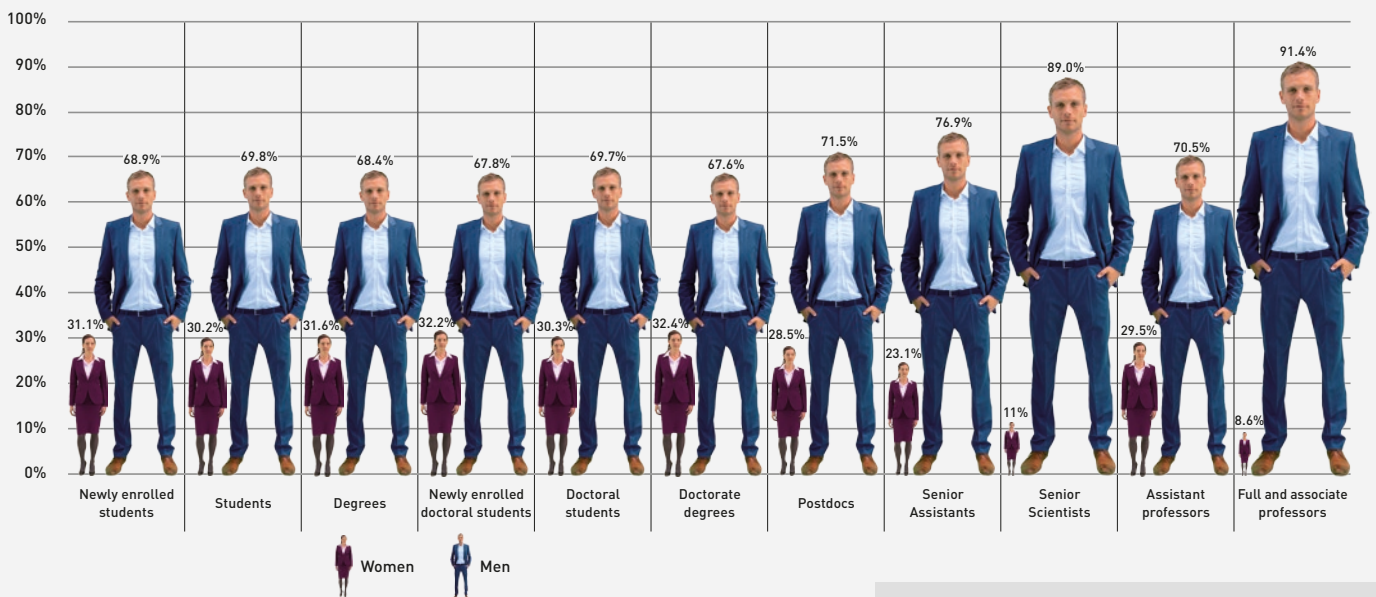


Women at ETH Zurich

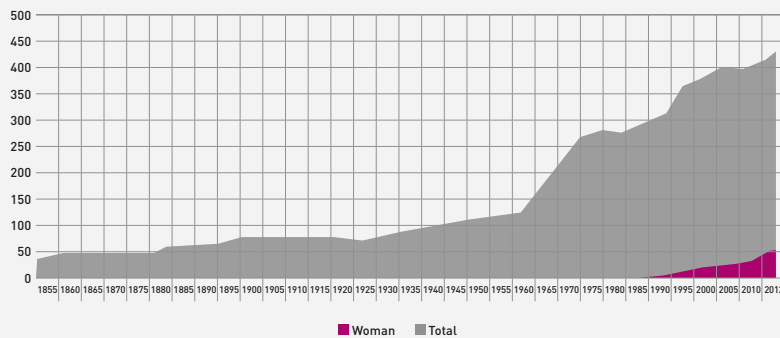
«Leaky Pipeline» Less women are occupied at universities, the higher the considered position on the academic ladder.

- ETH Zurich – Ratio of female students at 30%
- Ratio of female long-term professors at 9%

Leaky Pipeline ETH Zurich 2012



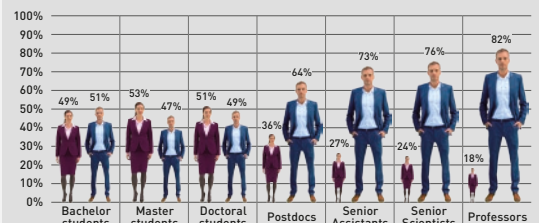
Professors by Gender at ETH Zurich (1855 - 2012)



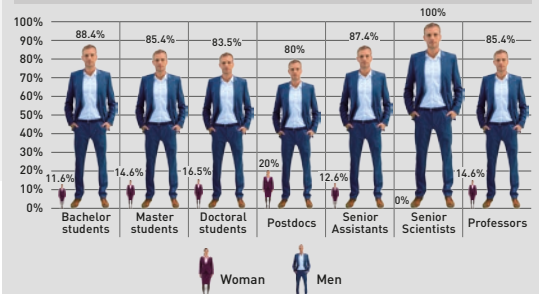
ETH Zürich, Gender-Monitoring 2012/13, www.equal.ethz.ch

The Leaky Pipeline is more pronounced in degree programmes with a high number of female starting students. While, for example, the number of female students in biology is at 50%, the number of professors remains comparable to computer sciences (12% female Bachelor students).

