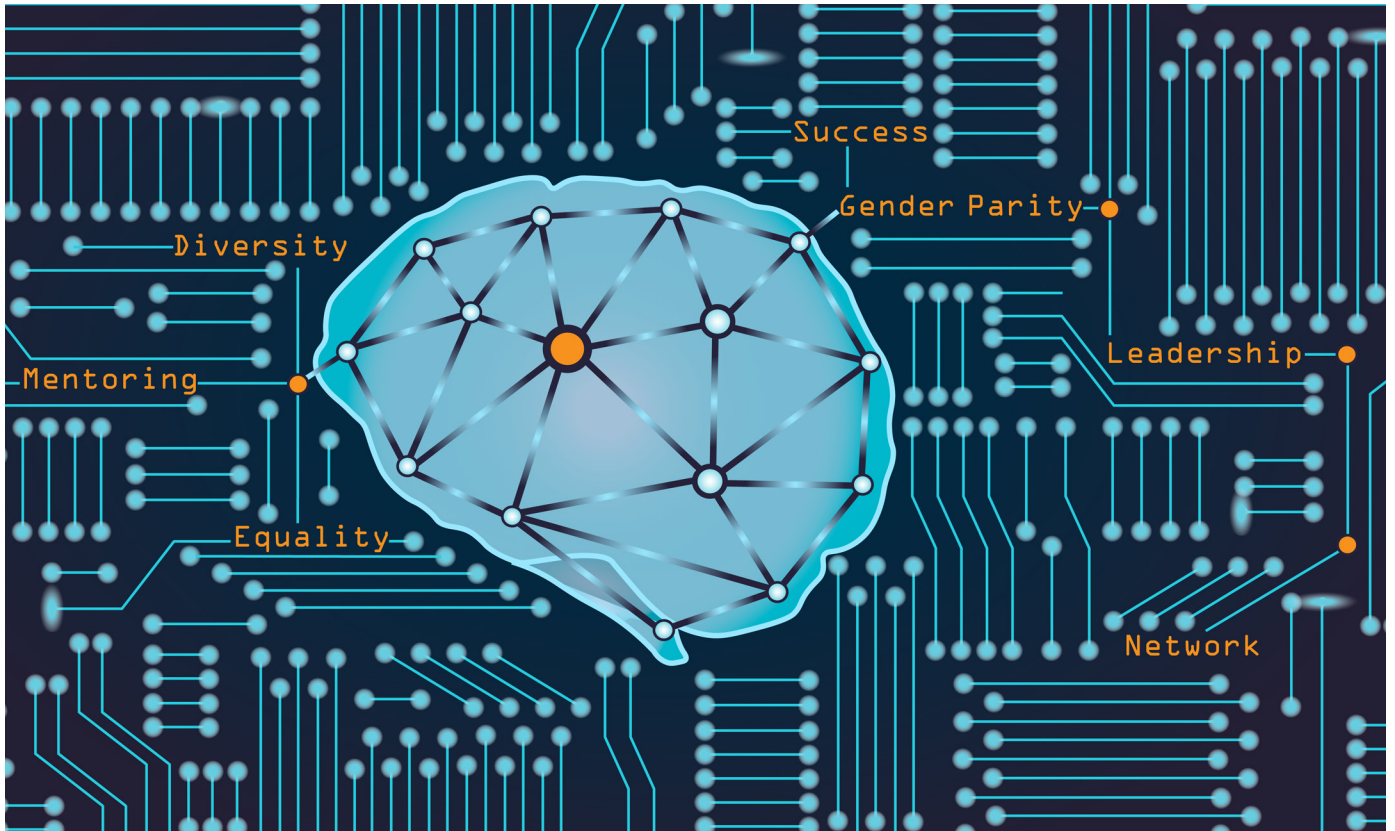


The *fatale* Initiative



FUTURE PLANS
FOR
THE YEARS 2021 AND 2022

IMPRINT

VEREIN ZUR FÖRDERUNG VON FÜHRUNGSKULTUR IN DEN BEREICHEN MATHEMATIK, INFORMATIK, NATURWISSENSCHAFT, TECHNIK (VFF-MINT) VIA "THE STEM FATALE INITIATIVE" <http://stem-fatale.com/>

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Synopsis

Founded in 2020 by 5 women and 1 man, The STEM fatale Initiative aims to take action towards gender equality in leadership positions in STEM.

