Foreword

Cassidy R. Sugimoto

The percentage of women authorships[1] in Switzerland over the past two decades is around 27%, making it one of the lowest in Europe and falling below the world average.[2] This is aligned with the rate of women in professorships (24%), which likely prompted the Swiss National Science Foundation to produce the PRIMA call, aimed at propelling excellent women scholars to professorships. Twelve of these awardees have shown the courage and generosity to share their stories here.

These scholars represent a range of disciplines, many of which have among the lowest rates of women participation, such as astronomy and physics. It is no surprise, therefore, that their stories are often of isolation: several women noted having never met anyone in their field before going to university and many were the first in their family to do so. These scholars were navigating completely foreign paths, with few women to help them along the way.

While they all held positions in Switzerland, they hail from around the globe and took many circuitous routes to their current position. Such is the nature of contemporary scientific work. Of the 30 highest-producing countries in the world, Switzerland has, by far, the highest rate of scientific mobility. This is, in some part, due to the concentration of work in

1 "Authorship" refers to "the average percentage of all authors on a paper who are women." See Cassidy R. Sugimoto and Vincent Larivière, *Equity for Women in Science: Dismantling Systemic Barriers to Advancement* (Harvard University Press, 2023).

2 All cited statistics are taken from Sugimoto and Larivière, *Equity for Women in Science*.

physics, a field where mobility is nearly a requirement for participation. Mandatory mobility can create heightened precarity, which is noted by several scholars and most elegantly by Meike Ramon, who spoke of academic life in terms of "lifelong dances with uncertainty."

Unfortunately, these inflection moments for mobility are concomitant with when scholars are most likely to also be balancing competing domestic demands, such as partnership, childcare, and eldercare. The stories in this book resonate with global analyses, demonstrating that academic women take on disproportionate domestic care responsibilities, with adverse effects for productivity and visibility. This was particularly heightened during the pandemic: Camilla Jandus describes homeschooling three children during COVID-19 while running her lab. The stories, however, highlight a silver lining for parenting: as Annalisa De Cia noted, "working mothers probably get some pretty good field training in leadership skills."

Despite the adversity they faced, a common theme across the narratives is passion: all the scholars have demonstrated that the foundation for resilience is commitment to curiosity, whether for sharks or the skies. Elizabeth Mesok provides excellent advice to let yourself be driven by the work you want to do, rather than the position you want to obtain. Many of the scholars, however, spoke about having projects that they "burn for" but that can create "burnout." They note that self-care and work-life balance will never materialize organically — there will always be more to do than there is time in the day. As Sara Hellmüller observed, "our main activity — thinking — is never really done." Space, therefore, must be created. Several spoke of structural changes in the system that are deconstructing institutions built for an "ideal scientist" — one who has the personal and financial support systems to devote themselves completely to scholarship. More work, however, is yet to be done to create structures that allow all scholars to bring the fullness of life to their work.

Another striking theme is the commitment of these women to lifting others in their scholarly pursuits. They spoke openly about their dedication to building teams and creating inclusive scholarly environments. This is an important element in diminishing the gender gap. For example, when women are in senior authorship positions, they select women

first authors in 46% of instances, whereas when men are in the same position, only 32% of first authors are women. By funding senior women for professorships, one both addresses gender disparities at the highest levels of academe and mitigates inequalities for early career researchers. The critical role of transitioning into mentorship and then leadership roles was beautifully articulated by Gina Garland, who spoke of adapting to this role and being faced with "new questions about the purpose and impact, the potential of research to affect change." She notes that: "Scientists do not work in a vacuum. Research does not begin and end in a lab, spreadsheet, or journal. Networks of people and thoughts are what spark and inspire the ideas behind projects, and ultimately drive these ideas into action [. . .] This network deserves to be not only acknowledged, but nurtured."

The stories in this volume highlight the role of women in the vast scholarly network, acknowledging their challenges and their contributions, and the communities that they have built. These stories are for the budding scholars, who contemplate devoting themselves to science; for the early career scholars, looking for a sense of belonging; for the senior scholars, considering how they can use their positions to empower others; and for those who make policy decisions to imagine and implement structural changes that support a thriving and diverse scholarly ecosystem.