Leaky Pipeline D-BIOL 2012



Leaky Pipeline D-INFK 2012



“Women have no interest in completing an academic career” ...

Yes, they do – but these are the facts:

Women

have a smaller chance to receive tertiary support (e.g. grants) ^{1,2}

are given less laboratory space ³

are less frequently nominated for decision-making bodies and awards ³

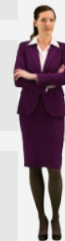
receive limited support from superiors, especially if they have children ⁴

publish less frequently than men, but their scientific impact per publication is higher ⁵

work on interdisciplinary subjects more often than men, but the reputation of these subjects is lower ⁶

«Our study strongly suggests that peer reviewers cannot judge scientific merit independent of gender.»

Wennerås, C., & Wold, A. (1997). Nepotism and sexism in peer-review. *Nature*, 387(22), p.341.



Application files of women are judged less highly by both men and women with respect to comparably qualified male applicants. ⁷

Evaluations and recommendations for women focus less on career-relevant aspects than those of men. ⁸

Appointment procedures fail to be aware of qualified candidates. ^{9,10}

1 Bornmann, L., Mutz, R. & Daniel, H.P. (2007). Gender differences in grant peer review: A meta-analysis. *Journal of Informetrics* – Accepted for Publication.
2 Wennerås, C. & Wold, A. (1997). Nepotism and sexism in peer-review. *Nature*, 387(22), 431-343.
3 Committee on Women faculty of the Massachusetts Institute of Technology (1999). A Study on the Status of Women Faculty in Science at MIT. <http://web.mit.edu/fnl/women/women.pdf>.
4 Ledin, A., Bornmann, L., Gannon, F. & Wallon, G. (2007). A persistent problem: traditional gender roles hold back female scientists. *European Molecular Biology Organization reports*, 8(11), 982-987.
5 Symonds, R.E., Gemmell, N.J., Braisher, T., Gorringer, K.L. & Elgar, M.A. (2006). Gender differences in publication output: Towards an unbiased metric of research performance. *Plos one*, 1, 1-5.
6 Rhoten, D. & Pflirman, S. (2007). Women in interdisciplinary science: Exploring preferences and consequences. *Research Policy* 36, 56-75.
7 Steinpreis, R.E., Anders, K.A. & Ritzke, D. (1999). The impact of gender on the review of the curricula vitae of job applicants and tenure candidates: A national empirical study. *Sex Roles*, 41, 509-528.
8 Trix, F. & Psenka, C. (2003). Exploring the color of glass: letters of recommendation for female and male medical faculty. *Discourse and Society*, 14 (2), 191-220.
9 Färber, C. & Spangenberg, U. (2008). Wie werden Professuren besetzt? Chancengleichheit in Berufungsverfahren. Frankfurt/Main: Campus-Verlag.
10 Hopkins, N. (2006). Diversification of a university faculty: Observations on hiring women faculty in the schools of science and engineering at MIT. *MIT Faculty Newsletter*, 18(4), 16-23.

“Women avoid competition”...

...but can still be motivated to participate

Women quotas increase the probability that a woman wins in a competition. They also motivate women to participate in competition with more self-confidence.^{1,2}

Competition allows especially capable women to succeed.¹

Group performance increases with a higher number of participating women. More women in science, business and politics make the respective institution's decisions more intelligent.³

The Overconfidence Phenomenon

Men tend to overestimate their own abilities, while women tend to the opposite.¹



¹ Balafoutas, L. & Sutter, M. [2012]. Affirmative action policies promote women and do not harm efficiency in the laboratory. *Science* 335, 579-582.

² Niederle, M. & Vesterlund, L. [2010]. Explaining the gender gap in math test scores: The role of competition. *Journal of Economic Perspectives*, 24(2), 129-144.

³ Wolley, A.W., Chabris, C.F., Pentland, N.H. & Malone, T.W. [2010]. Evidence for a collective Intelligence factor in the performance of human groups. *Science*, 330, 686-688.

¹ Barber, B.M. & Odean, T. [2001]. Boys will be boys: Gender, overconfidence, and common stock investment. *The Quarterly Journal of Economics*, 116(1), 261-292.

“Female leadership is not tough enough”

...but is that what leadership is about?

Assertiveness, self-marketing, self-confidence, speed and a good social network – according to people in leadership positions, these traits are necessary for good leadership ability.



This is the ideal set of traits according to existing leaders.



Tag cloud: critical success factors for leadership



These leadership traits are attributed to women.



Tag cloud: strengths of women in leadership positions



Men are being connected to these leadership traits.



Tag cloud: strengths of men in leadership positions

→ Which traits do you expect of superiors?

Kaiser, S., Hochfeld, K., Gertje, E. & Schraudner, M. (2012). Unternehmenskulturen verändern – Karrierebrüche vermeiden. Stuttgart: Frauenhofer Verlag.