

ERN European Research Nights 2018

ERN2018#2: GENDER EQUALITY
IN RESEARCH & DUAL-CAREERS

EUROPEAN RESEARCH DAY



1-day workshop by & for European community of research in Japan: learn & discuss careers & Europe!

Call for abstract open: bit.do/ERD2018Japan



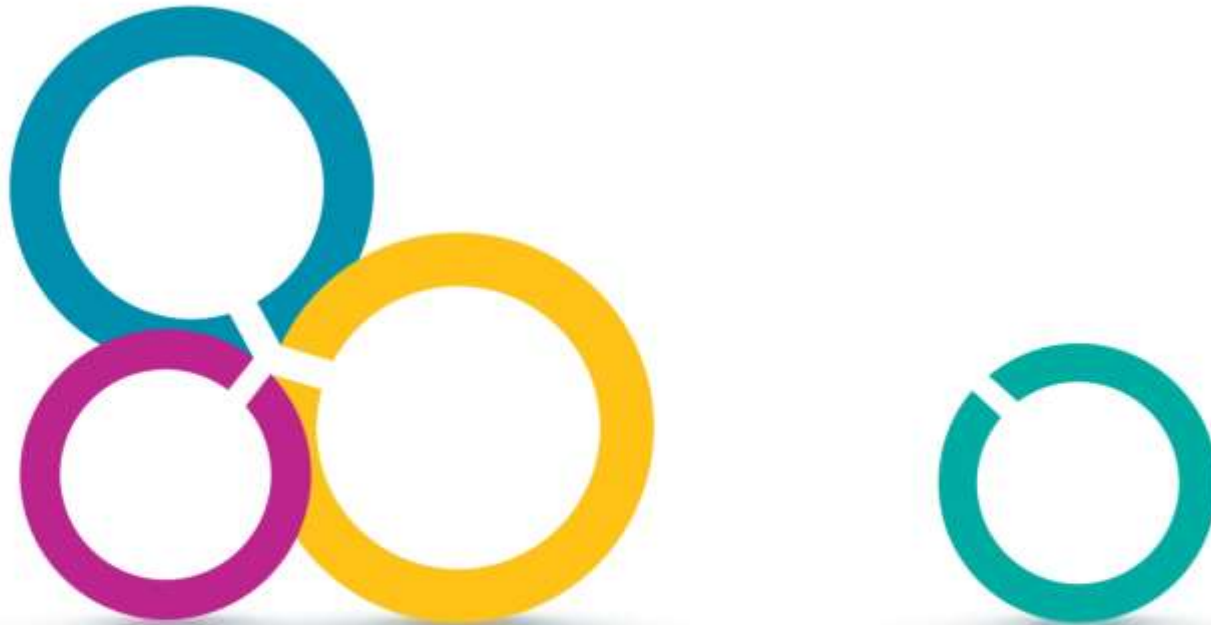
= european
research
day

2018



Gender Equality in Research and Innovation: EU Policies and Actions

ERN2018#2, 8 March 2018 Tokyo



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EURAXESS Japan
Coordinator

Gender-mixed research teams perform better

*"Promoting **diversity** not only promotes representation and fairness but may lead to **higher quality science.**"*

Campbell et al. (2013) *

*"**High-performing collaborative research teams** are created and maintained when team **diversity** (broadly defined) is effectively fostered and interpersonal skills are taught and practiced."*

Cheruvilil et al. (2014) *

*" (...) the key levers and drivers for innovative processes are positively influenced by having a **50:50 proportions of men and women in teams.** This clearly shows that equal gender representation can help to unlock the innovative potential of teams."*

The Lehman Brothers Centre for Women in Business. (2007) **

* Refers to gender-mixed/diverse teams in research

** Refers to gender-mixed/diverse teams in companies

She Figures 2015

Main source of pan-European statistics on status of gender equality in R&I
Released every 3 years since 2003

2015 edition:

“strides towards gender balance within the pool of higher education graduates”

“women in the EU accounted for only 33% of researchers”

“women continue to be under-represented in top positions”

“10.8% of women in research had precarious contracts (7.3% of men)”

“gender pay gap: women’s gross wages 17.9 % lower in R&D”

