Diving Into the Deep
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Inspired by Jacques Cousteau TV specials and sea adventure books, Dawn Wright (pictured left) dreamt about becoming a pirate or an ocean explorer. Years later, Wright realized her dream of becoming an oceanographer and found herself inside the deep-sea submersible, Alvin, examining recent volcano eruptions along the Juan de Fuca Ridge off the Northwest Coast. She also helped create a seafloor map of Fagaita Bay National Marine Sanctuary in American Samoa using geographic information systems (GIS).

Wright, a professor at Oregon State University (OSU) in Corvallis, has become a pioneer in marine geography and geology. As one of the few African-American women in these fields, Wright hopes that by sharing her adventures with young women and minorities, she can convince them that studying the world’s oceans can make for a rewarding career.

A Life of Exploration

Growing up in Maui, Wright took an interest in the complex processes of the ocean and decided to study earth sciences in college. She completed a B.S. in geology at Wheaton College in Illinois, then an M.S. in oceanography at Texas A&M University. Wanting to broaden her horizons after graduation, she spent three years traveling the world aboard a 470-foot ship as a marine technician for the International Ocean Drilling Program, helping to collect sediment and rock samples from the sea floor.

The experience inspired a desire to head her own expeditions and projects some day. So Wright enrolled at the University of California at Santa Barbara and started using GIS in her research. She completed a Ph.D. in physical geography and marine geology in 1994, and soon after became an assistant professor at OSU’s Department of Geosciences. She achieved the rank of professor in September 2002.

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Oregon Coastal Atlas, to help scientists and the general public address issues such as beach erosion and salmon restoration.

Moreover, Wright has traveled the world to examine fissures along mid-ocean ridges, hoping to unravel the mysteries of hydrothermal vents and underwater volcanic eruptions. Wright has been instrumental in building an important research program in seafloor mapping and tectonics at the University of Oregon, and she wouldn't trade her job for anything. "This work really does capture the imagination," she says. "It's fascinating science that may have great values in ways we don't even understand yet. But even more than that, it's a blast."

Addressing Concerns

Wright is an advocate for getting more students of color and women to consider careers in ocean sciences. The number of women is "indeed still very low, especially low for minorities," she says. Wright knows of what she speaks: she was the first African-American woman to dive with Alvin, and today she is still the only African-American female full professor at OSU.

For those who decide to embark on scientific career, Wright stresses the importance of building a strong support system. "These need not be people who necessarily look like you physically, but are of a kindred spirit, and believe in you and your abilities," she says. Wright herself wouldn't have gone as far as she has if it weren't for her mother and a former department chair, a Caucasian man.

Diversifying Oceanography

Wright has her own theories on why diversifying oceanography has been such a challenge. "Many minority students do not grow up thinking of marine science as a field that they would be welcome in or be able to undertake," she says. "I think I may be somewhat unusual because I grew up in the Hawaiian Islands, and my family was the first Negro family to move to Maui in the mid-1960s." Wright also points out that general oceanography and geography are still not major parts of most high school curricula in the United States.

Wright, who's now in her early 40's, has never felt that being African-American or a woman has held her back, even when she was just starting out. "Even if you are the only one [person of color or female] . . . , it does not have to defeat you," she says. "If one person gives you a hard time, there will always be someone else who does not and reacts to you in a wonderful, positive manner."

Despite her heavy workload, Wright devotes part of her time to sharing her work with future generations of scientists and letting them know about the career opportunities that might await them. Whenever time allows, she gets involved in science fairs and workshops for middle and high school students. She has written articles for K–12 publications and has been profiled in science and math textbooks, magazines, and even a permanent exhibit in the Oregon Museum of Science and Industry.

Wright also provides research opportunities for women and minorities in oceanography. Recently, thanks to funding from the National Oceanic and Atmospheric Administration, she and a colleague awarded two graduate fellowships: one to a female and another to a minority in coastal/marine geography and resource management.

"I really try to connect," she says. ". . . They can see me up there functioning and enjoying my role as a teacher and a scientist in this area, so hopefully that makes an impact."

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