Initiatives for Diversity

Ioanna Koutava, CERN Diversity Office

Quark Matter Conference, May 2018, Venice, Italy

Visit cern.ch/diversity
Contact: hr-diversity-info@cern.ch
BSc. in Sciences and Engineering

31%
BSc. in Sciences and Engineering

31% 69%

Education at a Glance 2015: OECD Indicators
Data from the 35 OECD Countries
Female Researchers around the world

- Female bachelor's graduates: 53
- Female master's graduates: 53
- Female PhD graduates: 43
- Female researchers: 28

Data on 189 countries and profiles of 140 of them
Degrees

Doctorate

Percent women

Number of women (thousands)

National Science Foundation’s - Women in Academic Science: A Changing Landscape, Ceci and al. 2014
Ability or perception?

Scientific fact:
“Perceptions and expectations influence the performance of students”

OECD PISA study on gender equality in education.

1. OECD PISA study on Gender equality in education: The ABC of Gender Equality
2. Self-Concept Predicts Academic Achievement Across Levels of the Achievement Distribution: Domain
The Draw-a-Scientist test
“Gender stereotypes of scientists influence adolescent girls’ and boys’ perceptions of who can be a scientist”

Jocelyn Steinke, Western Michigan University
Science performing Organisations

Data collection presented at the Gender in Physics Day at CERN, January 2017
https://cern.ch/diversity/gipd
Science performing Organisations

Women in the Engineering field

Percentage

European XFEL
ESA
ESO
ESRF
CERN
An emphasis on Gender Equality

Encouraging young girls and women to take up careers in science…

Fabiola Gianotti
Director-General | European Organization for Nuclear Research

As the Director-General for the European Organization for Nuclear Research (CERN), we also commit to undertake the following:

- The Organization will undertake actions to encourage school girls to take science and technology subjects.
- The VIP Visit Service will ensure to reach out to competent women as potential CERN representatives each time a VIP visit is organised.

Human Resources
Diversity Office

2017 CERN personnel statistics
Staff members
An emphasis on Gender Equality

Encouraging young girls and women to take up careers in science…

...Employing them…

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Encouraging young girls and women to take up careers in science...

...Employing them...

...Enabling them i.e. creating an inclusive work environment

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SIX WOMEN SHARE THEIR EXPERIENCE WORKING AT CERN

Diversity at CERN FCC - Movie

2017 CERN personnel statistics
Staff members

21%

A FAMILY-FRIENDLY WORK ENVIRONMENT

AN INCLUSIVE AND RESPECTFUL WORKPLACE

A PROFESSIONAL-PERSONAL BALANCE

CERN Human Resources
Diversity Office
Support structures

Family-Friendly work environment

Child Care Facilities
There are on-site facilities for children between the ages of 4 months and 6 years. Children’s Day-Care Center (EHV) and the School run by the CERN Staff Association.

Agreements are in place with local facilities in Meyrin, Switzerland and St Genis-Pouilly, France with a total of 40 reserved places for CERN Contributors’ children between the ages of 4 months and 4 years.

Support to Dual Careers
No restrictions are in place at CERN with regards to dual hiring of spouses. CERN is a member of the International Dual Career Network, supporting spouses of mobile employees in their job search.

Leave for New Parents
- Maternity leave: minimum 16 weeks, can be extended by 3 weeks (non-cumulative) under specific conditions such as premature birth, multiple births, serious illness or disability of the newborn, second child, single-parent and by 4 weeks for breastfeeding; 100% remunerated.
- Paternity leave (gender neutral, linked to the spouse giving birth): 10 working days; 5 additional working days under the same specific conditions as for maternity leave; 100% remunerated.
- Adoption leave: 15 weeks; 100% remunerated.
- Parental leave: 4 months, remunerated but with family benefits maintained and the health insurance fully funded by CERN.

Other Family-Related Leave
- Leave in the event of loss of a close relative: maximum 7 days / year remunerated leave. For single parents, this leave is increased by 5 days in the event of serious illness of a dependent child.
- Leave for family reasons: marriage, loss of spouse, child, parents; 3 days; brother, sister, parent-in-law or step-parent, 1 day.
- Compassionate leave: up to 3 months remunerated leave to care for a close relative.
- Leave donated by colleagues: up to 30 days per year in the event of a serious illness of a child or spouse (under certain conditions).

Inclusive and Respectful workplace

Accessibility
If you are experiencing a temporary or permanent disability, acquired or inherent, measures are in place to help you give and get your best in all activities. CERN strives to make the workplace increasingly accessible and to provide reasonable accommodation based on individual needs.

A Return-to-Work Policy
If you are returning from a long-term illness or acquired/disability, all necessary measures for your rehabilitation and return to work will be investigated and put in place whenever possible.

Informal Networks
CERN is a place where contributors who share an identifiable common interest in work-related issues can keep in contact with each other and to exchange ideas, information and experiences related to their integration at CERN.

Language Courses
To facilitate your successful integration in the Organization and in the local community, French classes at CERN are open to employees (subject to fees).

Support Services
Social Services
The Social Affairs Service team offers advice and support in a wide variety of circumstances including:
- Integration and stay in France and the borderlands including dealing with relevant authorities or services.
- Concerns and problems of a personal, family, professional, administrative or financial nature.

