

Bias ruins everything!

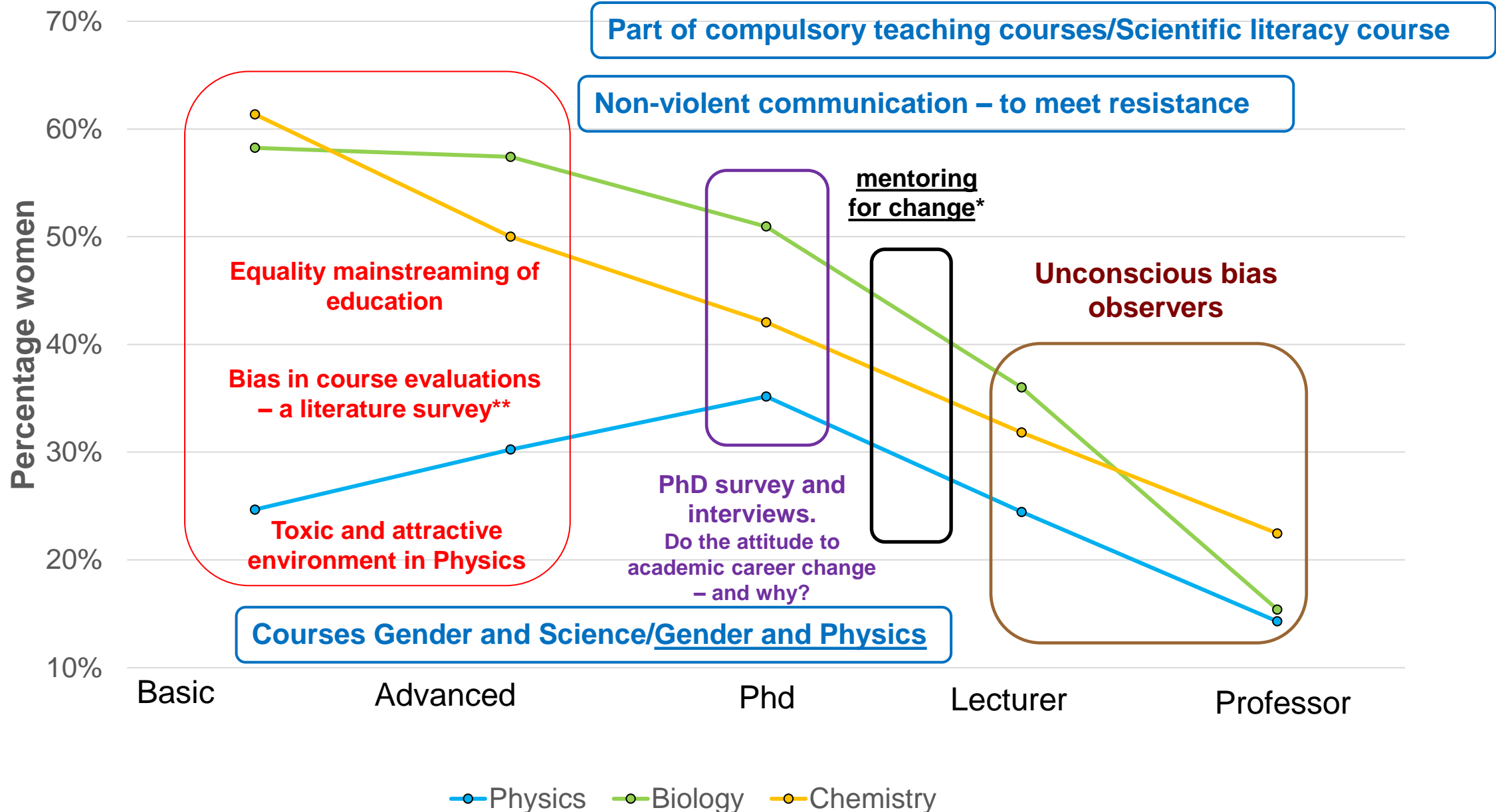
How preconceived ideas of groups of people is a threat to equal opportunities, safe work environment, fair career paths and academic values.