	Natural sciences		Engineering & technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	2005	2012	2005	2012	2005	2012	2005	2012	2005	2012	2005	2012
BE	30	33	19	21	47	53	40	47	43	49	42	45
BG	54	47	26	33	53	51	34	33	43	52	47	54
CZ	32	29	21	21	44	48	36	36	39	42	37	42
DK	26	33	16	24	41	49	50	51	32	42	45	43
DE	23	28	14	19	39	48	39	49	34	36	36	50
EE	38	40	24	31	57	58	42	46	55	58	59	62
IE	31	34	21	21	57	61	38	47	45	49	44	51
ES	38	41	34	37	40	43	38	39	39	42	39	42
HR	41	44	31	36	55	58	41	46	45	55	52	58
IT	36	42	21	26	30	36	32	39	36	42	49	52
CY	30	34	18	31	0 (0/7)	56	:	:	38	40	48	47
LV	39	43	21	36	59	64	51	54	60	64	70	68
LT	41	45	27	35	54	61	47	53	61	65	62	65
LU	26	24	18	16	23	23	:	:	34	58	35	53
HU	27	27	18	22	44	46	33	38	41	45	45	44
MT	17	26	9	13	30	46	20 (1/5)	27 (3/11)	34	40	28	23
NL	26	41	21	41	39	41	34	41	38	41	42	41
AT	26	29	18	22	40	46	49	56	44	49	46	52
PL	39	39	23	25	53	55	47	49	47	47	45	47
PT	48	51	33	31	54	56	50	55	53	54	51	50
RO	36	51	34	41	57	57	43	42	45	50	33	49
SI	29	30	18	24	50	52	52	53	38	46	47	51
SK	38	46	32	32	55	56	44	42	53	52	48	48
FI	33	33	30	25	57	67	58	55	53	57	54	57
SE	35	36	22	25	61	59	56	47	:	:	:	:
UK	31	44	19	40	51	50	33	60	41	39	47	38
NO	26	33	19	26	49	56	43	47	42	48	43	47
MK	33 (3/9)	56 (14/25)	32	34	62	66	28	44	38	48	64	54
RS	51	49	31	34	56	48	45	57	50	48	50	57
TR	41	43	30	32	44	47	27	30	37	41	41	43

She Figures 2015

Table 7.1. Women to men ratio of scientific authorships (when acting as corresponding author), by field of science, 2007–2009 and 2011–2013