The STEM fatale Initiative is a novel institutionally independent platform for women in scientific disciplines, often described by the acronym STEM (Science, Technology, Engineering, Mathematics), evolving from the Vienna region. The main language will be English since STEM subjects are international disciplines and the excellent academic institutions in Austria include scientists from more than 70 nations.

The STEM fatale Initiative has 3 main goals:

- Survey with Data Publication,
- Networking,
- Mentoring

The innovative aspect of the survey is the data-driven readout, which allows to identify critical factors exerting (1) positive impacts on women's careers in order to present a collection of best practices and (2) negative impacts on women's career progression in STEM. Results from the survey will be published in an international scientific journal and additionally as a publicly available report. These data will provide a framework to develop targeted strategies for educational measures in order to overcome women-specific career obstacles. Additional networking and mentoring programs will allow to further support exchange with peers and enhance career-strategic goal-setting.

THE STEM FATALE INITIATIVE TEAM:



NICOLE AMBERG



ANGELA BITTO-NEMLING



LISA CICHOCKI



AGLAJA KOPF



MELISSA STOUFFER



MOJTABA R. TAVAKOLI

Background

The "Gender Equality in Science and Research in Austria" Report released by the Federal Ministry of Education, Science and Research in 2018 illustrates that the participation of women across STEM disciplines drastically drops by approximately 20% at the associate professor and professor stages. While the probability for women being appointed as associate or full has significantly risen in the past decade as seen by significantly rising glass ceiling index at universities, women's share among overall applications still remains very low by accounting for only 15% of applications in technical universities and 28% of applications at classical universities.

Therefore, The STEM fatale Initiative is dedicated to (1) investigate why more women are not applying in what appears to be a less sexually biased professional environment and to (2) support women in STEM to aim for leadership position. In conclusion, educational systems and subsequently society will be able to invent measures to sustainably increase the pool of women contributing to leadership positions in STEM.

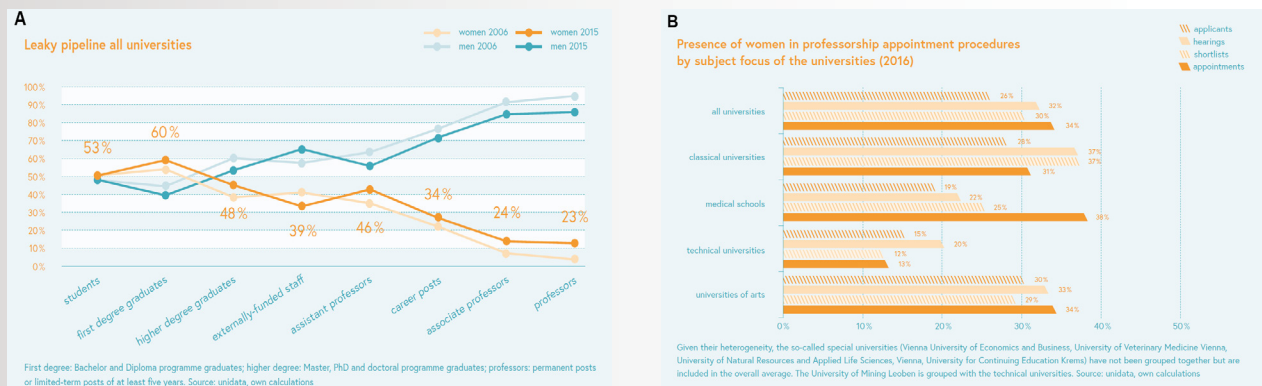


Figure 1: Leadership position potential for women in science. from: Wroblewski & Striedinger 2018*

A: Career trajectories of men in women in 2006 and 2015 for all Austrian universities.

