

Nancy Davidson, M.D.

Director of the University of Pittsburgh Cancer Institute
and the University of Pittsburgh Medical Center Cancer Center

*"I believe that there have been vast changes in how we think about breast cancer and how we treat it and what happens to women who are diagnosed, even over the course of my career. I have no doubt that that will continue in the future."
-Dr. Davidson*

After just her first year in medical school at Harvard University, Nancy Davidson, M.D. had the opportunity to take a summer internship with leading breast cancer researchers Drs. Kent Osborne and Marc Lippman. She had no idea that the job would become "life defining." She took the job because it was a paid internship, but soon became captivated with the work. She recalls that "...the science was really phenomenal and I could see the connection between the science of breast cancer, which was just taking off then, and potentially what it would mean for that particular disease."

Throughout her career, Dr. Davidson has continued seeing the connections between the biology of breast cancer and discovery of new life-saving treatments. Early in her career, she studied how hormones affect the most common form of breast cancer. Over the years, Dr. Davidson received funding for her work from Susan G. Komen for the Cure. In fact, her 1987 Komen research grant was one of the first grants she received. "First of all, yours was one of the very first organizations that invested in me as an individual; that was huge." She explained that as a new faculty member at Johns Hopkins University, having outside funding and endorsement helped her become established at the institution.

Dr. Davidson has gone on to help lead several significant clinical trials that demonstrated the effectiveness of new targeted therapies, including trastuzumab and bevacizumab. In further clinical research, Dr. Davidson helped demonstrate the value of combination therapies, such as chemotherapy and hormonal therapy, for young women with breast cancer.

Today, as the director of one of the NCI-designated comprehensive cancer centers, Dr. Davidson is diversifying her interests, saying "I'm trying to take a lot of the principles I learned in breast cancer and think about how they apply in all areas of oncology." She continues to be enthusiastic about the breast cancer field, describing the investigators at her institution as "leaders who are pushing the program to the forefront of breast cancer research."

Dr. Davidson believes that there won't be a "single breakthrough" that allows us to cure breast cancer, but that because there are several kinds of breast cancer, there will be several breakthroughs. She predicts that "...ultimately we're going to celebrate it because it is going to allow us to really individualize and tailor therapy in an even more meaningful way than we are now."



Professional Accolades

- 1986 - American Society of Clinical Oncology Young Investigator Award
- 1999 - **Brinker Award for Scientific Distinction**
- 2000 - Wellesley College Alumnae Achievement Award
- 2007-08 ASCO President
- 2008 - 11th American Association for Cancer Research-Women in Cancer Research Charlotte Friend Award
- 2010 - ASCO Gianni Bonadonna Breast Cancer Award

Komen Funded Research

- 1987 - \$40,000 - The Role of Epidermal Growth Factor and Its Receptor in Breast Cancer
- 1990 - \$30,000 - Post Doctoral Fellowship
- 1991 - \$30,000 - Post Doctoral Fellowship
- 1992 - \$30,000 - Early Award
- 1994 - \$105,000 - Regulation of Estrogen Receptor Gene Progression by DNA Methylation
- 1995 - \$90,000 - Regulation of Estrogen Receptor Gene Expression by DNA Methylation
- 1996 - \$107,639 - Functional Significance of DNA Methylation of Estrogen Receptor in Breast Cancer
- 2001 - \$105,000 - Role of DNA Methylation and Histone Acetylation in Estrogen Receptor Beta Expression in Human Breast Cancer
- 2002 - \$30,000 - Role of DNA Methyltransferases 1, 3A and 3B in Human Breast Cancer
- 2006 - \$250,000 - Polyamine Analogues as Novel Anti-Estrogen Receptor Alpha Agents