GENIE: GEnder Initiative for Excellence, Informatics*

on behalf of the Department of Computer Science and Engineering

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Abstract

Sweden tops gender equality rankings, but Swedish academia is still lacking women in top positions. To address gender inequality in its faculty, Chalmers University of Technology has invested 30 million Euros over 10 years in Gender initiative for Excellence (Genie).

As part of that, the Computer Science and Engineering Department committed to (1) improving and supporting academic hiring, (2) providing targeted support for visiting researchers, (3) offering inclusive leadership education, (4) analyzing the yearly employee work environment survey according to gender and academic seniority to better understand specific needs, (5) contributing to the EUGAIN project¹ as working group leader for dissemination and promoting the recommended actions across the department, and (6) establishing an LGBTQIA+ student group.

1 Description of the initiative

The GEnder INitiative for Excellence (Genie) is a Foundation initiative that started in 2019. The overall goals set at the start were to reach at least 40% females among full professors and at levels below, remove structural and cultural barriers that hamper women's careers, and create systems and processes that are fair. We are now in Genie's 4th year of ten. During the first years, we opened-up several funding possibilities for departments to use for recruitment. This way, we have funded the recruitment of several female faculty on different levels (assist profs, docent, professors). For example, five assistant professors in the 2018 Area of Advance call (4M€), a professor in Microtechnology and Nanoscience (1,5M€), 3 transfers of external to base funded faculty at the Departments of Space, Earth and Environment and Mechanics and Maritime Sciences (2M€).

Hiring. We recently (2022) added Genie funding to the offer to a female candidate, Rebekka Wohlrab, for a WASP assistant professor position, which made her choose the Department of Computer Science and Engineering (CSE) at Chalmers over the Royal Institute of Technology (KTH). Notably, several processes for female recruitment are ongoing in CSE which would not have happened without Genie support. Direct recruitment of women at the top level has been undertaken several times, with Genie and the departments putting in significant effort in these cases, showcasing our dedication and commitment to making progress.

Visiting researchers. Early on, to stimulate action in the departments, Genie funded 30 projects (2,3 M€) combining gender aspects with teaching/research via an open internal competition. We have an ongoing visiting researcher program (up to 100,000 €/person), with **14 visiting female faculty approved so far**. One of them is Miriam Sturdee, an excellent interaction design researcher visiting Chalmers CSE Dept. for a total of 6 months over the course of 2 years, distributed into several research visits.

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¹ https://eugain.eu

Leadership education. To integrate gender equality efforts into Chalmers organization, and make Genie successful, there needs to be **constant communication of aims and progress**, strong work by HR, and serious follow-up of all actions. We continuously try to get more insight at early stages of central processes around new policies and strategies. We suggest that gender equality should be safeguarded by an assigned person in each committee for each process. Genie has a number of trained faculty today that could be used. To get real integration going, leaders with mandate to decide on resources and directions must actively help Genie to integrate proposed efforts. To this end, Genie sponsored a **9-month Inclusive Leadership program** for doctoral students, postdocs, faculty, and staff, where 20 participants were trained by established leadership coach Lauri Robbins Ericson².

Work environment survey. Awareness of inequality and bias must be expected from everyone, and we must build in follow-up and accountability into every system. We need an organization where gender equality is the norm, and such work is rewarded: doing nothing should not be OK anymore. We therefore analyze the yearly employee work environment survey according to gender and academic seniority to better understand specific needs. This survey analysis must be done once or twice a year as a collaboration between HR and the Equality, Diversity, and Inclusion (EDI) representative at the department. At Chalmers and the University of Gothenburg, each department has an EDI representative, often a faculty member. This equality analysis has identified several challenges faced by female employees that were previously not evident due to their lower representation. Since then, we have implemented specific inclusion activities to ensure these groups are well-supported.

EUGAIN project. EUGAIN features more than 160 members from over 45 countries, including 5 non-European ones. Its main aim is to improve gender balance in Informatics through the creation and strengthening of a truly multi-cultural European network of academics working at the forefront of the efforts in their countries, institutions and research communities. It builds on their knowledge, experiences, struggles, successes, and failures, learning and sharing what has worked and how it could be transferred to other institutions and countries.

We are contributing to the EUGAIN project 3 as working group leader for dissemination. We recently headed the development of Deliverable 7 [TMU $^+$ 24] on Policy Recommendations. The document contains concise and practical measures that policymakers can adopt to support gender equity in Informatics. While the COST Action is named "European Network for Gender Balance in Informatics", we do see gender equity as the most important paradigm to strive for.