Tomas Brage, Professor of Physics, Lund University, Sweden

Today's talk

- What we do in Lund
- What is cognitive bias?
- What is systemic bias?
- Effects of bias
 - Recruitment process
 - Micro-aggressions, harassment and discrimination
 - Academic values – meritocratic principle, academic freedom, excellence.
- What to do about it?
 - One “tool-box”
 - Mentorship and sponsorship

Vertical segregation at Lund Science Faculty

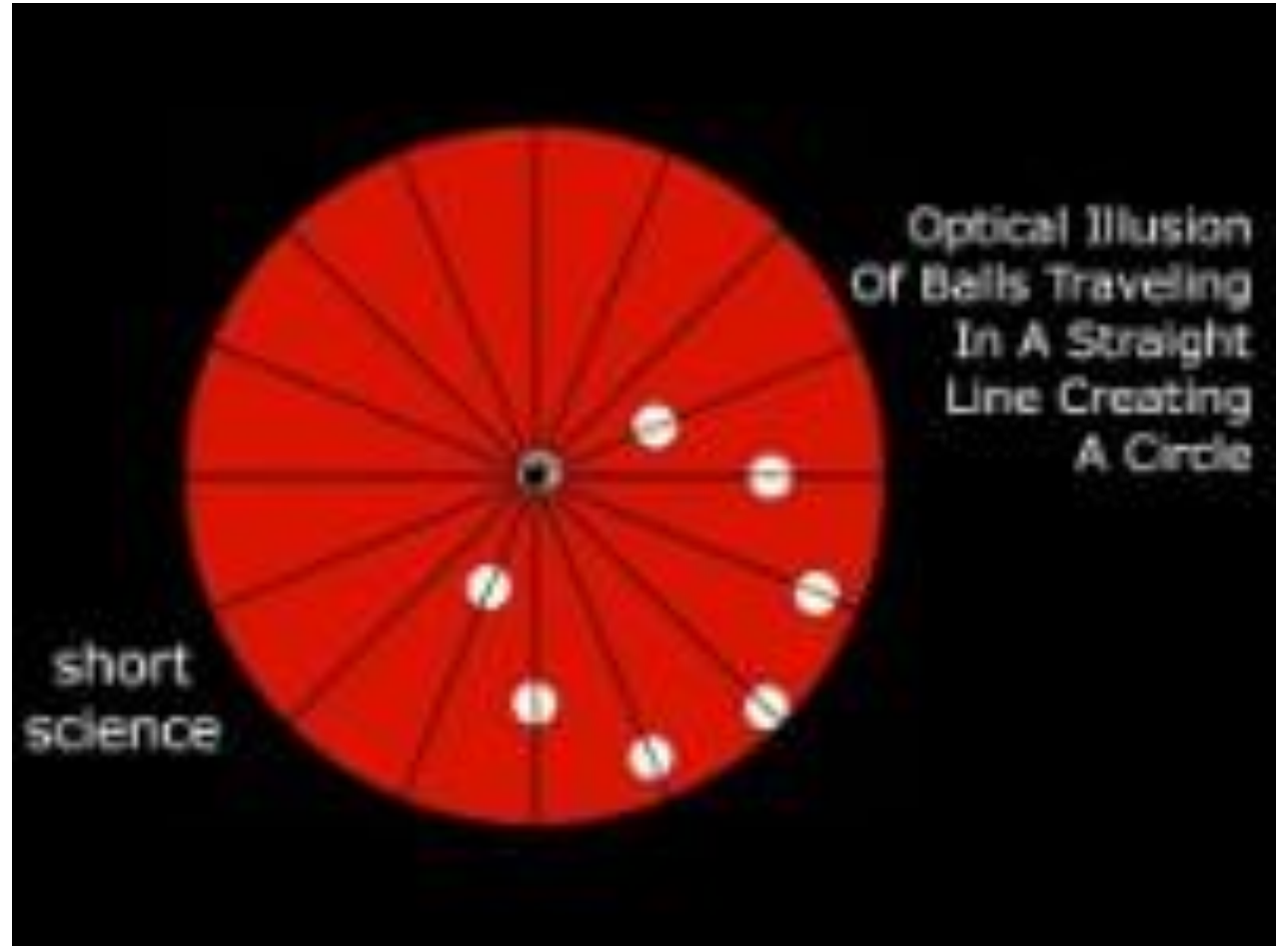


*Lövkrona & Brage 2016; **Östlin et al. 2020

Bias is a common “lens”

Bias and illusions

For how many balls do you see a collective motion?



What is bias?