	Natural sciences		Engineering and technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	07-09	11-13	07-09	11-13	07-09	11-13	07-09	11-13	07-09	11-13	07-09	11-13
EU-28	0.3	0.3	0.2	0.3	0.5	0.5	0.6	0.7	0.5	0.6	0.6	0.6
BE	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.6	0.5	0.6	0.5	0.5
BG	0.7	0.7	0.8	1.0	1.6	2.7	z	z	z	z	1.6	z
CZ	0.3	0.3	0.2	0.2	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.5
DK	0.3	0.3	0.2	0.2	0.6	0.7	0.6	0.7	0.3	0.4	0.4	0.3
DE	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.5	0.4	0.5	0.4	0.4
EE	0.6	0.6	0.2	0.5	0.4	z	1.0	1.4	z	1.5	1.3	1.2
IE	0.2	0.2	0.2	0.2	0.6	0.7	0.4	0.5	0.6	0.8	0.7	0.6
EL	0.2	0.2	0.1	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.9	0.7
ES	0.3	0.3	0.3	0.3	0.4	0.5	0.7	0.8	0.5	0.6	0.6	0.6
FR	0.3	0.3	0.2	0.3	0.4	0.5	0.6	0.6	0.5	0.6	0.7	0.6
HR	0.8	0.8	0.3	0.4	1.3	1.0	0.6	0.7	0.8	0.9	1.0	1.4
IT	0.4	0.4	0.2	0.3	0.4	0.4	0.7	0.8	0.4	0.5	0.6	0.5
CY	0.1	0.1	z	0.1	z	z	z	z	0.7	0.7	z	z
LV	z	z	z	z	z	1.4	z	0.9	z	z	z	z
LT	0.3	0.3	0.5	0.5	1.9	1.8	1.1	1.6	0.6	0.7	z	z
LU	z	z	z	z	z	z	z	z	z	0.4	z	z
HU	0.3	0.3	0.2	0.2	0.4	0.3	0.4	0.5	0.3	0.3	1.2	1.3
NL	0.3	0.3	0.2	0.3	0.6	0.8	0.5	0.5	0.5	0.6	0.5	0.6
AT	0.2	0.2	0.1	0.2	0.3	0.4	0.8	0.7	0.3	0.5	0.5	0.5
PL	0.4	0.4	0.3	0.3	0.9	1.0	1.0	1.0	0.8	0.7	0.7	0.6
PT	0.6	0.6	0.4	0.4	1.0	1.0	0.9	1.1	0.5	0.6	1.0	0.7
RO	0.8	0.8	0.8	0.7	1.5	1.2	z	1.9	0.9	0.9	0.4	0.7
SI	0.4	0.4	0.3	0.3	0.8	0.9	0.6	0.8	1.0	0.8	0.9	0.7
SK	0.4	0.4	0.4	0.5	0.9	1.3	0.9	0.7	0.9	0.9	0.3	0.4
FI	0.6	0.6	0.4	0.4	1.2	1.2	1.0	0.9	0.9	1.1	0.5	0.6
SE	0.3	0.3	0.3	0.3	0.8	0.9	0.8	0.8	0.6	0.7	0.7	0.6
UK	0.2	0.2	0.2	0.2	0.5	0.5	0.5	0.6	0.5	0.6	0.5	0.6
IS	0.5	0.5	z	z	1.1	1.1	0.2	0.3	z	z	z	z
NO	0.3	0.3	0.3	0.3	0.7	0.9	0.7	0.6	0.5	0.6	0.5	0.5
CH	0.2	0.2	0.1	0.2	0.3	0.3	0.4	0.5	0.3	0.4	0.4	0.4
ME	z	z	z	z	z	z	z	z	z	z	z	z
MK	1.6	1.6	z	z	z	z	z	z	z	z	z	z
RS	0.7	0.7	0.7	0.7	1.2	1.3	1.2	1.2	1.8	0.7	z	z
TR	0.3	0.3	0.2	0.2	0.4	0.4	0.3	0.4	0.5	0.5	0.7	0.7
BA	z	z	z	z	1.6	2.0	z	z	0.7	0.6	z	z
IL	0.2	0.2	0.2	0.2	0.4	0.5	0.5	0.3	0.6	0.7	0.5	0.5

In EU-28, 31 % of publications have a woman corresponding author.

Ratio of women to men authorships: 0.5 (ratio of number of researchers in the higher education sector 0.7)

https://ec.europa.eu/research/swafs/pdf/pub_gender_equality/she_figures_2015-final.pdf

Gender Equality in the European Research Area



European Research Area

An open space
for knowledge and growth

Three objectives

- Increase the participation of female scientists at all levels
- Ensure gender balance in decision-making
- Integrate gender dimension in research content & programmes

Three levels

1. Stakeholders- SHOs
2. Member States and Associated Countries
3. European Commission

Gender Equality in the European Research Area



European Research Area

An open space
for knowledge and growth

1- Research organisations are invited to :

Implement institutional changes through **Gender Equality Plans**:

- Audits of procedures/practices to **identify gender bias**
- Implementing **innovative incentive strategies**
- Setting **targets and monitoring progress** (indicators)

Gender Equality in the European Research Area



European Research Area

An open space
for knowledge and growth

2- Member States are invited to :

- Create the appropriate **legal and policy environment**
- Ensure **40% of the under-represented sex** in committees involved in recruitment and in drafting/evaluating research programmes

Commission Communication:
A Reinforced European Research Area Partnership for Excellence and Growth 17-07-2012

Gender Equality in the European Research Area



European Research Area

An open space
for knowledge and growth

3- The European Commission will:

- **Support** and encourage Stakeholders and Member States
- Foster Gender Equality and the **integration of the gender dimension in research content in Horizon 2020**

Commission Communication:
A Reinforced European Research Area Partnership for Excellence and Growth 17-07-2012