We identified four target audiences for that: Schools, Universities, Public Administration and Private Sector. For each of these audiences, we have researched the current state of practice and investigated pathways to improving both education and career paths in a number of scientific studies.

We now are leading the book editing process for Deliverable 8, a Handbook that brings all results of the project into a book format for a larger audience, from schools to university as well as industry and public administration. Faculty member Birgit Penzenstadler promotes the recommended actions across the department and was asked to present them in detail to the leadership group.

LGBTQIA+ student community. In the future, Genie plans to work more towards the undergraduates as they are a great resource of influence. Faculty member Francisco Gomes established an LGBTQIA+ student community with about 30 members that meet monthly. The group was established with the objective to give students who identify as LGBTQIA+ a sense of community and belonging in a safe space. During meetings, students from all academic levels (BSc, MSc, and PhD) share experiences, increasing their social capital and identifying ongoing barriers to inclusion. The group also connects LGBTQIA+ students with industry practitioners who can serve as ambassadors, broadening their network and enhancing representation through mentoring programs and potential employment in both industry and academia.

² https://lauri.co/about

³ https://eugain.eu

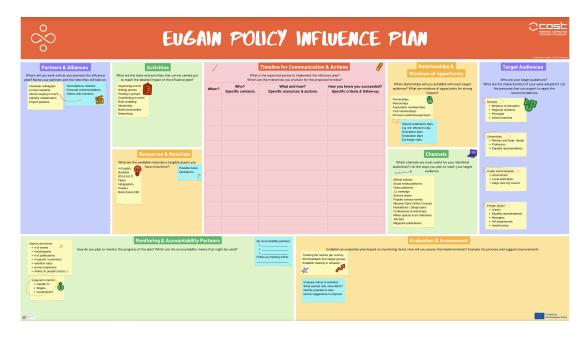


Fig. 1: The EUGAIN Policiy Influence Plan Canvas Template

2 Evidence of Genie's & EUGAIN's impact

Genie Throughout the years, Genie has continuously organized seminars, workshops etc. to make employees more aware/educated/inspired to act on gender equality issues. We have gathered strategic advisors and consultants with high reputation in the field (e.g., Paul Walton, Liisa Husu) that guide and help us in our work and its development. To keep track, we measure and analyze Chalmers-specific data and we produce a report every year that contains the proportion of women at different career stages, in different departments, salary differences and sick leave. See www.chalmers.se/genie and our article [SSWS21] for details.

Genie has supported many research proposals, which enables funding of female PhD and postdoc students, hence improving female representation in our departments. Other examples of what Genie has supported are CWA (Chalmers Women Association)⁴, which is now the biggest student organization at Chalmers, and a female mentorship program run by Wise-WWACQT⁵, now on its third round. Most of the Genie funds have been allocated to similar efforts, which have shown improvements in our biased academic system.

However, for long-term impact, it is crucial to transform the academic culture to be more inclusive and fair. For this, Genie has been helping the departments with tailored actions and money (2 Mkr — or circa 175k € — per department over 5 years). The Genie leadership and advisory group has visited each department at Chalmers several times (heads, faculty, individuals) to ensure the funds are being used positively and impactfully. In cases where progress toward equality is not as expected, Genie offers guidance on how to achieve better equality within the department.

Each department has a member of the faculty appointed as Genie representative that meets with the Department and reports to the Genie group regularly. In this way, they can inspire each other, share good ideas, and work together when appropriate. To aid in their work, Genie early on created a toolbox list with many actions one can take around recruitment, culture, promotion, etc.

EUGAIN After Deliverable 7 on Policy Recommendations, we saw that many EUGAIN members needed further support in putting such policy recommendations into action. Hence, we developed a Policy Influence Plan Canvas Template [PM24] that puts the most important tasks for carrying out policy influence into a one-page worksheet, see Fig. 1. This sheet was used at the final conference in Lisbon to educate 90 participants on policy influence in order to carry the work forward in the most effective way. There is further supporting material in form of posters and brochures [eug24].

⁴ https://www.cwa-chalmers.se/

 $^{^5 \} https://www.chalmers.se/en/about-chalmers/organisation-and-governance/equality/genie-gender-initiative-for-excellence/wise-wacqt-mentorship-program/$

Within the earlier efforts of EUGAIN, Penzenstadler also co-authored a book chapter with four other female faculty members, one of them, Gordana Dodig-Crnkovic, also from the CSE Department at Chalmers [RPL+23]. In this book chapter, they carried out an interview study and autoethnography on their career paths and showed the use of storytelling as a tool for empowering women in the same research community.

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⁶ https://creativecommons.org/licenses/by-nc-nd/4.0/