

Helen Sawyer Hogg

At the Dominion Astrophysical Observatory

Educator Tomo Nishizawa

Helen Sawyer Hogg (née Sawyer) lived from 1905 to 1993. Called the First Lady of astronomy, she was an early role model for women in science. Sawyer Hogg was raised in the United States before working in Canada. She became an expert on the variable stars (pulsating stars that change their brightness in a periodic manner) in Milky Way globular star clusters (large groups of stars bound together by gravity).

Helen Sawyer Hogg received her MA in 1926 and her PhD in 1931, both from Radcliffe College in Massachusetts. She did her research at Harvard College Observatory, but Harvard would not give graduate degrees in science to women at the time.

In 1930, Sawyer Hogg married Frank Scott Hogg, a Canadian astronomer. Soon after, the couple moved to Canada, where Frank Hogg got a job at the Dominion Astrophysical Observatory (DAO) in Saanich, BC. There was work for Helen Sawyer Hogg there too, but during the Great Depression (1929–1939), public institutions like the DAO would not employ a husband and wife from the same family. Director John Plaskett found a solution. He gave a grant he had received to Sawyer Hogg, so she could continue her work on variable stars in globular clusters. She was not paid, but she had funding to continue her work as a volunteer.

The Hoggs were also parents, and they sometimes brought their baby with them when they came to work with the Plaskett Telescope at night. One night a distinguished visiting astronomer was startled to hear a baby cry, then a woman's voice yelling, "Frank, change the baby and send up more photographic plates!"

In 1935, the Hoggs moved to Toronto, and Frank Hogg became an astronomy professor at the University of Toronto. In the following year, Sawyer Hogg was hired as a research assistant at David Dunlap Observatory, where she continued to work on star clusters. In 1941, when World War II had led to the



Dr. Helen Sawyer Hogg (*front row, fourth from left*) at a conference at the Dominion Astrophysical Observatory in 1956. The conference marked her return as a senior astronomer to the place where her career started.

departure of men from the University of Toronto, Sawyer Hogg became an astronomy lecturer there. She was made a full professor in 1957. During her career, Sawyer Hogg published more than 200 scholarly articles on galaxy and star clusters.

From 1951 to 1981, Helen Sawyer Hogg popularized astronomy by writing a weekly column, *With the Stars* for the *Toronto Star*. In 1976, she was made a Companion of the Order of Canada and also wrote an astronomy guide, *The Stars Belong to Everyone*. She was the first woman president of the Royal Canadian Institute for the Advancement of Science and a path-breaking role model for women looking to balance scientific work and family life.

Although Sawyer Hogg's biggest contributions to astronomy came after her time at the Dominion Astrophysical Observatory, it was an important place for a scientist who would go on to have a stellar career.