WOMEN WHO CONQUER CANCER ARE EVERYWHERE

ASCO, CONQUER CANCER ELEVATE WOMEN IN ONCOLOGY  By Aaron Tallent
In 1920, Marie Mattingly Meloney, then editor of a women’s magazine called The Delineator and the first woman to win a seat in the U.S. Senate press gallery, was granted a rare interview with Marie Sklodowska Curie. In the course of their discussion, Ms. Meloney learned that the first woman to win a Nobel Prize and first person to win two Nobel Prizes needed a gram of radium to continue her research. She and her late husband, Pierre, found her first gram in 1898 through refining and processing tons of mineral ore. Madame Curie’s research with that gram laid the foundation for radiation therapy, and she even stayed in Paris to protect it during World War I. However, the original radium was given to doctors to use for cancer treatment, and she could not afford to purchase more. The price of radium in 1920 was $100,000, roughly $1.4 million today.

“Marie Meloney started the Marie Curie Radium Fund and through a national campaign raised $100,000 and bought Marie Curie that gram of radium,” said ASCO chief medical officer and executive vice president Julie R. Gralow, MD, FACP, FASCO. “They succeeded primarily through small donations from women throughout the country, including numerous prominent women academics who rallied around the cause.”

Leadership and Perseverance
In 1964, ASCO’s founders held their first meeting at the Edgewater Beach Hotel in Chicago. Among those seven founders was Jane C. Wright, MD, FASCO, who served as the secretary/treasurer for ASCO from 1964 to 1967. The director of cancer research at New York University Bellevue Medical Center, Dr. Wright was the highest ranked Black woman at a nationally recognized medical institution in the country at a time when there were only a few hundred Black women physicians in the United States. Dr. Wright’s leadership in oncology over her 40-year career elevated the field; her research contributions included developing the technique of using human tissue culture instead of laboratory mice to test the effects of therapies on cancer cells and demonstrating that methotrexate could treat breast and skin cancers.

“Dr. Wright finished medical school in 1945 and interned at Bellevue Hospital in New York City, long before the Civil Rights Act, and she was able to persevere, not only given her gender, but also the fact that she was Black,” said Ms. Daly.

Perseverance is key in medicine, but it was even more critical for the pioneering women of oncology and cancer research. Madame Curie’s and Dr. Wright’s stories are just two examples, but advances that moved the field forward did not come without an unwavering determinedness.

Today, when someone learns they carry a BRCA1/2 gene mutation, they immediately speak with their physician to discuss options for monitoring or reducing risk for breast and other cancers. They then begin taking steps to see if other family members carry the gene mutation as well. And we now have a new class of highly effective cancer research and the delivery of quality cancer care. This is not a year-to-year effort but in perpetuity for the organizations,” said Nancy R. Daly, MS, MPH, Conquer Cancer CEO.
therapies, PARP (Poly-ADP ribose polymerase) inhibitors, that target cancers with genes defective in DNA repair, primarily BRCA1/2. In the 1970s and 1980s, the idea that certain breast cancers were hereditary was generally met with extreme skepticism, but geneticist Mary-Claire King, PhD, changed that through her research and determination.

Prior to the discovery of BRCA1, the study of genetics was generally considered useful only in diseases with a simple genetic tie, such as Huntington’s disease and sickle-cell anemia, but not in complex diseases like breast cancer. From 1974 to 1990, Dr. King worked tirelessly to identify a genetic marker that accompanies the presence of breast cancer in families, ultimately convincing the National Institutes of Health (NIH) that her research was worth funding. In 1990, she and her research team identified the marker that is now known as BRCA1. For Dr. Gralow, who had the opportunity to work with her beginning early in her own career at the University of Washington, Dr. King’s relentlessness was as critical as her intellect in this advancement.

“She was a real force, and it wasn’t just her brilliant, scientific mind. It was that she didn’t back down. Nobody believed at the time that there could be a possible genetic basis to cancer, but she knew this was right and that it needed to be studied,” said Dr. Gralow. “Another reason why she was such a strong role model for me was that she also used her expertise in the fledgling field of genetics and genomics for human rights and social justice purposes, including identifying children taken from their families in war-torn Argentina.”

ASCO’s first woman president, Ruth Rose Ellison, MD, used her term from 1974 to 1975 to push for the use of a multidisciplinary approach to treatment. The potential for utilizing different combinations of surgery, radiation therapy, and chemotherapy in oncology was still emerging and needed more research and clinical guidance. Dr. Ellison advocated for this to ASCO’s approximately 800 members during her presidency.

