

## Sabine Goldberg - Profile

My name is Sabine Goldberg and I worked as a Research Soil Scientist with the Agricultural Research Service of the United States Department of Agriculture in Riverside, California for 33 years, retiring in May 2016. My Bachelor's and PhD degrees are in Soil Science. My specialization is in Soil Physical Chemistry. I have been a member of the Association for Women Soil Scientists (AWSS) for 20+ years. During those years, I have been a faithful attendee at the AWSS meetings held during the Soil Science Society of America national meetings. My primary contribution has been on the AWSS Travel Scholarship committee. I served seven years as Member and four years as Chair. I was recently appointed to serve on the ACS Women in Science committee for a three-year term (2017-2019).



It was in the mid-1970s that urban people first started to enter the agricultural fields and I was one of them. My father was a literature professor and the first farm that I ever set foot on was the University of Wisconsin experimental farm! I chose the field of soil science as a major because I was having trouble deciding between botany and chemistry and I liked the fact that soil science integrates so many different scientific fields. I had concluded that agriculture had better job prospects than my first love, history!

I remember that when I indicated to the undergraduate advisor at the University of Florida that I wanted to declare a major in soil science, he became very excited. He asked me whether I wanted to go to graduate school and what I wanted to specialize in. After I told him that I wanted to specialize in soil chemistry, he volunteered to introduce me to the professor who taught graduate-level soil chemistry. When he did so, he very excitedly told the soil chemist that I wanted to major in soil science. Both gentlemen were very friendly and very excited. Coming from Wisconsin, I attributed this to Southern Hospitality, but I found out later that I was only the second woman who had ever declared an undergraduate major in Soil Science at the University of Florida! During my senior year, I won a \$100 award as the best senior soil science student. When the undergraduate advisor asked me how I was going to spend the money, I replied that I was going to buy a sewing machine. In hindsight, I find my statement to be hilariously funny. I suspect that there was never another award winner who used the money in this way again!

I started graduate school in the Soil and Environmental Sciences department at the University of California-Riverside in January 1978. I was still not quite aware of how rare women were in soil science, but I did hear that the Soil Science department had graduated its first ever woman PhD the month before I arrived. At that time, graduate student enrollment was about 15% female. My major professor was Garrison Sposito who, in addition to being one of the most brilliant soil chemists ever and a wonderful human being, has maintained gender parity in his laboratory since 1980. Since there were other female graduate students, I never thought about the fact that I would most likely be first and only woman at whichever institution hired me.

I started my career at the U.S. Salinity Laboratory in 1983. I was their first ever female research scientist. I was welcomed warmly and treated well. I did feel, however, that the older scientists considered me to be much like an exotic animal. Meaning that they did not know whether I was going to be friendly or bite! I later heard that at a regional project meeting, one of the scientists had been told that it would be a terrible mistake for the laboratory to hire a woman. All of the attending scientists

(all male, of course) had agreed that it was impossible to work with a woman. At the time, I was very shy, non-confrontational, and tried to get along with everyone. With time, I came out of my shell and learned to be assertive. It was survival! When you are an assertive woman, you are considered to be aggressive. I have often told colleagues that if I were a man, I would be considered pretty low-key.

I never had any grand plan for my career when I finished graduate school. I always said that I just wanted to be someplace where I could “do some fun research”. I have certainly had the opportunity to do that. One of the best pieces of advice that I was ever given was to attend the Soil Chemistry Division business meeting at the SSSA national meetings. I have done this regularly since 1984. At first, I was the only woman in attendance. This gave me a lot of exposure and led to the opportunity to serve as Chair of the Soil Chemistry Division. I also became involved in the editorial process of Soil Science Society of America Journal, first as Associate Editor, then Technical Editor, and since January 1, 2014 as Editor. In each case, I was the first woman soil chemist to hold that particular position. I was also the first woman soil chemist to be elected a Fellow of the Soil Science Society of America. I had always operated under the maxim that “a woman needs to work twice as hard, for twice as long, to get half the recognition”. Therefore, I was very gratified to observe that women soil scientists were elected Fellows at the equivalent point in their careers as men.

My only regret about my career is that I never had the opportunity to teach courses. As a graduate student, I thoroughly enjoyed being a teaching assistant. So instead, I taught math to my two sons throughout their secondary school careers. My older son, Daniel received a Bachelor’s degree in Biology, a Master’s degree in Ecology, Evolution, and Organismal Biology, and is in his first year of a PhD program in ornithology in the Department of Biology, Ecology, Evolution, and Systematics at Illinois State University. My younger son, Matthew received a Bachelor’s degree in Computer Science from UCLA and is in his first year of a PhD program in Computer Science at the University of Maryland. My joke has always been that they say “Mom has a PhD. How hard can it be?” My ability to apply for faculty positions across the country was limited by the fact that my husband Gary has his own law office in Riverside. I had always thought that I would have very progressive children, since Dad is a lawyer and Mom is a soil scientist. Imagine my surprise, when my younger son came home from school and asked me “Mommy, can ladies be lawyers too?” Notice that he did not ask “Mommy, can men be soil scientists too?” In first grade, he had already learned that society places limitations on women and not on men.

I have made a point of trying to meet and mentor as many fellow women soil scientists as I could. In fact, I have been accused of giving special treatment to my women colleagues. For example, when I was Division Chair, I selected four women and one African-American man as Session Chairs for a total of nine Sessions at the SSSA national meetings. I have been fortunate to have had a series of great mentors. Due to the lack of senior women in soil chemistry, all of my mentors have been men. In turn, I have mentored a large number of individuals, most of whom have been men. I believe that, the way I can pay back my great mentors, is to try to be a great mentor myself. Hopefully, the individuals whom I have mentored will, in turn, mentor the next generation. This is how we flourish as a scientific community.