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A WISE Leader Inspires Women at SF State

by Reyna P. Menjivar

“I consider my pathway to science to have been very interesting and unusual,” says Dr. Lisa White, who until recently was a geosciences professor at San Francisco State University as well as Associate Dean of the College of Science & Engineering (COSE). Dr. White is now Director of Education and Outreach at the UC Museum of Paleontology in Berkeley. One branch of her unusual “pathway” led to the directorship of Women in Science and Engineering (WISE), a faculty-run organization at SF State. As director, White is helping steer WISE in its mission: inspiring women to major in—and stay in—the sciences. Women now earn 60 percent of non-science bachelor’s degrees nationwide. According to a recent report, however, only 28 percent of women earn B.A.s in science, technology, engineering, and mathematics [STEM] subjects compared to 38 percent of men. White hopes that WISE can help address this gap. “I’d love to continue to engage more people, more students,” she says, both here and on other campuses.

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White’s own history provides part of the inspiration for other women. White was an undergraduate at SF State starting in 1978. At that time, she was a declared art major with an emphasis in photography. She developed an interest in the geosciences through photographing landscapes, however, and switched majors. In her junior year she worked as an intern with the U.S. Geological Survey in Merlo Park. An African American woman, White noticed stares of curiosity, even disbelief, when people discovered she was an aspiring geoscientist. She also recalls how few women were enrolled in her geoscience classes, and decided, even then, to encourage other women to enter and stay in science. She finished her PhD at UC Santa Cruz in 1992. While working as a student assistant, this writer also re-joined Randall and others in starting an official chapter of WISE at SF State.

In her graduate program during the late 60s and early 70s, recalls Randall, “I had a number of issues which I hope women these days aren’t going through. I became really sensitized to being a minority in an area where it was mainly men.” When Randall arrived at SF State in 1987, WISE met once a month during lunch but the group lacked leadership and financial support. Following its “rebirth” in 2010, the group garnered strong continuing support from Provost Sue Rosser, COSE Dean Sheldon Axler, and biology department chair Michael Goldman. Adds Randall, “We also have a person who can coordinate and organize, in the form of Lisa White, plus a web site and some donors to back up the activities of the organization with money.” Randall approached science and engineering faculty members in the Fall of 2009, to discuss issues facing women in these fields. Her timing was lucky; that year, Rosser became Provost and strongly supported the organization. Dr. Randall and Rosser both contributed personal funds to launch WISE officially in 2010. Observes White, “WISE is now comprised of 40 female faculty members in the College of Science & Engineering who meet once a month during lunch but the group reason enough to start a forum.”

Rooser’s and Randall’s seed funding allowed WISE members to start a seminar series on the SF State campus. WISE organizers have invited women scientists from across the nation and the globe to engage campus faculty and students in discussions about women in science. For example, on March 9, 2011, to celebrate the 100th anniversary of International Women’s Day, Dr. Zuleyna Tang-Martinez, a biology professor at University of Mississippi, St. Louis, spoke about animal behavior and how males generally initiate mating and sexual selection. Good scientists such as Tang-Martinez and other female leaders at SF State have fostered the idea of increasing science awareness among students. “The whole idea of this is to bring women in as role models and also as of support for women faculty.”

WISE seminars like these stimulate discussions on the historically male-centered nature of most science professions. No one is certain why men have so dominated science fields, but a common assumption is that women put their science educations and/or careers on hold to start and raise families. As a result, “I think important to encourage scientific innovation,” she says, “because diversity drives creativity.” WISE is and should be “an organization that provides community, greater sense of belonging in science, and access to top administrators,” Márquez-Magaña concludes.

White observes that, “It is too early to evaluate the progress of WISE. … It is not a good idea to judge it too hastily because WISE members are still figuring out their direction.” In a SISE seminar, Randall added, “We are intended to inspire diversity and retention in STEM fields as well as to foster discussions about frustrations common to both students and their female professors.”

Lisa White notes that while other science programs have lower percentages, the SF State biology department now has about equal numbers of female and male students. She speculates that popular career applications such as medicine and nursing contribute, but notes that the biology department has “led the way not only in gender diversity but ethnic diversity as well.” It is no accident that a biology professor reached out to other women science professors and Randall did so, says White, because faculty members in other departments “are really fragmented.” White adds that the “issue of women in science could not have been better approached without communicating with other professional women with wealth.”

Beyond initiating a speaker series and including students, WISE is providing a forum for interdisciplinary faculty discussions. “Some of the issues we’ve discussed,” White says, “that can provide women with professional networking opportunities in the sciences.” A year later, White joined Randall and others in starting an official chapter of WISE at SF State.

In her office in Thornton Hall, White has an enormous bookshelf crammed from floor to ceiling with books and files. Conversations often start with some discussion of her recent activities. “I do not recommend this [amount of work] for everybody,” she jokes. But she sees still more opportunity for effort through WISE despite the increasing numbers of women majoring in science today. White would love for WISE to help students connect with courses that attract them to enter and stay in science. “As a faculty group,” she says, “WISE can look for ways to better help the women majors we do have to enter the profession and think about advance degrees and career tracks that would lead them into leadership positions.”

Dr. Lisa White
Department of Geosciences

Dr. Lisa White, a biology professor at SF State, was a driving force behind the creation of WISE. She credits the group with helping her and other female scientists navigate the often male-dominated world of science. Through WISE, she and her colleagues have been able to provide support and networking opportunities to female scientists, helping to inspire and retain women in science. The organization’s growth and success have been significant, and White hopes to continue to make a positive impact in the field. In an interview with this writer, White discussed her experiences as a female scientist and the role that WISE has played in her career. She explained how the group has helped her overcome challenges and provided a sense of community and support. WISE has also helped to foster discussions on issues facing women in science, such as mentorship and networking opportunities. White is committed to continuing the work of WISE and helping to inspire the next generation of female scientists. Through her efforts, she hopes to create a more inclusive and supportive environment in the sciences.