CERN Ombuds
The CERN Ombuds is available to provide impartial advice and guidance; to help resolve interpersonal disputes; to listen, explore and examine concerns or problems; and to guide people at CERN in applying the CERN Code of Conduct.

Medical Service
The CERN Medical Service, comprising 3 doctors, 4 nurses, 3 secretaries and 1 psychologist, is available to guide and help you in ensuring you achieve optimal health and well-being at work.
Teachers + CERN’s Diversity Office + research findings = Gender Inclusive Teaching

“It really made me realise some of my own unconscious behaviours, to which I will definitely pay more attention to in the future.

One of the things I will take home is, that an environment of collaboration and open discussion, rather than competition, can do wonders and can engage not only more girls, but also my more introverted male students.”

(Itumeleng Molefi, Physics Teacher in South Africa)
Gender Inclusive Teaching

An engaging science classroom, for female and male students

1. **Open enquiry activities**
   Opportunities for debates, e.g. on the ethical implications of science for society, allows the students to experience science in alternative ways.

2. **No painting science pink**
   Adapting classroom examples to a stereotypical image of girls does not work to get more girls into science.

3. **Role models**
   Pointing out positive female role models in science and engineering and at all career levels can counteract the stereotypical image of a mature male scientist.
Gender Inclusive Teaching

4. Reflection time
Studies have shown that, giving the students the opportunity to reflect on the learning process and outcome (e.g. a learning journal), increases the pleasure of learning for both genders significantly.

5. Collaboration, rather than competition
By nurturing an environment that is based on collaboration (e.g. through group work) rather than competition, girls’ interest in the subject can be sparked. Research has shown that girls are less engaged if the learning environment is competitive.

6. Avoiding stereotypes
We all have bias and as a teacher it is especially crucial to be aware of the remarks and examples being used to avoid common stereotypes, e.g. girls being generally better suited for social sciences and languages.
Conferences and Gender

Aggregate share of men and women at 23 conferences in Europe from 2012-2016

| WOMEN | 25.0% |
| MEN   | 75.0% |

Source: Open Society Foundations, calculated from conference agendas

U.C. Davis Professor J.A. Eisen publishes a list of 60+ conferences with poor gender ratios on his blog the «Tree of Life»
How to address this?

Rule 1: Collect the Data
Rule 2: Develop a Speaker Policy
Rule 3: Make the Policy Visible
Rule 4: Establish a Balanced and Informed Program Committee
Rule 5: Report the Data
Rule 6: Build and Use Databases
Rule 7: Respond to Resistance
Rule 8: Support Women at Meetings
Rule 9: Be Family-Friendly
Rule 10: Take the Pledge

“A policy may state, for example, that the conference committee wants to achieve a gender balance of speakers that roughly reflects that of its audience”

The Post-Career Break Fellowship

An opportunity for scientists and engineers returning to work after a career break.

“CERN gives you an opportunity for a second chance!”

- 2-year Fellowship at CERN for scientists or engineers
- For graduates who have been on a career break for at least 2 years
- The Fellows had career breaks due to personal reasons such as family or caring responsibilities
- Hiring 1-2 people per year
15% of the world’s population live with some form of disability

**Early School Leavers in EU**

- People without a disability: 12.3%
- People with disability: 31.5%

**Employment at the EU level**
- 47% of persons with disabilities are employed
- 72% of persons without disabilities

*Human Resources Diversity Office*

Disability statistics - access to education and training, Eurostat, July 2014
European comparative data on Europe 2020 & People with Disabilities, Cornell University ILR School, December 2013
Equality or Equity?
Internship Programme
Advancing the inclusion of students with special needs

✓ European Physical Society Award

→ Accompanying the teams and supervisors

→ Communicating the positions to the appropriate networks

→ Raising awareness at CERN

→ Preparing the work environment
Follow Diversity at CERN

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The CERN Diversity Office

Diversity? It’s an issue for the majority

On 27 January, I spent much of the day in the Globe, where I took part in the Gender in Physics day organized by the Gender Equity Network in the European Research Area (GENERA). Two weeks later, it was a pleasure to be present at the second event organized around the world as part of UNESCO’s International Day of Women and Girls in Science.

On both of these occasions, however, one thing that really struck me was the number of women who were present. It’s true that after listening to the opening speech by the director of the CERN Division for Women and Girls in Science, it became clear that diversity is not an issue for everyone, whereas for many women it is.

When we look at diversity, it’s easy to think “this is not for me” or “this is not a field for women” or “I don’t belong here”. However, the reality is different: Diversity is an issue for the majority, and it’s important to make an effort to understand it and to work towards greater diversity.

Diversity in Action workshop

30 May 2016

After two years, six successful editions and plenty of positive feedback, we hope to be able to launch a Diversity in Action workshop.

“HEP - still an unfeminine profession?”

01 May 2016

In 1981, Mary K Gaillard became the first woman on the CERN Council; a theoretical physicist spanning the period from the inception of the Standard Model of particle physics and its experimental verification.

Workplace Accessibility, CERN Diversity Programme Leader, 26 Feb 2018

Accessibilité au lieu de travail, Jerome Cibadier 26 Feb 2018

EnGENDERing Success in STEM, CERN Head of Human Resources 07 Feb 2018

(Presentation in French) Pour un environnement de travail plus inclusif, Geneviève Guinot 04 Nov 2017