B: Percentage of women in faculty recruiting processes in Austria in 2016.

*Reference: Wroblewski, Angela; Striedinger, Angelika (2018) Summary – [Gender Equality in Science and Research in Austria. Commissioned by the Austrian Federal Ministry of Education, Science and Research](#)

Goals

AIM 1: SURVEY AND DATA PUBLICATION



Our survey is acquiring data on critical positive and negative factors influencing women's career choices, including professional, societal, structural and personal factors.

Thereby, we have gained a total of 205 survey responses within the first three months of our operations.



We aim to use the analyzed data to

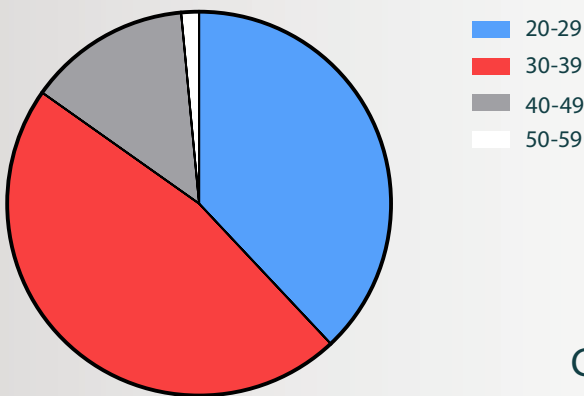
- publish the results and strategies in an international peer-reviewed scientific journal,
- publish the results and strategies as a publicly accessible report (accessible by language and free of cost; availability by download and hard-copy),
- develop targeted educational strategies and measures by collaborating with education experts, psychologists and professional coaches, and
- propose these strategies to institutional and/or political leaders in order to sustainably improve women's career chances towards leadership positions in STEM environments.

The preliminary cumulative results from those participants accessible in the section "News & Partner" on our website.

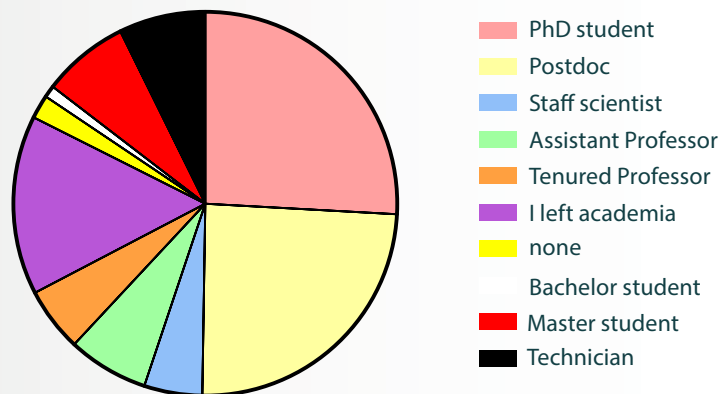
Survey Results

The STEM fatale Initiative was able to quantitatively determine positive and negative impacts for women's career development by collecting data from 205 participants by covering all age groups, career stages and STEM disciplines:

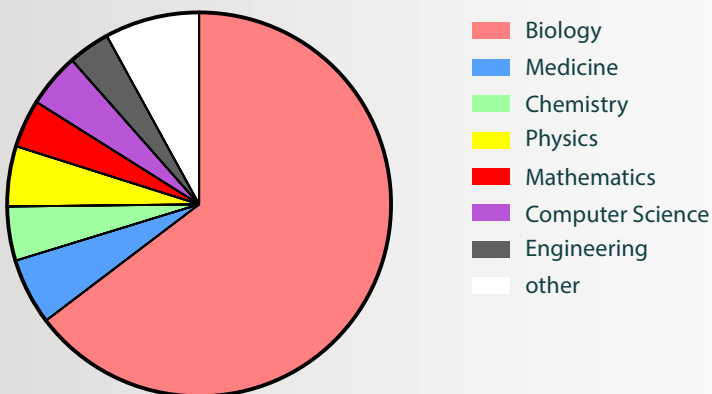
Age



Career stage

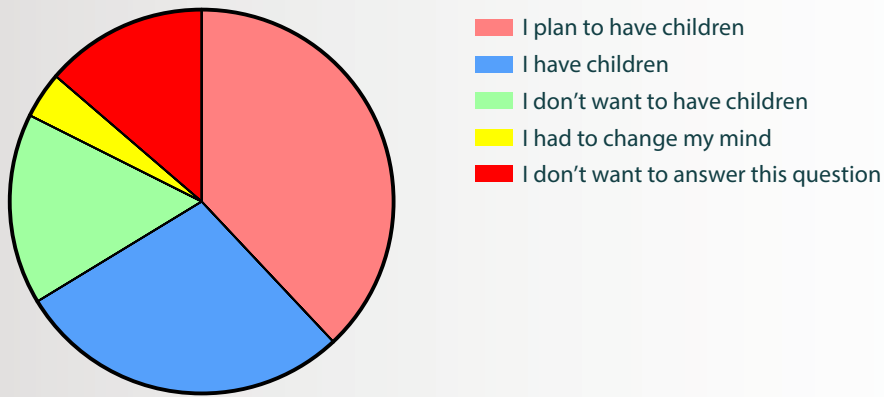


STEM discipline

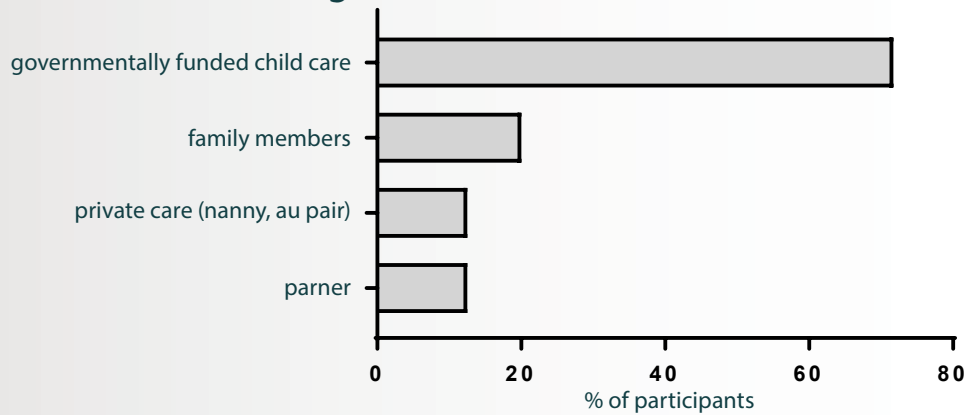


Survey Results

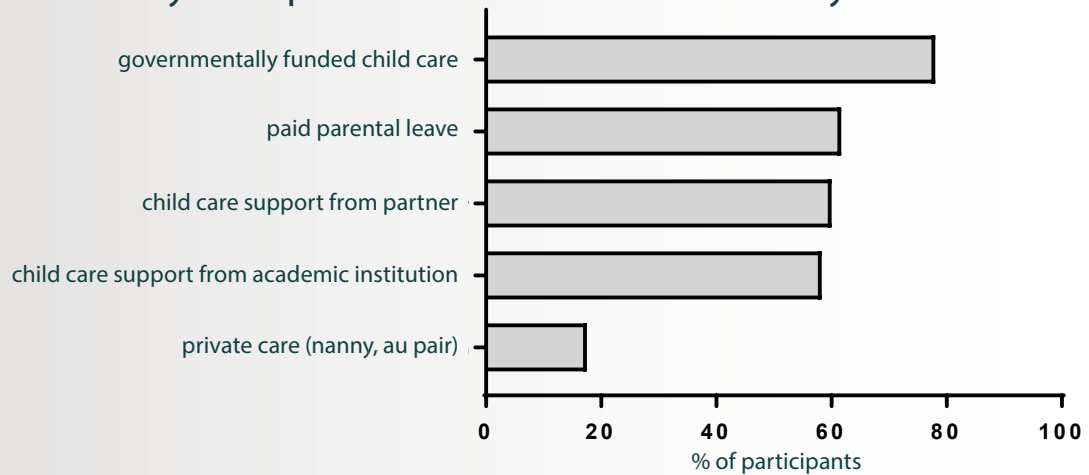
Status of family planning



How was the child care arranged?

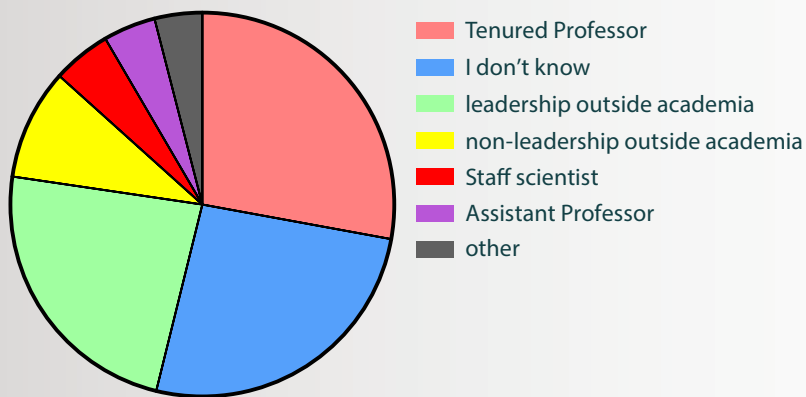


