No more excuses: Europe's science needs more female leaders!

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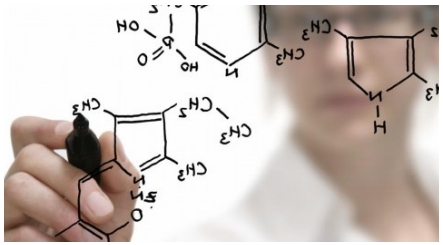
What I will talk about



1.) What is the problem?

2.) Why we need a change?

3.) Why so few?

4.) Some possible explanations

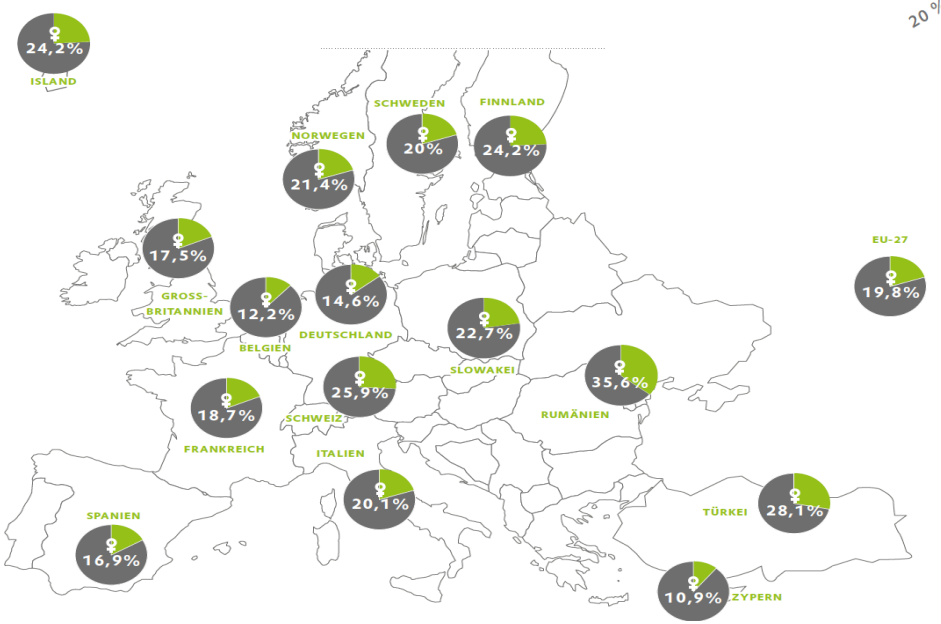
5.) Ways forward

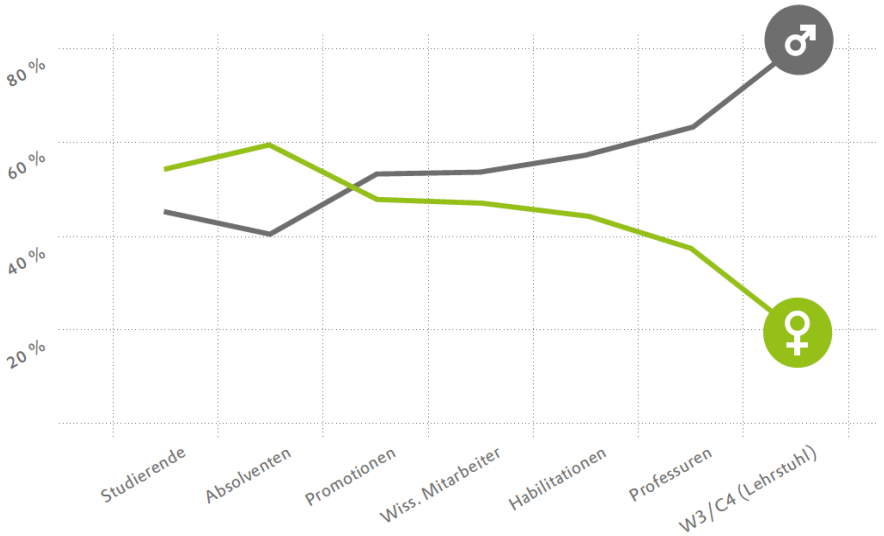
6.) Summary

1.) What ist the problem?

In Europe women disappear from every rung of the scientific career ladder!

Percentage of women in leading science positions in Europe





The „leaky pipeline“

2.) Why we need a change?

2.1) Fairness and social equity

Women represent half of the population.

One rationale for mitigating imbalances in academia is that publicly funded bodies like universities should reflect the demographics of the citizenry as directly as possible at all their levels.

→ A fair proportional distribution of men and women in academia – including the highest-ranking positions – is
-a question of social participation
and
-a value in itself.