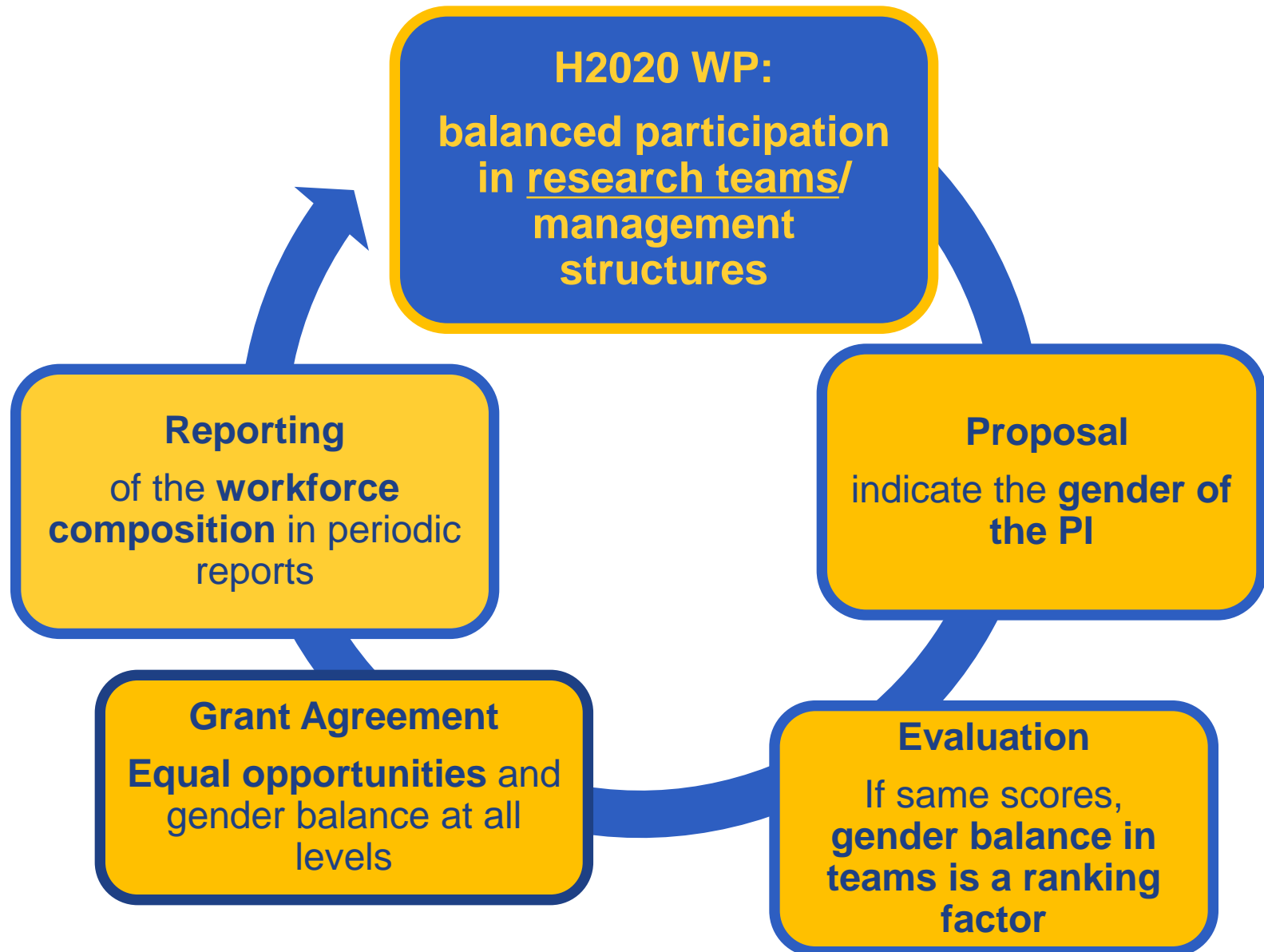
Gender Equality in Horizon 2020

THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

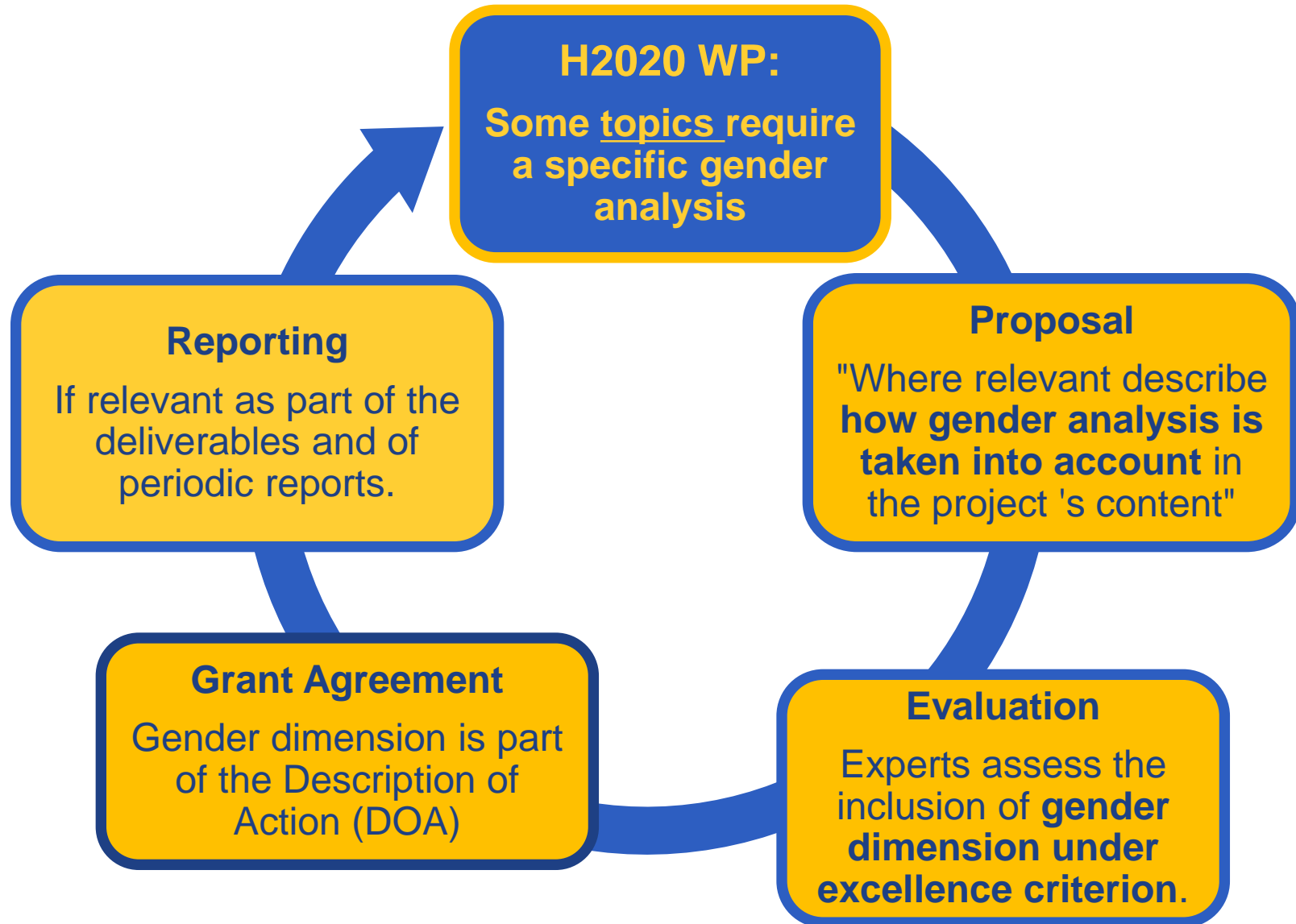
HORIZON 2020

The background of the slide is a deep blue gradient with a glowing horizon line. In the center, a small globe of the Earth is positioned above a stylized, glowing human figure. The text 'HORIZON 2020' is written in large, white, sans-serif capital letters across the middle of the image. The word 'HORIZON' is on the left, '2020' is on the right, and the globe and human figure are integrated into the letter 'O' of 'HORIZON'. The overall aesthetic is futuristic and scientific.

Gender Equality in Horizon 2020



Gender Equality in Horizon 2020



Gender Equality in Horizon 2020

The H2020 Participant Portal: Funding opportunities

TOPIC : The gender perspective of science, technology and innovation (STI) in dialogue with third countries

Topic identifier: SwafS-12-2019

Publication date: 27 October 2017

Types of action: RIA Research and Innovation action

DeadlineModel: single-stage

Planned opening date: 11 December 2018

Deadline: 02 April 2019 17:00:00

Time Zone : (Brussels time)

Scope:

The project will investigate how gender equality matters are taken into consideration at different levels of international cooperation in the area of science, technology and innovation between the EU and a selected set of third countries, along three objectives, i.e. equality in scientific careers, gender balance in decision making, and the integration of the gender dimension in R&I content. The project will build on the work done by the ERA-related groups in charge of gender equality and international cooperation as well as EU funded projects. It will provide a mapping and a subsequent analysis of how gender equality is taken into account and promoted:

Gender Equality in Horizon 2020

The H2020 Participant Portal: Funding opportunities

Find projects/topics with a gender dimension:

H2020 Participant Portal → "Funding Opportunities" → Quick finder "Gender" (bottom part, left column)

(325 closed projects, 45 open calls, 67 forthcoming calls as of 08/03/2018)

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/index.html>

More Info on EU's Gender policies in R&I:

RTD-GENDERINRESEARCH@EC.EUROPA.EU

<http://ec.europa.eu/research/swafs/index.cfm?pg=policy&lib=gender>

Recent positive evolutions

Proportion of women in grade A positions:

15 % in 2000, 18 % in 2007, 21 % in 2013 → 23.5 % in 2014

Proportion of women heads of institutions in the higher education sector:

15.5 % in 2010 → 20.1 % in 2014

Proportion of women heads of institutions accredited to deliver PhDs:

9 % in 2007, 10 % in 2010 → 15 % in 2014

Legal framework:

14 Member States and 3 Associated Countries implemented quotas or targets for gender balance in decision-making bodies, such as executive boards, recruitment committees and evaluation panels (from National Action Plans submitted in 2016 by MS/AC)