Since Dr. Ellison, eight more women have served as ASCO president. Two of the last four were Lori J. Pierce, MD, FAS- TRO, FASCO (2020-2021), and Monica M. Bertagnolli, MD, FACS, FASCO (2018-2019); Lynn M. Schuchter, MD, FASCO was elected for the 2023-2024 term.

“ASCO has made a concerted effort to ensure diversity and inclusion in their leadership ranks. A direct result of this effort has resulted in more women achieving the honor of having served as president of ASCO. This is a powerful optic to young women physicians,” said Sandra M. Swain, MD, FACP, FASCO, who herself served as ASCO president from 2012 to 2013. Dr. Swain is currently a professor of medicine and associate dean for research development at Georgetown University Medical Center and vice president of genetic medicine at MedStar Health.

**Supporting Women in the Early Stages of Their Research Careers**

Among the many ASCO initiatives supported by Conquer Cancer is a substantial portfolio of research and mentorship grants. In 1984, the first Young Investigator Award (YIA) was granted to Judith Salmon Kaur, MD, a fellow at the University of Colorado Health Sciences Center. Dr. Kaur, who is one of only two Native American oncologists working in the United States, received the grant to

**“It is critical for women to get that recognition from an organization like Conquer Cancer—that then leads to other opportunities.”**

— NANCY R. DALY
study the development of monoclonal antibodies which could lead to targeted treatments for melanoma.

Receiving the YIA “was wonderful, and it powered me to think that I could do cancer research and that having access to funds for someone early in the career could make a difference. It also connected me to ASCO very early in my career,” said Dr. Kaur, medical director for the Native American programs in the Mayo Clinic Cancer Center.

In the nearly four decades that have followed the first YIA, Conquer Cancer has increased the number and types of grants and awards that it provides. “Since Dr. Kaur received a YIA more than 38 years ago, Conquer Cancer has awarded 562 additional YIA and Career Development Award (CDA) grants to women in oncology and has created YIA and CDA grants exclusively for female researchers,” Ms. Daly said. “I think that it is critical for women to get that recognition from an organization like Conquer Cancer, ASCO’s foundation. Once they have the acknowledgement within their institution that they got an ASCO grant, that then leads to other opportunities.”

While these grants advance breakthrough research, they also ensure women have the resources to sustain a long cancer research career. To date, 98% of all Conquer Cancer grant recipients remain active in research.

“I was an early recipient of an ASCO Career Development Award in 1995 when I was transitioning between fellowship and junior faculty, and it allowed real protected time so I could think and do research, apply for other grants, and write papers. I guess you could say that was my gram of radium,” said Dr. Gralow.

Gender disparities impact providers, and they also impact patients. Many cancer treatments affect fertility and ovarian function temporarily or permanently in women and cause sexual side effects that can be physical, mental, or emotional. Dr. Gralow said that recognizing these challenges helped put her on the path to specializing in breast cancer.

“I realized my patients were more comfortable telling me— as opposed to my older male counterparts— about the issues they were facing once they were done with treatment, such as early menopause. A lot of them would tell me that they felt lost after treatment ended and were left on their own to deal with the side effects,” she said.

The pressure to exercise and be healthy can also be challenging for patients struggling after treatment. This prompted Dr. Gralow to co-found Team Survivor Northwest, an exercise and fitness program for woman cancer survivors in Seattle.

“It’s kind of like Women Who Conquer Cancer. You’re out there supporting each other, and women who have gone through the program are the biggest mentors and cheerleaders for the new people coming into it,” she said.

Early in her career, Dr. Gralow was also active in a Ukraine Breast Cancer Project, which was funded by the U.S. Agency for International Development, her first experience in global oncology. That helped lead to her founding the Women’s Empowerment Cancer Advocacy Network (WE CAN), which supports patient advocates in low- and middle-resource countries.

“We were able to bring breast and cervical cancer patient advocates, initially from the former Soviet Union, Eastern Europe, and Central Asia, together to network with each other to learn about their work and how they could be supportive. Then it grew to East Africa,” she said.

In 2018, Dr. Gralow received the ASCO Humanitarian Award for her global work in empowering women with cancer and survivors.

Timely, oncologist-approved information to help patients better understand and manage their side effects is available at Cancer.Net, ASCO’s award-winning patient information website.

Visit asco.org/funding-opportunities to learn more.