What is bias?

Bias is a cognitive process, where the cultural and social context affects a person's decisions, judgement and actions.

It could be a negative effect if it is based on stereotypes, beliefs, prejudices and preconceived notions. It is therefore a threat to meritocracy!

It can lead to micro-aggressions (and worse) and non-events.

It is not only psychology, but also organizational/systemic.

Cognitive biases - examples

- Affinity bias
 - Prefer people that are like us.
- Attribution bias
 - Explain behaviour/success/failure differently for different groups.
- Confirmation bias
 - “We see/hear what we expect to hear”.
- Conformity bias
 - Bandwagon effect or majority bias.
- False consensus bias
 - Overestimate the extent to which our beliefs/opinions are typical and general.

Systemic bias – process hi-jacking

Not only psychology ...

- Decoupling
- Standardisation
- Symbolic boundary work

Inspired by:

Nielsen 2015, *Make academic job advertisements fair to all*, Nature **525** 427

Nielsen in Drew and Canavan 2020, *The Gender-sensitive University*, Routledge

Systemic bias: 1. Decoupling

Saying one thing, doing another

One says:

“We only judge qualifications and merits”

But does:

Non-transparent processes and choices

Systemic bias: 2. Standardisation

Pretending there are objective measures

In teaching:

What is the translation between points and grades on an exam?

In careers:

h-index and other measures

See DORA and COARA declarations:

[sfdora.org](https://www.sfdora.org)

coara.eu

Systemic bias: 3. Symbolic boundary work

Justifying through stereotypes

Sexism, e.g.

Old sexism: *“Women are not fit to or it’s dangerous for them to...”*

New sexism: *“Women do not want to...”*

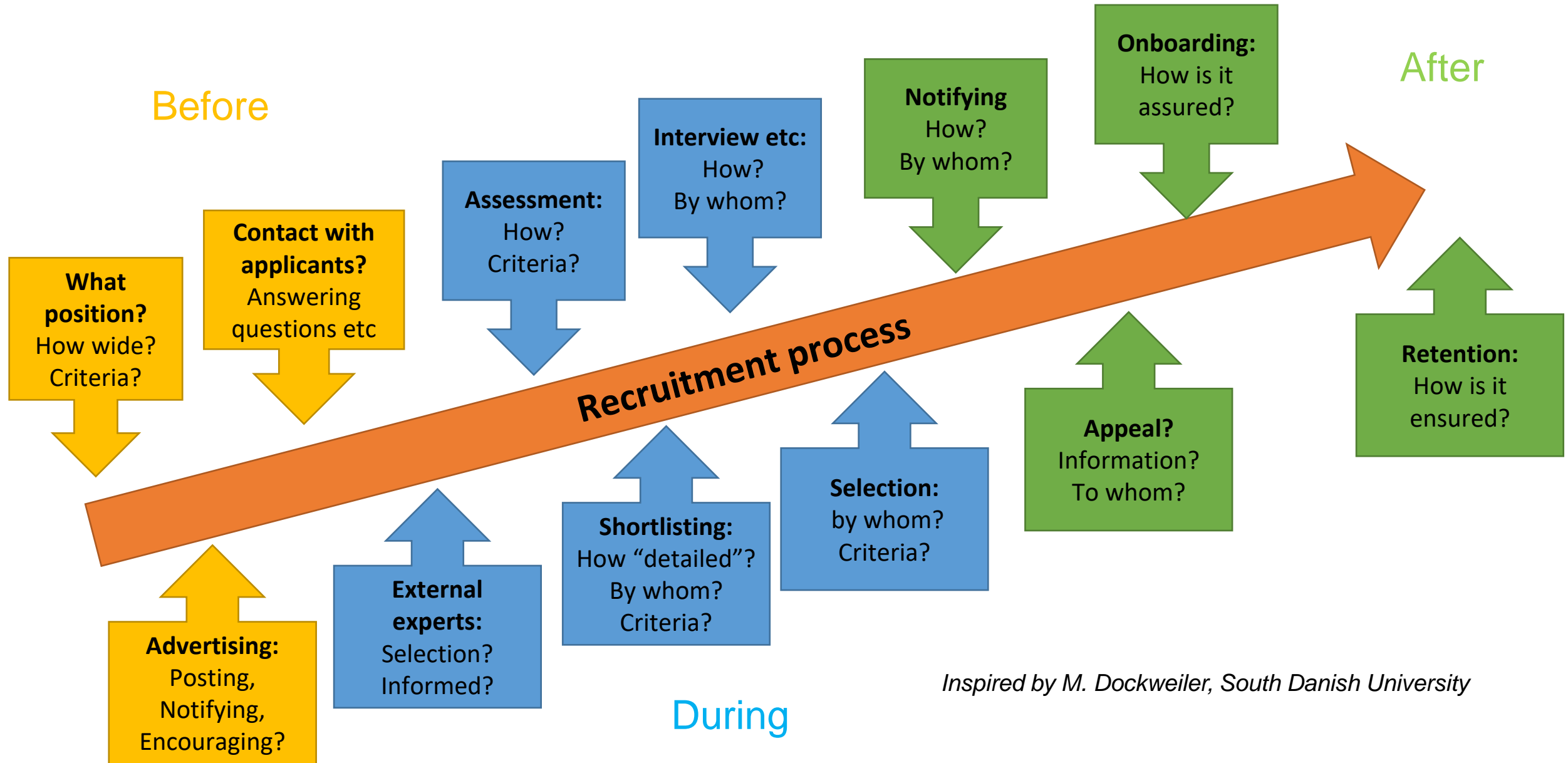
Stereotypes, e.g.

