

# SUSAN COHN USA

Professor Susan Cohn has devoted her career to caring for children with neuroblastoma and conducting clinical and translational research focused on understanding the biologic underpinnings of highrisk neuroblastoma to identify new therapeutic targets.

She has also led efforts to develop risk classification algorithms in the International Neuroblastoma Risk Group (INRG) Task Force and the Children's Oncology Group (COG). In collaboration with Drs. Samuel Volchenboum and Andrew Pearson, she has also created the INRG Data Commons, a platform that currently houses data on >24,000 neuroblastoma patients from around the world that are available to the research community.

She is conducting translational research with Dr. Mark Applebaum and Dr. Chuan He at the University of Chicago to investigate the epigenomic landscape of neuroblastoma and to develop liquid biopsy epigenomic biomarkers for response and survival.

In studies conducted with Drs. Monica Pomaville and He, she is investigating the biological implications of the m6A epitranscriptome and is testing the antineuroblastoma activity of inhibitors of METTL3, a writer that installs m6A RNA modifications.

Professor Cohn is also devoted to training the next generation of pediatric oncologists and has mentored numerous pediatric oncology fellows in both clinical and translational research.

"If it was easy, anyone could do it."

### On Relationships that Influenced My Career

Dr. Sharon Murphy greatly influenced my career. I first met Sharon when she was recruited to serve as the Hematology/Oncology Division Chief at Children's Memorial Hospital at Northwestern University. At the time, I was a young faculty member. Shortly after joining the Northwestern faculty, Sharon was elected Chair of the Pediatric Oncology Group (POG). Sharon introduced me the leaders of the POG Neuroblastoma Committee, including Dr. Robert Castleberry and Dr. Garrett Brodeur, both of whom also served as mentors for me. I learned very quickly the power of collaborative research and the importance of cooperative group clinical trials. I had the privilege of serving as the first Chair of the COG Neuroblastoma Disease Committee and have remained active in the COG since its inception in 2001. As an internationally recognized expert in lymphoma and a highly skilled female pediatric oncologist, Sharon also served as an important role model for me.

Dr. Andrew Pearson has also greatly influenced my career. I met Dr. Pearson, who is from the United Kingdom, in 2004 when we were asked to co-chair a new INRG Task Force by leaders of the Forbeck Research Foundation. The overall goal for the Task Force was to develop a consensus approach to pretreatment risk stratification. The INRG Classification System was was based on analyses of 13 variables in a cohort of 8,800 international patients. We quickly recognized the significant value of the data in this large cohort. A process to ensure these data are available to the research community was developed, and this enabled seminal studies, previously not possible with smaller patient cohorts. I have learned so much from Dr. Pearson's European approach to leadership, which differed a bit from my American approach. Specifically, he has taught me the importance of patience, developing consensus, civility, and working together.

#### On Challenges and Overcoming Them

I have encountered numerous challenges during my career. I found it very difficult to balance my life as a mother to young children and my career. I was fortunate to have a supportive husband who made sure dinner was ready every night for our children. This was not easy because my husband is also a physician with a busy practice. We also had a wonderful nanny who came to our home to help care for the kids when we were at work. However, I always felt that I was not doing all that I should as a mother, and I also felt I was not accomplishing all that I should at work. Figuring out how to "do it all" is not easy and remains a constant challenge. My family and my career are both very important to me. I eventually learned how to live with the realization that I needed to change my expectations about what can be achieved each day.

Pediatric oncology is a difficult career, and there are many challenges associated with this job. While caring for patients who do well is very rewarding, it is so difficult when a patient dies. As a young doctor, I remember not being able to control my emotions when one of my patients died. Although I have been working in this field for more than 35 years, I continue to be deeply affected by every one of my patients who dies. My motivation to conduct research focused on developing more effective treatments started when I was a pediatric resident caring for a precocious little girl with neuroblastoma, named Emily, who did not survive.

## On Balancing Career and Other Life Responsibilities

I am fortunate to have a supportive husband and family. When my children were young, in addition to our nanny, we had extended family nearby who could provide help when needed. I first started my pediatric fellowship when my son was 3 months old. I met with my Division Head in advance of the fellowship and asked if my schedule could be modified when I started fellowship so that I could spend more time at home. I was able to begin my fellowship with an elective evaluating bone marrows rather than the hospital service. This provided an opportunity for me to transition into what eventually became a very busy fellowship year. I was fortunate to continue to have significant help at home during my career.

## My Words of Wisdom for the Next Generation of Female Leaders

When I started medical school, I had no idea what type of career I would have. I knew I was going to be a doctor, and I realized quickly that I loved working with children. I would have told my younger self that if you are passionate about your work and pursue opportunities that arise, you will have a rewarding career. Although hard work is key, serendipity and luck also contributed to my success. I consider it a privilege to care for patients with cancer. New advances in pediatric cancer treatment are being made each year and survival rates continue to increase. However, more work is still needed. We must develop novel effective therapy for children with brain cancer and other metastatic solid tumors that are currently not curable. In addition, efforts to improve the quality of life of pediatric cancer survivors are critical. This will require a new paradigm for treatment strategies. We need to change our "more is better" approach and test less toxic, effective treatments that are individualized for each patient and their cancer. I am confident that those of you who are now embarking on this career will continue to make advances that will improve the outcome of children, adolescents and young adults with cancer.

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