

Foreword

Female students entered universities and university colleges a long time ago. Nonetheless this has not produced a corresponding effect on the proportion of women in top academic positions. At the University of Oslo (UiO), we see an accumulated gender gap, which is particularly visible in the natural sciences and technology, having 40 per cent female students yet only 24 per cent female professors (2021). We recruit fewer women than the recruitment pool suggests, and it is obvious that this systematic dropout of women higher up on the career ladder results in a loss of talent – something we cannot afford. We share this challenge with other European academic communities.

There is little scientific support for hypotheses that the accumulated gender gap in academia is only due to academic traditions and oversight. Nor do the assessment and employment systems appear to be objective enough to bring about changes on their own. We have to deal with this knowledge actively. At the Faculty of Mathematics and Natural Sciences (MN) at UiO, we have, in collaboration with the Centre for Gender Research (STK), organized this work through the research project “FRONT: Female Researchers on Track” (2015–2019). With the Faculty of Theology, the Natural History Museum and the Royal Institute of Technology (KTH) in Stockholm, this project has been continued as “FRONT2: Future Research and Organizational Development in Natural Sciences, Technology, and Theology” (2019–2022). Through FRONT we have systematically sought new knowledge as a foundation for long-term measures and further work towards improved gender balance in our organizations. This book describes key elements of this new knowledge, and how such insight may be used when working for change. This knowledge is important internationally, and the initial Norwegian publication has therefore been augmented by this revised English edition.

The world faces enormous challenges requiring restructuring, which is dependent on research-based knowledge from universities. However, the development of a sustainable society presupposes an unbiased research and education system encompassing a diversity of research perspectives, as well as educating candidates from all segments of the population. We know that academic role models of both genders are essential to successful student recruitment, which in turn forms the basis for an academic career path. Consequently, student recruitment and career opportunities are closely entwined and established in the learning environment, work environment, and research culture we create together, among both students and employees.

The absence of women in higher academic positions affects universities' societal position and is much more than just a challenge for women themselves. Universities are important carriers of culture – they manage, develop, and disseminate knowledge, and educate the citizens of tomorrow. Skewed selection resulting in a persistent gender gap in academia must therefore be considered to be a comprehensive democratic problem. This perspective is rarely addressed in the debate, despite the fact that the university is generally concerned with rectifying social inequality. It should not be the exclusive domain of one-half of the population to define research agendas and manage the development of knowledge in society. The work to rectify gender skewness in academia, therefore, requires particular attention from all leaders and employees in the sector, in synergy with political leadership, and the sector's range of instruments – if we truly wish to take this challenge seriously.

Recent research has led to increased recognition of the research organization's and the research system's central role and revealed that competition for research funding and academic positions is not gender neutral. This recognition undermines the very idea of meritocracy, which is a fundamental ideal in academic culture and tradition. This is particularly important in light of the fact that competition is intensified by the accumulation of competitive advantages. The belief in scientific quality as an objective dimension, unaffected by the system and society within which it is assessed, appears naive. Academia's subjectivity is well documented in international research, and *implicit bias* (unconscious

prejudice) is a phenomenon of which academic leaders and organizations are increasingly aware. Additionally, gender-selective patterns are reinforced by professional hierarchies with their origins in old academic traditions. Moreover, research shows that a fiercely competitive climate may strengthen the “masculinization” of the researcher role, and exposes hierarchies among men, while simultaneously excluding women. Interaction between different hierarchies, and strong competition under current competitive conditions must be assumed to contribute to the significant gender gap that we find in top academic positions. FRONT has placed a great deal of emphasis on highlighting and understanding the significance that different professional hierarchies and implicit bias might have for career opportunities for women and men in our system. “Men and masculinities” is emphasized as a particular focus area.

FRONT’s objective is to create long-term cultural change to improve gender equality and gender balance in the cooperating units, where the main objective is to rectify the gender gap in top academic positions. With funding from the Research Council of Norway’s BALANCE programme, which aims to improve gender balance in Norwegian research, we have implemented and followed up research-based initiatives with close involvement from the management in the different departments. Through this interaction between research-based initiatives and research on the initiatives, we have developed an extensive knowledge base during the course of several years. This systematic, knowledge-based, working methodology with a long-term focus (10-year perspective), followed up directly by top leadership, is unique in our sector. It has also been vital for achieving recognition of gender balance as a significant organizational challenge in our units. Leading this work and following the organization through comprehensive development has been a pleasure, but also a challenge. It is my distinct conviction that close leadership involvement is essential for success, although of course these efforts must also progress elsewhere in the organization. This book is based on our work and our experiences in the project, and presents our research findings. I believe that the knowledge base developed here will have considerable transfer value both within and beyond the higher education sector.

I wish to thank everyone who has contributed to the project during the past several years! This book represents a very important part of the work, and I want to thank all the authors, especially Øystein Gullvåg Holter and Lotta Snickare, for their major efforts in producing, analyzing, and disseminating knowledge gathered from our organization. This knowledge has been compiled in such a way that it should be highly useful to others working for a gender-equal academia and working life. In addition to the authors, I wish to thank the project's administrative leaders, the project coordinators, steering committees, research groups, project participants, partners at UiO and KTH, heads of departments, and the dean's office at the MN faculty. Additionally, many thanks to the Research Council of Norway, which has funded and followed the project with great enthusiasm.

I hope the readers of this book will find the project and research findings interesting. I also hope that the book can contribute to the important work of change currently happening in Norway and other countries!

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