risk-taking

caring vs. competition

What are the effects of bias?

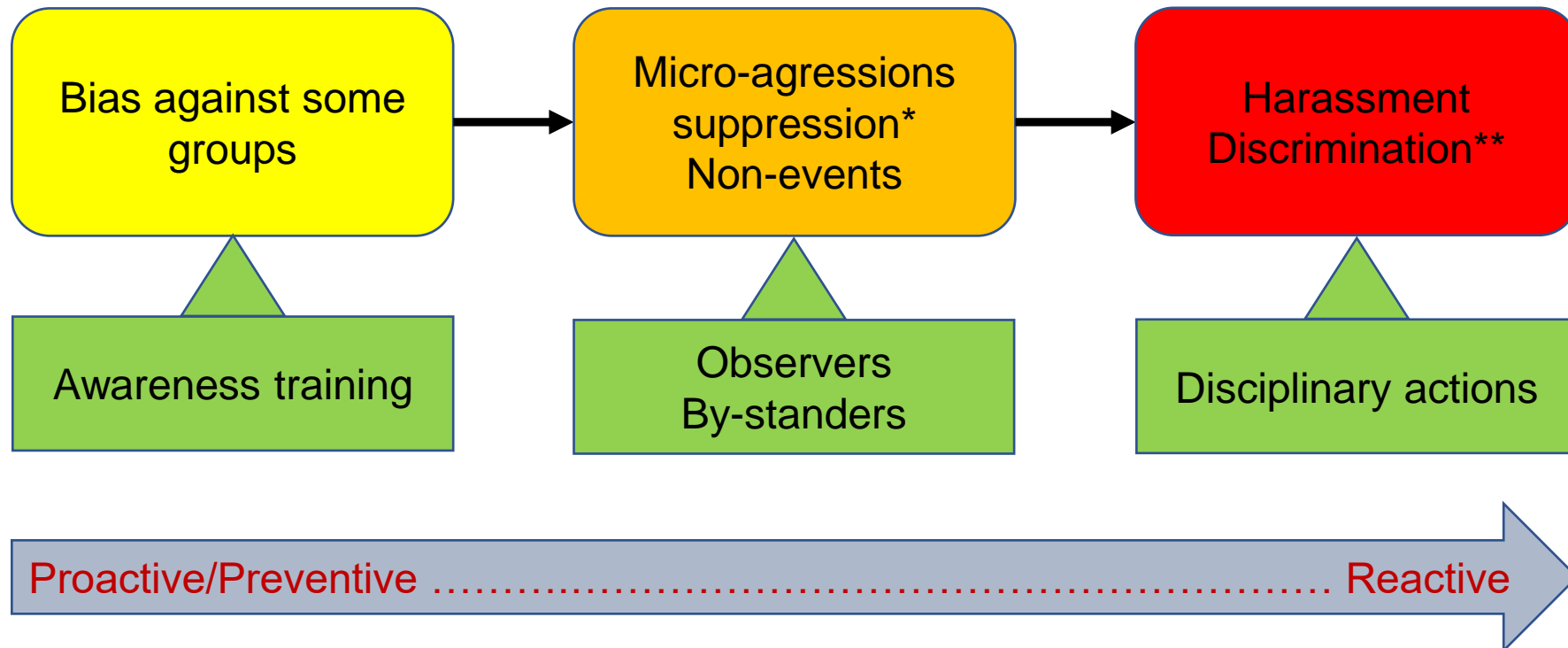
Recruitment process – a minefield of bias



Inspired by M. Dockweiler, South Danish University

Step towards discrimination

Actions will be harder the further it gets in this process.



