

# "Research is formalized curiosity. It is poking and prying with a purpose." by Zora Neale Hurston

# RAELENE ENDERSBY AUSTRALIA

Associate Professor Raelene Endersby is a cancer scientist with extensive expertise in translational cancer research for paediatric brain cancers. Dr. Endersby completed a Bachelor of Science with firstclass Honours in Molecular Genetics from Curtin University (Australia). Inspired to make a difference in medical research, she completed a PhD at the Perkins Institute for Medical Research (Australia), focused on the leukaemia. Dr. Endersby then traveled overseas to St. Jude Children's Research Hospital, USA, for postdoctoral training in childhood brain cancers and developmental neurobiology. In 2011, she was awarded a research fellowship to return to Australia and join the Telethon Kids Institute with a strong desire to build a research program in Western Australia that will accelerate international progress for children with brain cancer. The Brain Tumour Research Program at Telethon Kids Institute is a large collaborative unit she co-leads with Clinical Head Nick Gottardo. They have created an environment that is highly integrated, bringing together the clinical and laboratory aspects of brain cancer research, and that incorporates researchers from other organisations and disciplines where people generously share their expertise.

Internationally, she is Co-Chair of the Preclinical Steering Committee within the Collaborative Network for Neuro-Oncology Clinical Trials (CONNECT) which spans North America, Europe, and Australia. She is a member of the CNS Tumours Group of the Australian and New Zealand Children's Haematology & Oncology Group (ANZCHOG) – Australia/NZ's peak cooperative trials group for childhood cancer. Her national

recognition is evidenced by positions on committees such as Chairing the 2023
Commonwealth Government's evaluation of the Australian Brain Cancer Mission (ABCM), the Brain Tumour Expert Group of the ZERO Childhood Cancer Program (Australia's largest childhood cancer personalised medicine program) and the ZERO Preclinical Research Strategy Working Group, working to enhance fundamental and translational childhood cancer research in Australia.

### On Relationships that Influenced My Career

There are many people who have shared experiences, advice, and played important roles in shaping my career and helping me find my own path forward. Initially, it would have to be my parents who instilled a strong work ethic in both my sister and I. Through this I have learnt to rely on self-discipline, as well as to work with focus and attention to detail. My father was a GP and my mum a scientist (molecular microbiology), so they imparted an interest in medicine, encouraged me to explore my desire to understand the world around me, and inspired me to always think about helping others.

One of the character traits I have valued in my journey to be a successful scientist is integrity. This was instilled in me by my postdoc mentor, Suzanne Baker. She once said to me that as scientists, we do not have much to offer except for the ability to use our tools and knowledge to help us really understand biology; so, if we are going to pursue this, then it is on all of us to do it properly to the best of our ability. i.e. no short cuts, and do the right experiment, even if it is hard. Learning from her, I hold myself to very high standards of excellence, being very careful in the designing of experiments, and in the interpretation of the results, considering all angles. Most importantly, I seek advice from others constantly to make sure all aspects are considered and addressed. Integrity not only relates to the way I approach my research, but I also in the way I interact with people. I am committed to authentic leadership. I am honest but kind and proud of the excellent relationships I have with my colleagues and students. I mentor my trainees to become innovative and critical thinkers, willing to be bold in their ambitions, whilst maintaining scientific rigor and integrity.

Most importantly, I believe that transformative change in paediatric oncology will not happen without great teamwork. What keeps me in the lab every day is the encouragement, advice and thought-provoking discussions I have with clinical colleagues, especially Nick Gottardo. It is easy to get distracted from the 'big picture' when dealing daily with the uncertainties of bench research, lack of funding and no job security. Having Nick Gottardo and other physicians value our research and skills and remind us of the urgent need find better therapies for kids with brain cancer is what keeps me striving to find the answers.

### On Challenges and Overcoming Them

Paediatric oncology and translational research is a team sport. Indeed, we work as a team of teams multiple clinical disciplines taking care of patients, based on research generated across a very diverse range of specialized scientific fields. In a research lab, effective teamwork is essential to ensure a safe workplace, efficient use of limited resources and positive morale. Becoming a lab head and managing a growing team of high-achieving people, with diversity in culture, gender, and expertise, was a huge challenge for which I had received no prior training. I was fortunate to have the opportunity to undertake some leadership and management training at my institution. As part of this, I learnt more about myself, my own unconscious motivators, my deficiencies, and how I am perceived by other people. This also helped me recognize and appreciate how and why other people behave. Understanding people has helped me be a better team leader and mentor. Another challenge has also been where I have recognized

when a team member was not coping within our work environment. Being able to recognize that their mental health was suffering and seeking help and advice on how to deal with it has helped me be a more compassionate and understanding leader.

## On Balancing Career and Other Life Responsibilities

I would not be able to do my work without a large amount of support around me. My husband is an amazing support. He has been willing to relocate anywhere, even when this was at the expense of his own career. We work together to care for our child, both when he was younger and now. My family never make me feel guilty when work calls me away from home, or when I need to put in the long hours to meet a grant deadline. I make the effort to not miss out on important events, even though this means I need to put in time after hours to make up for it. This is a major bonus of having an academic career where my schedule is self-determined and essentially freed from rigid work hours, although the converse of this is that you never really switch your brain off. To manage this better, I run and listen to podcasts. I love traveling so I am also often trying to learn new a language and am always seeking different places to eat and new food to try.

My Words of Wisdom for the Next Generation of Female Leaders

There is still so much progress needed for paediatric oncology. We need to attract the best and brightest minds to the field to help build on our existing knowledge. This means there are great opportunities to continue our collaborations especially with our international partners, in particular cooperative trials groups. Research as a laboratory scientist is a very tough career, and there is no one path to success. I love the freedom being research scientist provides. It is a privilege to be able to focus my time on challenges within paediatric oncology that interest and excite me. I

relish the task of using my initiative and judgment to focus on undiscovered aspects of childhood cancer that I think have potential to be important insights that might change the way we treat these diseases. However, when I was younger, I was so frustrated by the fact that there is no formula that guarantees my next position. Due to the nature of working within a limited funding environment, research positions and grant funding are scarce, making it very competitive. Being successful wasn't just about putting in the most hours, working with the best people or being the smartest in the room. My advice is to focus on what you're enjoying. Despite all the challenges, are you loving it? Do you get satisfaction, joy and fulfilment in each day, week, month? If you have passion for your work, it will get you through the many challenges thrown your way. Have confidence in yourself and your abilities, but don't be afraid of a career change either.