



Editorial

The first article in this issue, by Poona Saxena, *Gender and Computer Science Debate at Indian Institutes of Technology* adds to the growing literature that challenges Western centric narratives about gender and STEM particularly in the field of computing. The paper reports on an ethnographic study, of the experiences of Indian women students in Computer Science and Engineering (CSE). The study explores early experiences that motivated the women to enroll in CSE as well as their future aspirations. Important findings from this study of Indian women and their participation in computing are that they do not experience masculinity in the field. On the contrary, Computer Science is considered female-friendly, and in India at least, it does not have the stereotypical image of the *antisocial geek male*.

Meanwhile, the engagement of girls and young women continues to pose a challenge in other areas of the world, and initiatives to redress this often happen either within or outside of formal education, but rarely combining both of these. Sarah Hug and Suzanne Eyerman describe a partnership between informal and formal education in the USA which does just that. In "*I Like That Girl Power*": *Informal/Formal Learning Ecosystems that Support Young Women's Engagement in STEM* they report on a project run by Techbridge Girls to engage young women of color in engineering. The paper shows how by integrating an afterschool program into the school community, the project has created opportunity for informal and formal settings to reinforce one another in ways that are less common in traditional, stand-alone informal STEM learning.

There has been a considerable amount of research focused on women who do not enter STEM careers, in other words on those who lose interest prior to even entering these fields. Rebecca Hite, Heather Greenhalgh-Spencer, and Michela Insenga in their paper *How She Persisted: Working Women Engineers' Experiences in and Perceptions of Engineering*, focus instead on women who persisted, meaning those who are currently working in the field as an engineer. Their study recruited 46 female engineers from engineering firms and academic departments in the US and UK to participate in a survey querying sources of their engineering capital and habitus (per Bourdieu) and perceptions of engineers and the field. Participants reported educational influences and family as important. Women held positive perceptions of engineers and engineering, citing their use of non-cognitive skills (e.g. creativity, critical thinking) and improved social outcomes (e.g., betterment, impact) from engineering.

Professional networks and women's groups have long been in the forefront of leading campaigns for sector change as well as supporting women in their STEM careers. Alicia Dawn Bjarnason adopts a feminist geography perspective to look at the role and experience of Canadian professional women's groups in her paper "*A Space of their Own? Professional Women's Groups in the Alberta Resource Sector*". This mixed-methods study included an inventory of current groups that exist in Alberta, an online survey to reach professional STEM women within the geoscience community, as well as semi-structured interviews. The intended outcomes were to create evidence-based solutions, which in turn will help contribute to concrete solutions to better support professional female geoscientists.

Our final paper is a Canadian case study *The Effectiveness of Negotiation Skills Training in Advancing the Status of Women in Science and Engineering* by Jerie Shaw, Jenepher Lennox Terrion and Catherine Mavriplis. Starting from the observation that women are less likely to negotiate for career progression than men are and that they negotiate differently than men do, this paper presents a detailed account of a negotiation skills training program for women in STEM in Ontario. The authors present a mixed-method evaluation (questionnaires and qualitative semi-structured follow-up interviews) to assess the impact of the workshops. Results showed that the training produced positive results and was particularly effective at encouraging participants to transfer their new skills back to the workplace and actually change their negotiation behaviours.

We hope you enjoy reading the papers in this issue. Keep well and stay safe.

Clem Herman, on behalf of the editorial executive: Helen Donelan, Barbara Hodgson, Carol Morris, Stefanie Ruel and Gunjan Sondhi