2.) Why we need a change?
2.2) Global Competition

- New players on the global map of science
- Map will continue to change with African science developing more rapidly than before
- Competition between international locations
- Impending lack of highly qualified employees in academia and business,
- 47% of post- graduate programmes are women in the EU in 2012*,
- On average only 20% in academic leadership positions are female

We cannot afford to allow key potential of excellence to go untapped!

2.) Why should this be changed?
2.3) Research Performance

A rather recent study shows that companies with more diverse workforces perform better financially *(Mc Kinsey, 2015).*

Do gender-diverse research teams also conduct better research?

The evidence for positive impact of gender diversity on research productivity, quality and innovation is insufficient.

Challenge: how to measure better research performance?

Ongoing EU-funded research tries to develop a nuanced and realistic measure of the impact of gender diversity on research outcome across countries and sectors (GEDII study, 10/2015 – 10/2018).

3.) Why so few?

-3.1.) Gender Bias?

Sir Tom Hunt, Seoul, June, 2015:

„The trouble with girls in the lab is,

that you fall in love with them and they fall

in love with you and

when you criticize them, they cry.

For the good of science, labs should be

sexually segregated“.

4.) Some possible explanations
4.1) Gender Bias

The unjustified resignation of Tim Hunt only sends the wrong message
In that men should hold their tongues,
not change their beliefs.

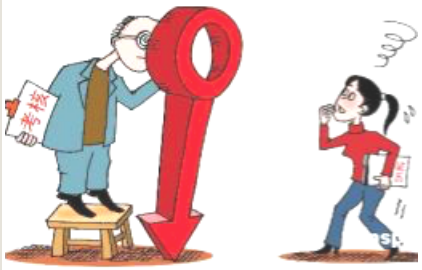
Tim Hunt is not alone (and he may not even be gender-biased),
but three out of four of us
are gender-biased!

Most of us view a career in science as more male than female!
TEST YOURSELF!

Harvard Implicit Association Test – Harvard University

www. implicit.harvard.edu/implicit/demo

4.) Some possible explanations
4.1.1) Gender Bias



Gender Bias in women and men may lead to lower success rates of female grant applicants

Success rate for ERC grants:
- 10% female applicants
- 12% male applicants

Similar success rates at EMBO or HSFP.
Reasons are still elusive:
- committees chaired by women do not change the rate,
- nor does a gender balanced evaluation panel

But the reported gender bias in both, men and women, must play an important role in this.

4.) Some possible explanations

4.2) Career and Family, Missing Role Models

Combining **family and career** is a challenge, still more often for women than for men: Working crazy hours, lack of adequate day care, support by partner, etc.

Another factor that deters women of pursuing scientific careers are **missing examples of successful women** who have done the same.

"When you are 24 or 26 and are looking at different career options - industry, academia, or government labs - men see three clear paths and will know several people who traversed each one. They can see other men 20 years down the line. …. If you plan to have children, but don't see any women who have gone that path, you may not be sure it's possible." (Geraldine Richmond, professor of chemistry, University of Oregon)

4.) Some possible explanations
4.3) Non-transparent paths?

Dutch study* outcome: no systematic correlation between success in career and indicators for research performance in both: men and women!
-Does this mean that the academic career system is not able to promote and keep all the best talents?

→ Lack of transparency: High potentials (among them many women) leave university – not for a better salary but because of non-transparent and not formalized career paths (e.g. promotion is dependant on vacancies – not on individual performance, missing tenure track options)

→ **Is this problem bigger for women?**

* Barbara von Balen et al, *Determinants of Success in Academic Career*, 2012

5.) Some ways forward

5.1) Are Quota a solution?

Let‘s have a look at the proportion of women in business and politics:

Women’s representation in advisory boards

Country	*Women’s representation*	*Type of quota*
Portugal	8 % (2014)	no quotas
Germany	18 % (2014)	no quotas
Austria	13% (2014)	no quotas
Norway	36% (2014)	legislated quotas
Iceland	46% (2014)	legislated quotas

Women’s representation in national parliaments

Country	*Women’s representation*	*Type of quota*
Hungary	10% (2014)	no quotas
Belgium, I	12% (1994)	no quotas
Belgium, II	39% (2014)	legislated quotas
Sweden	45% (2010)	party quotas

5.) Some ways forward

5.1.1.) Are Quota a solution?

The most often used argument against quota in science is: **"For the sake of science, we decide on the basis of quality only!"** We all agree with this**, but is it true?**

Gap of reasoning:

Women and men are equally talented: The number of really outstanding talents is small in both, in men and women!

So if men are occupying a large majority of high-level posts, there must be quite a few mediocre ones amongst them!

Aiming for highest quality must mean: Search for the very best talents, in both, women and men!!!

In an ideal world this would result in a corridor: 40/60%

5.) Some ways forward

5.1.1.1.) Are Quota a solution?