What would you require to be able to combine family and career?

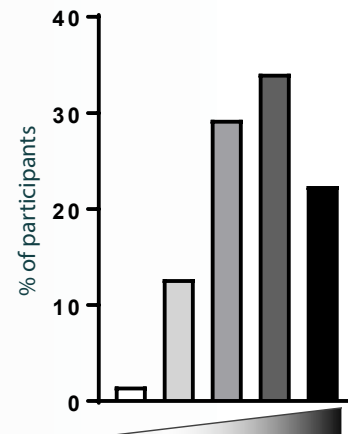


Survey Results

Long-term goal



Self-doubt



Reasons to aim for a leadership position:



Reasons to not aim for a leadership position:



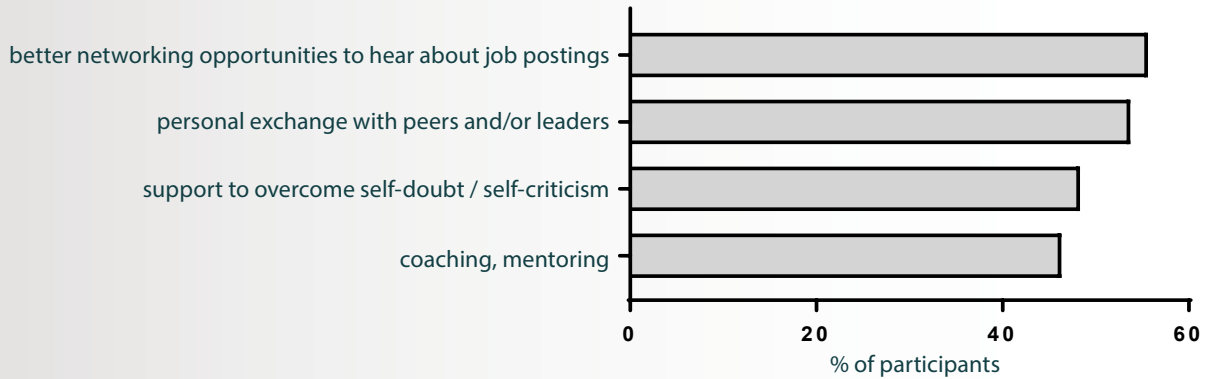
Survey Results

Measures to support more women in aspiring a leadership position:

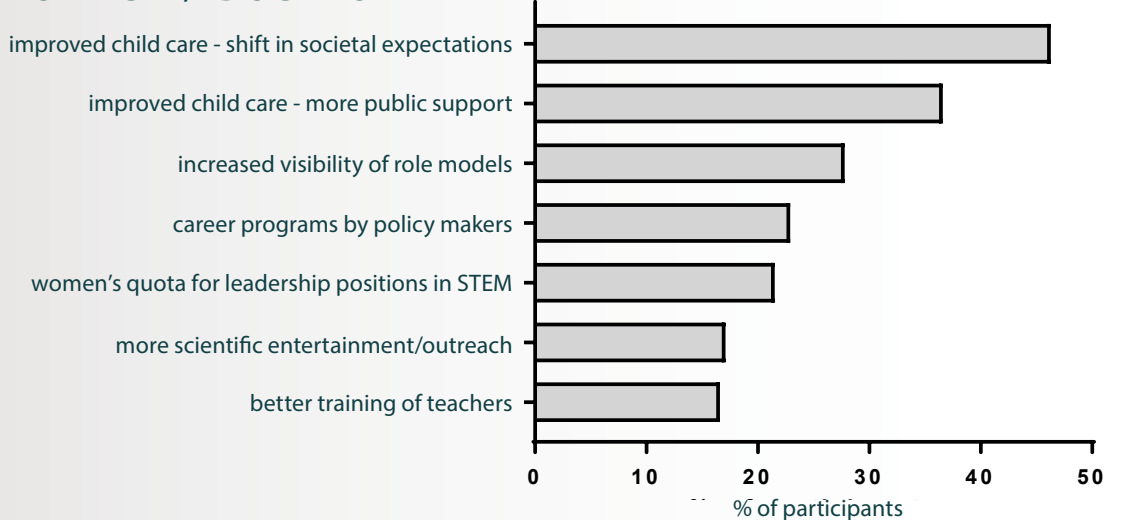
INSTITUTIONAL/STRUCTURAL



PERSONAL/STRUCTURAL



SOCIETAL/POLITICAL/EDUCATIONAL



Goals

AIM 2: EXCHANGE AND NETWORKING



Preliminary results from our survey have demonstrated that access to informal structures, such as networks and the existence of role models, have a positive impact on careers.

Thus, we aim to build up a networking platform by organizing meetings and talks in Vienna and other Austrian cities.

Our events should include women from all backgrounds by using the English language, and target women of all career stages in STEM.

We aim to connect successful and established women leaders (role models) with undergraduate students, graduate students & postdocs in order to provide inspiring interactions and career advice for the next generation of early career researchers.

Concretely, we aim to organize personal networking events in a central, institute-independent building in Vienna, such as at the Federation of Austrian Industries.



The program of the event will start with a keynote speech from a successful STEM woman, including

- a summary about her career trajectory, providing insights how she navigated her career to become a successful and well-established female leader in the field, and
- a talk about the relevance of her research and the scientific achievements of her research group.

The talk will be followed by a short panel discussion to already set the stage for the final and longest part of the networking event: informal mingling and supportive exchange with peers at a buffet. Thereby, we not only enable women to talk about challenges, but also showcase achievements and allow knowledge transfer on how to overcome career obstacles, job opportunities and foster potential scientific collaborations.

Goals

AIM 3: MENTORING AND WORKSHOPS



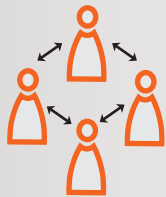
Other preliminary results of The STEM fatale Initiative survey has uncovered a strong need for mentoring programs and career workshops to enhance women's support system on their way to a leadership position in STEM.

We will establish a panel of up to 20 successful, well-established women in their respective STEM field who will serve as mentors.

The competitive mentoring program should provide 1:1 mentoring of a selected mentee with their mentor to provide high-quality career advice for the early career researchers.