*Lövkrona & Brage 2016, ** Lövkrona 2016

Bias against academic values

- Academic freedom
 - If you face bias, you are not free in research and teaching.
- Meritocracy
 - Merit (latin) are questioned (standardisation bias). Solution: Dora (sfdora.org) and Coara (coara.eu)
 - Cratos (greek) = power, is not distributed fairly (see leaky pipeline)
- Excellence
 - Diversity gives excellence, if correctly managed (needs good leadership!)



What can we do to mitigate bias?

LERU advice paper on bias – full process

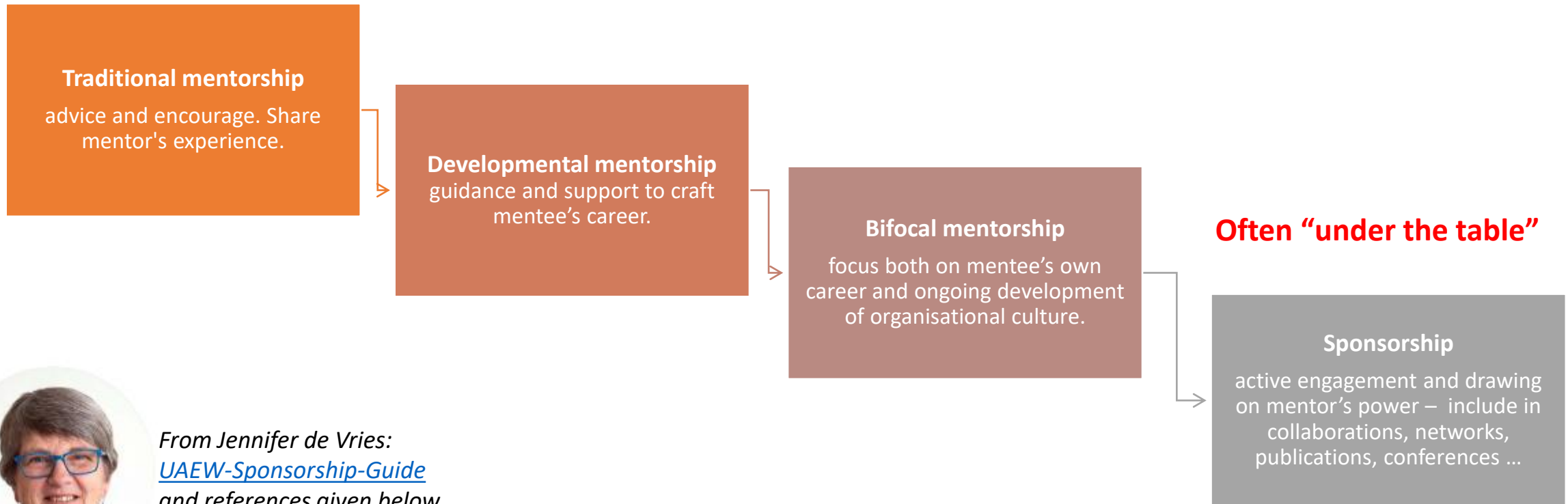
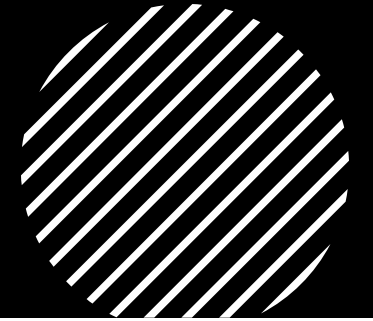
1. **Monitor** career development and assign responsibilities. **Accountability.**
2. **Measures** for countering gender bias
3. Offer gender **bias training**
4. **Recruitment and funding** processes should be monitored. Use **bias observers!**
5. Evaluate the **language** in recommendations etc
6. Eliminate gender **pay gap**
7. Evaluate **quality**; Compensate for **care leave.**
8. Monitor **precarious contracts** and part-time positions.
9. Use **positive actions** against vertical segregation

Implicit bias in academia:

A challenge to the meritocratic principle and to women's careers – And what to do about it



Mentoring – and bias.