YES and NO!

- **NO,** if applied without a well-thought through strategy
- **YES,** if applied intelligently, they are the most promising tool to guarantee long-term results

Statistics collected by ERC suggest that

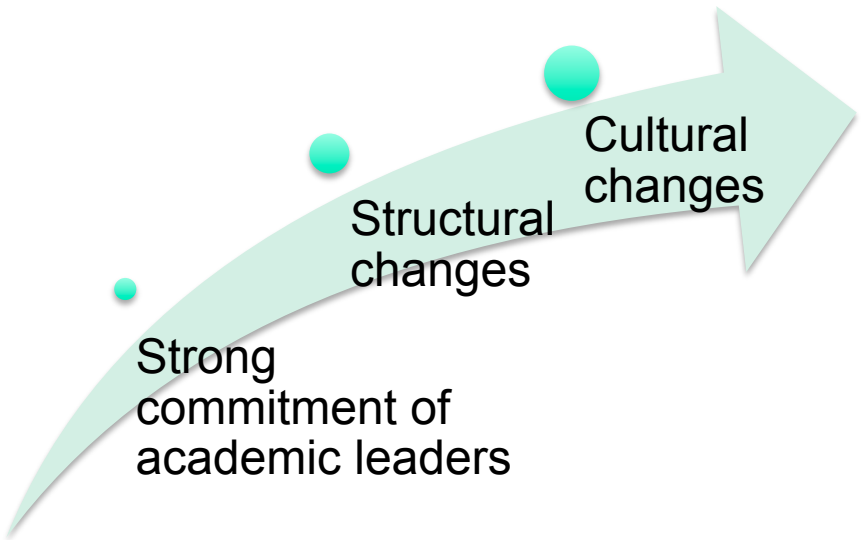
- quota are no magic wand to bring about gender equality in academia.
- Quota might make matters even worse by overworking already stretched female scientists

Quota need a more differentiated exploration on several levels: 1) High-level academic positions
2) Review committees and other decision bodies
3) Funding

5.) Some ways forward

5.2.) tools to find excellent female scientists!

One missing link on the path
towards more gender balance



Awareness ☑

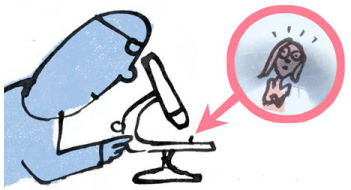
Willingness ☑

Commitment ☑

ACTION!

But:

Where to find all the excellent female scientists?



5.) Some ways forward

5.2) **AcademiaNet** - European database on excellent women in science

:: **2,000 profiles** of highly qualified women academics of all disciplines and fields – nominated by **50 renowned scientific organizations** in 19 countries!

:: **Goals:** - Raise the visibility of excellent female researchers
- **Increase the number of women in scientific leading positions and committees**

:: The database is **unique in Europe**: Researchers can only join upon the nomination by highly recognized scientific partner organizations.

→ *Learn more about AcademiaNet this afternoon in the Knowledge Exchange Forum 1 (2:45 pm)*

5.) Some ways forward

5.3) Other measures than quotas and databases

:: Dealing with the merit issue

Excellence and the way it is defined and measured should be clearly defined in selection processes. → Increase transparency for applicants and reviewers. For example, the DFG and BBSRC describe their selection processes in application instructions.

:: Training women for leadership roles

Examples: 1) „Fast Track – Excellence and Leadership Skills for Outstanding Women in Science“ - an intensive education program for outstanding female postdocs
2) EMBO Laboratory Management Course

5.) Some ways forward

5.3) Other measures than quotas and databases

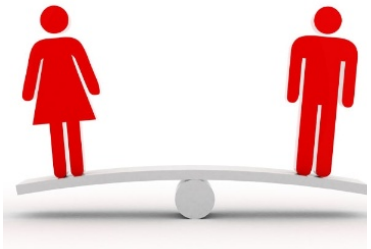
:: Mentoring

Providing mentoring to postdocs and junior faculty will improve their career outcomes.
To be efficient, mentoring should provide access to relevant networks and offer real job options to the mentees!

:: Training decision makers

Help people to become aware of their biases:
Bias-mitigating trainings addressing the highest levels of academia (Presidents, Department Heads, Personnel Managers). These target groups are able to influence and improve gender-balanced policies in their institutions.

6.) Summary
of challenges and ways forward



70% of all men and women are gender biased!
Awareness and gender-bias training are promising first steps, so try the Harvard-test and look to Norway

Awareness, willingness, commitment are the basis, but then **we have to act and support women in their daily life!**

Quota, if applied intelligently, are the only way to guarantee real progress in the long term.

Science has to become more attractive – for men and women – with **transparent career paths, clear rules and standards.**


THANK YOU