Contact - Registration

Mail: japan@euraxess.net

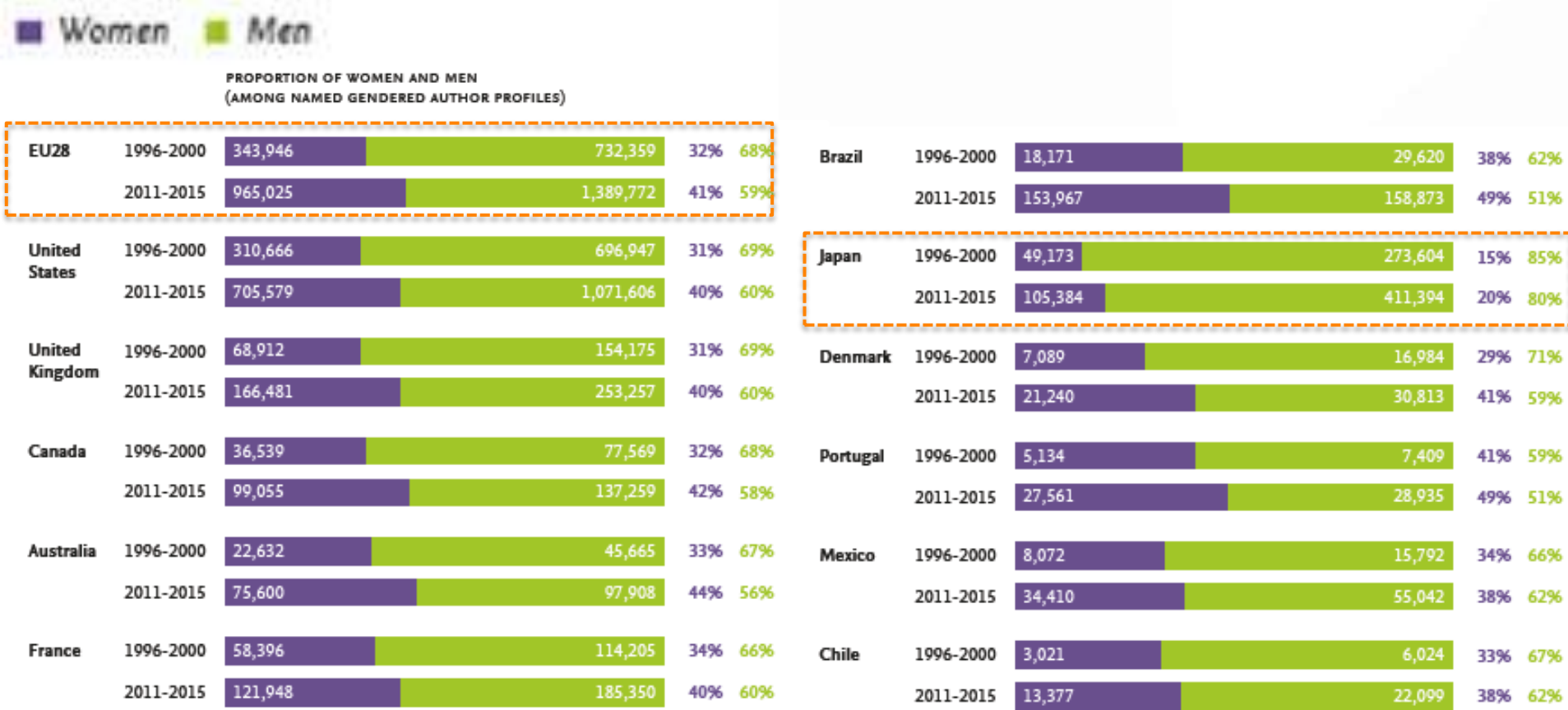
Web: japan.euraxess.org



Gender in the Global Research Landscape

- establishing a scalable framework to support policy evidence

Proportion and number of researchers by gender



The proportion of women among researchers and inventors is increasing in all twelve comparator countries and regions over time.

Citation Impact by gender for each comparator

- All fields of Science

■ Women ■ Men



In all regions examined there is only a little difference in field weighted citation impact between women and men

International collaboration

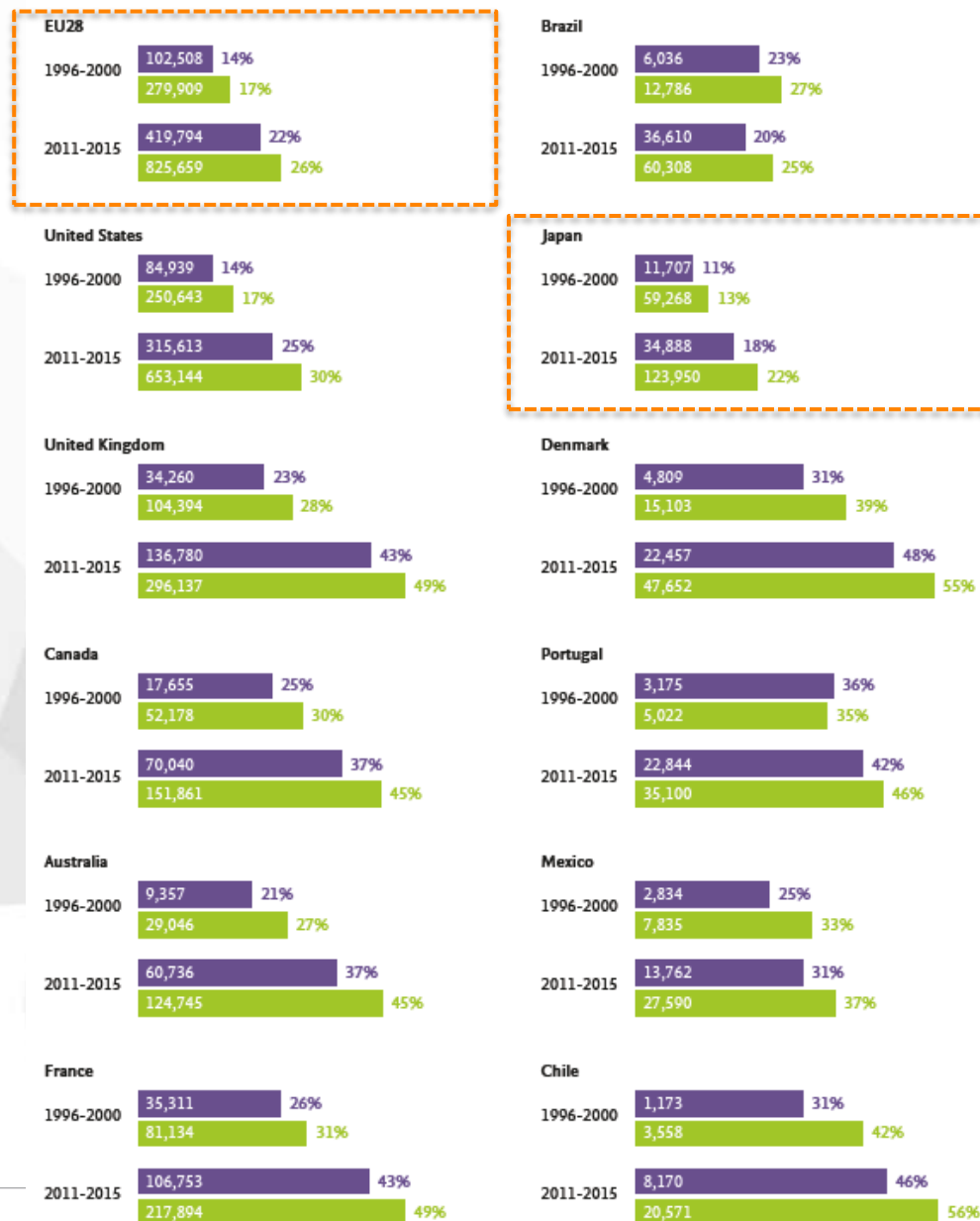
Women are less likely than men to collaborate internationally on research papers.