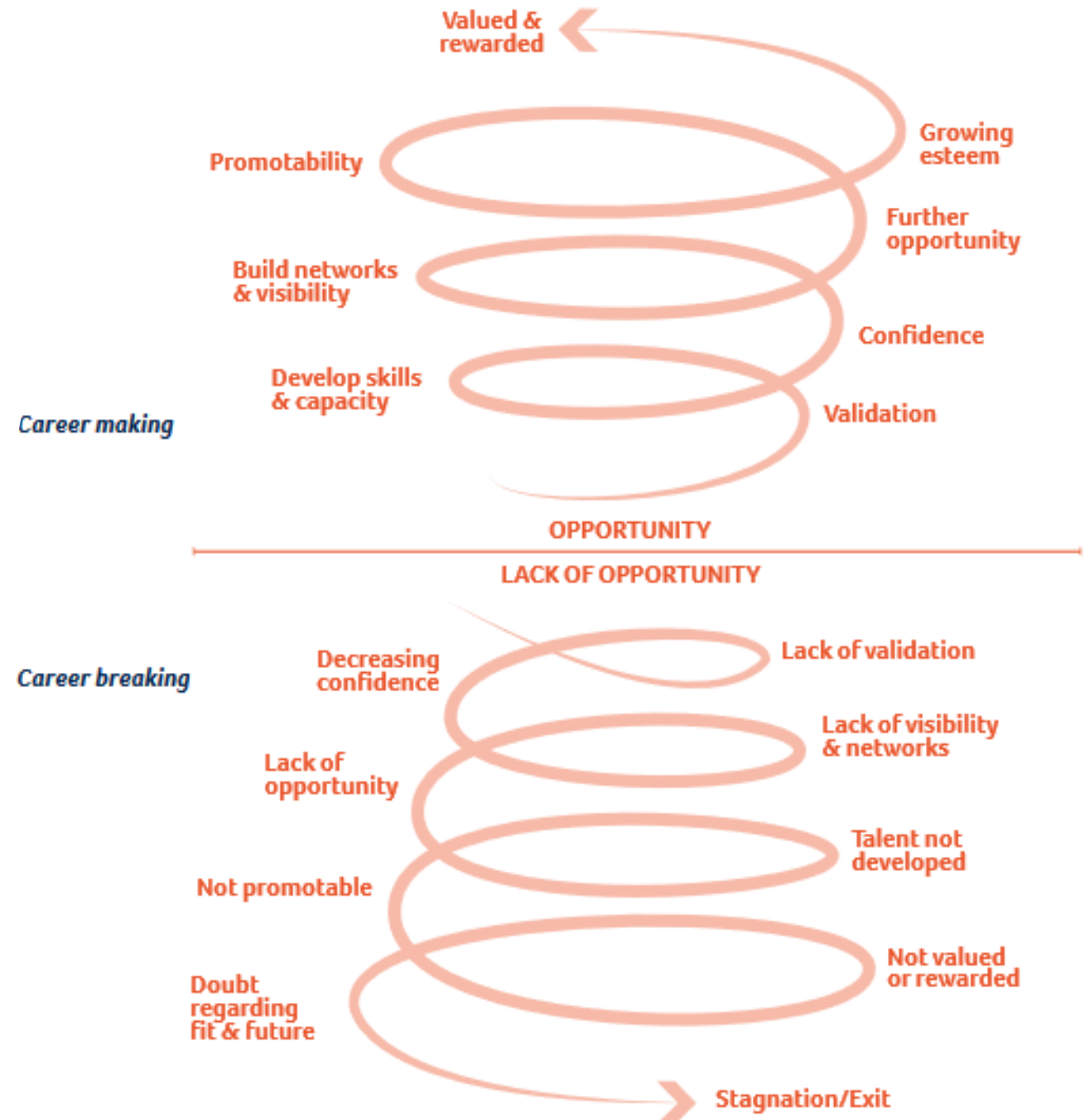


*From Jennifer de Vries:
[UAEW-Sponsorship-Guide](#)
and references given below*

Career spiral

- with or without sponsoring

From de Vries & Binns (2018), *Sponsorship: Creating Career Opportunities for Women in Higher Education*, [available online](#).