Over the course of one year, the mentee needs to proactively arrange virtual or personal meetings with her mentor and think of concrete career-related goals or questions.

The mentoring program will harbor a specific networking framework program.



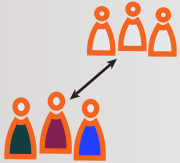
We will also use our survey results in order to develop workshops together with educational and psychological experts/coaches to allow most optimal support to early career workshop participants.

Preliminary cumulative results from our survey show, that women present extremely high self-doubt and admit that they need to provide much more support for themselves in order to aspire a leadership position.

We thus aim to develop two workshops aiming at providing support to overcome self-doubt and to enhance self-belief:

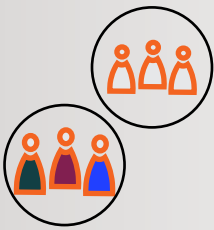
- Self-presentation, body language and conveyed status (Trainer: Mag. Susanne Schinko-Fischli)
- Goal-setting workshop and coaching (Trainers: Dr. Anita Reinbacher and Mag. Dagmar Lerche)
- Gender stereotypes, overcoming self-doubt and enhancing self-belief (Trainer: Verena Florian)

Target Group



The STEM fatale Initiative is an institute-independent platform which is able to include women from all geographical backgrounds by using the English language.

Our platform thus allows to bridge Viennese and generally Austrian institutions as well as bridging to well-recognized innovative international institutions, such as EMBL or Max Planck Society.



The currently existing female STEM networks in Austria:

- only target the minority of STEM women by operating in the German language (FFG's "w-fORTE"),
- do not foster a strong personal exchange by lacking dedicated networking events, workshops and coaching ("FEMtech" and the Facebook group "Frauen* MINT Wien").
- present discipline-specific networks bound to particular institutions or universities and thus don't allow exchange with peers from different research centers, such as
 - WoChem - Women in Chemistry, University of Vienna
 - FemChem - Platform at the Faculty of Technical Chemistry/TU Wien
 - Wobio - Women in Biology Initiative, University of Vienna
 - NowaGEA - Network of Women in Academia at the Faculty of Earth Sciences, Geography and Astronomy, University of Vienna

Communication Channels



We are currently employing low-cost communication channels such as our website and regular newsletters, the usage of social media channels (Facebook, LinkedIn, Twitter), distribution of self-designed flyers/brochures in national and international research institutes, and participation at institutional seminar series and international conferences.

Thus far, the launch of The STEM fatale Initiative has been featured in a few Austrian media, such as regional newspapers and the international radio FM4.

Three powerful multipliers to increase our sphere of action will be

- the publication of our results in a scientific publication and a general report,
- the production of promotion videos and
- the interaction with influential journalists and magazines in order to promote media coverage to make our actions accessible to a broad audience.

Fostering Diversity

We are already planning the next steps to increase our impact:



- inclusion of other groups of minorities in STEM,
- expansion from an academic-centric network to an academic and non-academic interaction point,
- support of interaction between all STEM individuals to strengthen a dialogue to overcome systemic limitations together.



This part of our activities will be led by our team member Mojtaba R. Tavakoli. Mojtaba knows too well about the negative impact of exclusion by traditional structures.

Born as a minority “Hazara” in Afghanistan, Mojtaba and his family were exposed to severe ethnical discrimination in the early 2000’s and had to flee from their country. They found a safe harbor in Austria and experienced the benefits of a supportive, motivating and prosperous environment in which everybody can thrive and succeed.

Therefore, Mojtaba wants to contribute to The STEM fatale Initiative and make it an accessible and sustainable concept for everybody.

Achieving diversity and equality in academic institutions will not end inequalities on a global scale, but it might be the beginning of the end.

A scientific community that intentionally and systematically embraces diversity through equality will challenge the status quo and become the driving force for society.

Notes

The Initiative

THE STEM FATALE INITIATIVE

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