were ready for Caltech in the fall of 1969, the Institute wasn't ready for them. Girls were not accepted as undergraduates until September 1970.

They have all had excellent grades—in fact, they all graduated with honors—and they all intend to go to graduate school.



## Stephanie Charles

Stephanie Charles went through high school in Falls Church, Virginia, in three years, and enrolled for a year at the University of Maryland before coming to Caltech. The Institute's reputation in physics was the magnet that drew her to the West Coast, because her interests lie in applied physics.

Stephanie completed her graduation requirements before the third term of her senior year and took a part-time job at the Jet Propulsion Laboratory working for Dr. John Anderson. Dr. Anderson supervises a planetary ephemerides and relativity group which furnishes computed material on planetary positions to space missions. It also deals in experimental relativity, using spacecraft data to test relativity problems. Stephanie has been working specifically on the orbital effects of general relativity and how they might affect spacecraft orbits. She is also calculating earth tides.

Stephanie will do graduate work in electrical engineering at Stanford.



## Deborah Chung

Deborah Chung entered Wellesley after graduating from King's College in Hong Kong. After a year she transferred to Caltech because of what she had heard of its academic and engineering standing.

She immediately took advantage of the campus research atmosphere and went to work for Professor Gerry Neugebauer on infrared measurements obtained from Mariner 9. Since June of last year she has worked for Professor Pol Duwez and Dr. Chang-Chyi Tsuei on x-ray diffraction. She has been particularly absorbed in studying the structure and properties of amorphous solids by computer simulation.

Deborah graduated from Caltech with a BS in engineering and applied science and an MS in engineering science, and will go to MIT for further graduate work.

When she arrived at Caltech, Deborah moved into Lloyd House, but eventually opted for the available kitchens and relative quiet of Marks Graduate House. She also discovered the best-tuned piano on campus in the glee club practice room and managed to keep up her practicing. She has studied the piano since she was five and in April 1970 won the Brahms Intermezzo Piano Solo Competition in the Hong Kong Music Festival. In 1971 she became a diplomate of the Royal Schools of Music in England.

## Sharon Long

Sharon Long went to George Washington High School in Denver, whose challenging academic atmosphere—mostly in the mathematics course—prepared her for Caltech. She spent a year at Harvey Mudd College before transferring here. She started out in the chemistry option, then went into the Institute's new Independent Studies Program, with a double major in biochemistry and French literature. Her program included both course work and research done with Daniel McMahon, assistant professor of biology.

She has been deeply involved in student government since her sophomore year, and on the side she has played oboe in the Caltech Woodwind Quintet and pursued her interests in films, cooking, and needlework. Although she was accepted in medical school at UC Irvine, she has decided to wait a year before continuing her studies. She will go to Europe this summer—to start breathing again after her three years at Caltech.



## Flora Wu

Flora Wu, also a native of Hong Kong, came to Caltech for her last two years by way of Pasadena City College, where she was class valedictorian at her graduation. Flora followed the same path blazed by her older sister Bessie, who is now a third-year medical student at USC.

Flora arrived in the U.S. in August 1969 with little more than "a coat and my violin." She got a part-time job doing light housekeeping for one of Pasadena's little old ladies, which helped her learn English conversation and American customs.

Flora, a chemistry major, is following her sister into medicine, and will enroll at the University of California, San Diego, medical school in the fall.

While she was amassing many more units than she needed for graduation from Caltech, Flora also worked on non-histone chromosomal proteins under Dr. Sarah Elgin, a research fellow in biology in Professor Leroy Hood's group.

She has lived in Page House and considers that an important part of her Caltech experience. She still has her violin, though she's afraid to play it because she hasn't had time to practice. If she can just hold off until she finishes her medical education, she'll get back to it eventually.

