

## Finding suitable Work Place Cultures

### Objectives

Participants learn about the concept of workplace cultures and get to know three ideal-typical cultures of physics cultures, the Workerbee-, the Caretaker- and Hercules-culture. They learn how diverse these cultures can be, what their characteristics are and in which countries they can expect finding aspects of each of the three cultures. Furthermore, they reflect on their own experience concerning workplace cultures, get aware about their preferences and develop strategies to get information about workplace cultures in a physics department they are interested in, e.g. in the context of applications.

### Introductory Notes

The analysis of different workplace cultures of physics is the basis for the participants' reflection in what kind of working environment they want to do their research. In order to allow this analysis the lesson focuses on the international research project UPGEM (Understanding Puzzles in the Gendered European Map) which was financed by EU's 6<sup>th</sup> framework programme in the period 2005-2008. The overall objective of the UPGEM project was to understand why one finds cultural diversity in the proportion of female physicists employed at universities across Europe (cf. Hasse/Trentemøller 2011). The project conducted 208 qualitative interviews at more than 20 universities in five European countries, Denmark, Italy, Estonia, Finland and Poland which led to three different but interrelated ideal type workplace cultures that are characterized by different cultural values, traditions and norms (ibid.). It is discussed how competition, creativity and risk-taking work differently in the three different scientific workplace cultures and how local meaningmaking patterns can in- and exclude male and female researchers for different reasons in the three work place cultures.

### In-Class-Time

150-165 minutes, including 30 minutes break, depending on group size.

### Schedule and Teaching Instructions

**Homework** for the participants in preparation for the session:

- Read the article of Hasse/Trentemøller (2011)

**Group Work:**

*60 minutes*

Building groups. Groups should not be bigger than 4 people.  
Exercise on Work Sheet in Groups

**Participants' Break:**

*30 minutes*

**Group Presentation:**

*60-75 minutes*

Let each group present for 10 minutes at maximum their results to task number 1 and ask for aspects in their institute's culture that are Hercules-, Caretaker or Workerbee-like. This can be the department where they work on their Bachelor, Master thesis or PhD as well as the departments they have spent some time during a summer school or an internship.

In a second step ask for their preferences concerning workplace cultures.

In the third step collect the ideas how to find out something about the culture of a (fictive) team/institute they are interested in. Discuss and evaluate the ideas. Here you can give them advice drawn from your own knowledge or experience.

## Work Sheet: Finding suitable Work Place Cultures

Rethink the different prototypes of work place cultures in the text of Hasse/Trentemøller 2011: the Hercules Culture, the Workerbee Culture and the Caretaker Culture.

1. Then, think of your own experiences in physics departments and the research groups where you have been so far, e.g. during your master or bachelor thesis, or during this summer school. Do you recognize patterns of the Hercules, Caretaker or Worker Bee culture? Use the table from Hasse/Trentemøller 2011, page 11:

**Table 1** Patterns of meaning in the three work place cultures

	<b>HERCULES</b>	<b>CARETAKER</b>	<b>WORKER BEE</b>
<i>Work relation</i>	Devotion to physics. No intersection of family with work.	A healthy work life balance is prioritized. Social concern.	Research is 9-5. Private life and work life clearly divided.
<i>Work place identity</i>	Very individualistic. Praise initiatives, creativity. No room for weakness.	Group oriented with focus on social ties. Team can help the weak but maybe limit the creative work if the group demands it.	Work alone and keep to one self. Focus on the given task + work regulations and conditions.
<i>Competition</i>	One-on-one open and hidden competition is encouraged. All means are employed. Strategic thinking is necessary.	In-group competition is unacceptable—only group vs. group. The group defines the means of competition.	Uninterested & somewhat scared of competing—requires extra effort. Competition only at top-level.
<i>Power structure</i>	Anti-authoritarian tendencies challenge those with power through individual hidden power games.	Seemingly flat structure but entanglement of team/group and the leader's power; the leader use power to promote and protect the group. Young must earn membership are exploited by elder group members.	Clear and formal hierarchy. Distant but strong leader; one-man institutes, with many workers who can be replaced.
<i>Gender</i>	Being woman/mother is used negatively in competition. Gender overshadows competency—leading to cases of sexual harassment.	Group loyalty comes before gender (and competency). Few cases of conflict including sexual harassment.	Absence of competition makes gender unimportant.

2. Which work place culture does suit you best, and why? Or, which features of the three cultures would you like to find in your own (future) research team in physics?

3. When you consider entering a new work group, say for your master thesis or when applying for a PhD position, how can find out how it will be like? Think about specific questions to ask:

a) the graduate students

b) the postdocs

c) the group leader

d) the gender equality officer

### Obligatory Reading

Hasse, Cathrine; Trentemøller, Stine (2011): Cultural Workplace Patterns in Academia. In: *Science Studies* 24 (1): 6-25.

### Further Reading

Hasse, Cathrine; Trentemøller, Stine (2008): *Break the Pattern! A critical enquiry into three scientific workplace cultures: Hercules, Caretakers and Worker Bees*. Tartu University Press: Tartu.

Hasse, Cathrine; Trentemøller, Stine (2008): *Draw the Line! Universities as workplaces for male and female researchers in Europe*. Tartu University Press: Tartu.

Ko, Lily T. et al. (2014): Agency Of women of color in physics and astronomy: Strategies for persistence and success. In: *Journal of Women and Minorities in Science and Engineering* 20(2): 171-195.

### Additional Resources and Materials

The project UPGEM: [http://cordis.europa.eu/result/rcn/51993\\_de.html](http://cordis.europa.eu/result/rcn/51993_de.html)