## Policy brief \#2

## from the GRANteD Stakeholder Conference

# Applications, Grants and Research Careers 

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## Introduction

The GRANteD project has also investigated how gender disparities are shaping research careers and grant application behaviour. The policy brief summarizes main findings from different GRANteD research strands and policy recommendations discussed at the $2^{\text {nd }}$ GRANteD stakeholder conference.

## Empirical Results

Investigating research careers in academia through a large dataset of Swedish researchers GRANteD was able to show that in this case there are no gender differences in the time to professorship when controlling for scientific merits and past performance. But as grants have a strong effect on the time to professorship, gender bias in research grant allocations might indirectly affect the time to professorship.

Contrary to the Swedish findings, the analysis of Dutch data on researchers careers provided evidence that women compared to their male colleagues have a higher probability to drop out of science careers more often and also earlier in the career. Men therefore reach more often the full professor rank which suggests that gender bias affects the appointment procedures. Whether the stronger leaky pipeline effect for women nor the gender disparities in full professor appointments can be explained by differences in performance and scientific merit between women and men. Results can be interpreted that meritocracy in science works for women but not for men, who become full professors with lower levels of performance and merit compared to women.

The persistence of a stronger leaky pipeline for women researchers can be explained by the persistence of hurdles for women's career advancement in the research system: from male dominated formal and informal networks, lack of career support through supervisors, lack of flexibility and work life balance, chilly organisational climates and toxic work environments among others.

The GRANteD applicant survey investigated gender disparities among applicants of five research funding programmes in five research funding organisations. Its results did confirm the gender disparities in research and innovation known from the scientific literature only in some areas such as engagement in care responsibilities and supervisor support but not in others such as past performance, academic housework or feelings of belonging. This somewhat surprising findings can be interpreted as an effect of self-selection among researchers and especially women researchers who do not apply for grants if they feel not sufficiently supported or do not consider themselves as competitive.

## RECOMMENDATIONS FOR RESEARCH FUNDING ORGANISATIONS

Based on the results of the GRANteD project following recommendations have been discussed at the $2^{\text {nd }}$ GRANteD stakeholder conference in Vienna:

There is a clear need to strengthen the influence and impact of research funding organizations on the implementation of gender equality policies in research performing organisations. Research funding organisation should increase the accountability of research performing organisations for their efforts to promote gender equality and inclusion. This is for instance already partially implemented in Horizon Europe where public organisations and higher education institutions need to have a Gender Equality Plan to be eligible for funding. Another example are Irish research funding organisations which require an Athena SWAN Gender Equality accreditation to be eligible for research funding. Such requirements could promote the uptake of gender equality policies in research performing organisations.

Another approach is to require applications to foresee the promotion of gender equality during the research project implementation - on the team as well as on the content level. Especially for funding programmes for early stage researchers the inclusion of mentoring and career development measures should be consider as for instance in the ESPRIT programme of the Austria Science Fund (FWF).

The fact that also women researchers who report more often that they are the main care taker and that they have taken more often and longer parental leave are applying for research funding shows that gender equality policies like extension regulations or limiting the number of relevant publications in the applications or work life balance policies in research performing organisations are important and enable women (and men) with care engagements to pursue their academic careers.

To advance the knowledge on gender bias in the nexus between research funding and research careers more large scale, longitudinal datasets from different countries and organisations are needed. Research funding organisations should therefore engage in collecting and monitoring data about their applicants and make this date available for research purposes making use of the special provisions in the GDPR for statistical and scientific research.

## Further Reading:

- Sandström, U. (2022) D3.2 The Making of a Professor: A large-scale longitudinal Analysis to reveal Gender Disparities in Science Careers
- Mom, C., van den Besselaar, P., \& Möller, T. (2022, September 7). Factors influencing the academic career - an event history analysis. 26th International Conference on Science, Technology and Innovation Indicators (STI 2022), Granada, Spain. https://doi.org/10.5281/zenodo. 6975566
- Möller, T \& Holzinger, F. (2023), D7.1 Synthesis report on gender differences in grant application behaviour

