

# Spotlight on women in science

## Linda Vong\*

February 11, 2021 marked the sixth annual International Day of Women and Girls in Science—a day commemorating the global effort to increase the advancement and engagement of women and girls in science and technology fields. Women play critical roles in STEM (science, technology, engineering, math) fields, however gender equity is yet to reach parity, with women accounting for only one third of researchers worldwide (UNESCO 2019).

Today, women graduating from higher education hold no <50% of MD degrees and PhDs in the life sciences and social sciences—a marked increase in comparison to statistics from decades earlier (Burrelli 2008). Yet, there remains an under representation of women in higher level tenure-track or professorship roles. Many aspects of societal structure and cultural beliefs constrain the choices that women make, from deferring careers to raise children or caring for elderly family members, through to prioritization of spouses' careers or geographical location over one's own. Critically, the choice to start a family can impact the decision to apply for and withdraw from tenured roles (Faculty Committee on Women in Science, Engineering, and Medicine 2010). Rather than penalizing female academic scientists for taking family leave, an approach towards attaining gender equity that many academic institutions have implemented include pausing the so-called "tenure clock", making accommodations or allowances for productivity during child-rearing, reduced teaching load, and extensions for grant and funding proposals.

Efforts directed towards overcoming barriers that women in academia have historically faced, including discrimination in grant funding, publication bias, and hiring practices, have largely been successful (Ceci and Williams 2011). However, in addressing the number of women entering and staying within STEM fields, other factors, such as gender pay gap, cultural beliefs, and biases (whether implicit or explicit) remain challenges that we must overcome to allow women to participate fully in science.

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Canadian Centre for Primary Immunodeficiency, Division of Immunology/Allergy, Hospital for Sick Children, Toronto, ON

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\*Corresponding author: Linda Vong/linda.vong@sickkids.ca

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**Dr. Sneha Suresh, MD, FRCPC**Pediatric Clinical Immunology and Infectious Disease,
Stollery Children's Hospital
Assistant Professor, University of Alberta

### **Biography**

Sneha completed her pediatric residency and pediatric infectious disease fellowship at the University of Alberta. She received a Stollery Children's Foundation Fellowship to complete a fellowship in Clinical Immunology and Transplantation at the Hospital for Sick Children, University of Toronto. She currently works at the Stollery Children's Hospital as the clinical

lead for the Pediatric Immune Deficiency clinic, serving patients in Northern Alberta, the Northwest Territories, and Nunavut. By combining her expertise in Infectious Disease and Immunology, her research focuses on vaccination and protection of immunocompromised hosts, both with primary and secondary immunodeficiency. She is also involved in the postgraduate and undergraduate education of residents and medical students in the field of Clinical Immunology.

## Perspective on women in science

"As a woman in my particular field, pediatric Immunology and Infectious Disease, I have been incredibly lucky to have been mentored by both men and women who respect and value the contribution of women to science. Whether it is supervisors who consistently employ and give opportunities to women in their lab or fellowship programs, or women in the field themselves who understand the multifaceted roles that women in science or academia must balance; these mentors are wonderful role models of professionalism, dedication and balance that I have been so fortunate to learn from. The best advice I can give to women (and anyone!) starting their careers, is give yourself time to figure out what gives you a sense of balance and contentment. Whether that is time with family, children, pursuit of a sport or hobby, travel, or pursuit of further academic work in your field, figure out what that is and give it time and importance in your busy life. A sense of internal balance and fulfillment can only improve our external contributions to our respective fields."