Make it visible!

We usually use the word "policeman"...

... and suppose it's ok also for women. But what if...?



manwhohasitall

@manwhohasitall

"Being called a Policewoman doesn't bother me at all, because I know it covers both women and men," Andrew, Policewoman, age 40



Thank you for
the attention!

Questions?



References

- Brage and Lövkrona (2016), *Core values work in academia – with experiences from lund university*, Lund University
- Brage & Lövkrona (2016), *See the Human Beyond – an anti-discrimination training programme*, chapter 3.3 in Brage & Lövkrona 2016.
- Bernard & Castilla 2010, *The paradox of meritocracy in organizations*. Administrative Science Quarterly, **55**(4), 543-576.
- Courses in gender: Gender and Physics – [online, more information here](#); Gender in Science and Technology – on campus, [more information here](#).
- de Vries, Jennifer (2011), *Mentoring for change*. Melbourne, Victoria: Universities Australia Executive Women & the LH Martin Institute for Higher Education, Leadership and Management.
- de Vries & Binns (2018), *Sponsorship: Creating Career Opportunities for Women in Higher Education*, [available online](#).
- Devine et al 2012, *Long-term reduction in implicit race bias: A prejudice habit-breaking intervention*, J. of Exp. Soc. Psych. **48** 1267-1278.
- Drew and Canavan 2020, *The Gender-Sensitive University*, Routledge,
- Freeman & Huang 2014, *Collaboration: Strength in diversity*, Nature News **513** 305
- Husu 2001, *Sexism, support and survival in academia: Academic women and hidden discrimination in Finland*. Social Psychological Studies 6. Department of Social Psychology, University of Helsinki
- LERU advice papers on Gender: <https://www.leru.org/publications?q=gender>
- Lövkrona 2016, *Discrimination in academia – a research overview*, chapter 2.1 in Brage & Lövkrona 2016
- Lövkrona & Brage (2016), *Master suppression techniques, counter strategies and affirmation techniques – concepts to understand and combat discrimination within academia*, chapter 2.3 in Brage & Lövkrona 2016
- Lövkrona, Brage & Möller (2019), *Mentoring for change – evaluation of a gender-integrated mentorship programme*, [available online](#)
- Moss-Racusin et al. 2012, *Science faculty's subtle gender biases favor male students*, PNAS **109** 41
- Nielsen 2015, *Make academic job advertisements fair to all*, Nature **525** 427
- Nielsen et al. 2017, *Opinion: Gender diversity leads to better science*, PNAS **114** 1740
- Nielsen, Bloch Carter & Schiebinger 2018, *Making gender diversity work for scientific discovery and innovation*. Nature, human behaviour. **2** 726-734
- Nielsen (2020) *Gender bias in academic recruitment and selection*, chapter 3 in Drew and Caravan 2020.
- Stewart and Valiant 2018, *An Inclusive Academy – Achieving Diversity and Excellence*, MIT press.
- Wennerås and Vold 1997, *Nepotism and sexism in peer review*, Nature 387 341
- VR 2020: Does the Swedish Research Council Have a Gender-equal Assessment Process, <https://www.vr.se/english/just-now/news/news-archive/2020-05-07-does-the-swedish-research-council-have-a-gender-equal-assessment-process.html>
- Östlin, Brage, Espersson & Möller (2020), *Gender bias in student's evaluations*, [available online](#)

EDI Projects at the faculty of science in Lund



Antidiscrimination workshops

(Chapter 3.3 in [Brage & Lövkrona 2016](#))

Ethnographic studies of study environment for physics students (internal).

PhD-students and their attitude to academic careers

– interviews and surveys. (Stadmark 2023, to be published)

Unconscious bias observers – training and implementation.

Nonviolent communication workshops.

Equality, diversity and inclusion workshops for all science students.

[Gender bias in student evaluations – literature study.](#)

[Gender dimensions in physics – conference and workshops.](#)

Part of compulsory HE-teacher training.

Scientific literacy course.

[Gender in science & technology course.](#)

[Gender and physics course.](#)