For EU 28
(22% for women; 26% for men).

Japan has relatively low shares of international collaboration for both men and women
(18% for women; 22% for men).

■ Women ■ Men

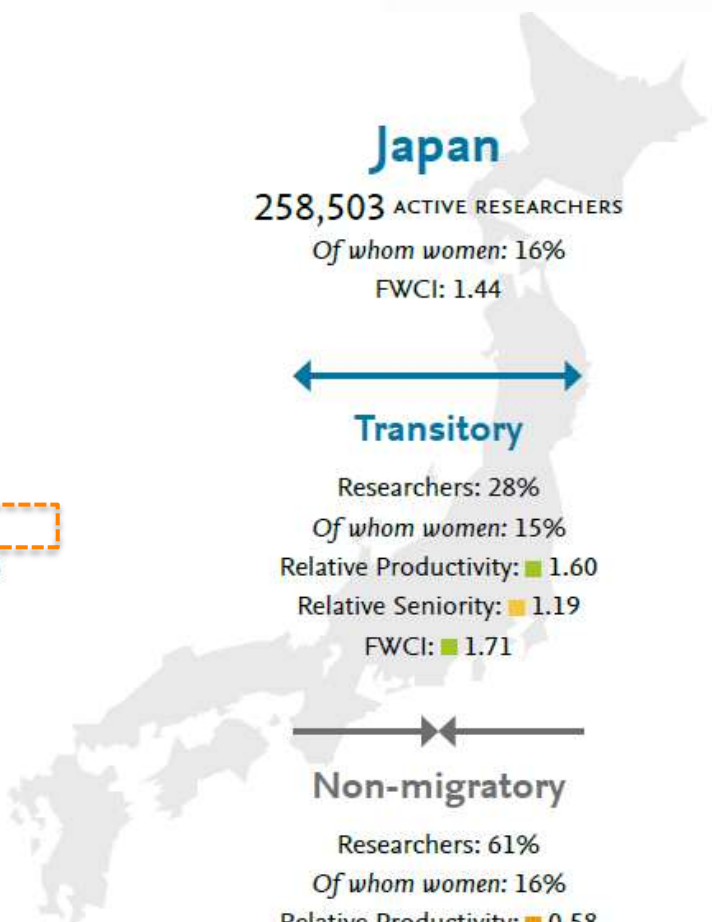
SCHOLARLY OUTPUT RESULTING FROM INTERNATIONAL COLLABORATION AS A SHARE OF TOTAL SCHOLARLY OUTPUT



International mobility (1996-2015)

Among researchers, women are generally less internationally mobile than men

Japan 16% Women
 16% non-migratory
 11% inflow women
 19% outflow women
(only country with higher percentage of women leaving)



Inflow

Researchers: 5%
Of whom women: 11%
 Relative Productivity: ■ 1.26
 Relative Seniority: ■ 1.24
 FWCI: ■ 1.51



Transitory

Researchers: 28%
Of whom women: 15%
 Relative Productivity: ■ 1.60
 Relative Seniority: ■ 1.19
 FWCI: ■ 1.71



Outflow

Researchers: 6%
Of whom women: 19%
 Relative Productivity: ■ 1.19
 Relative Seniority: ■ 1.15
 FWCI: ■ 1.40



Non-migratory

Researchers: 61%
Of whom women: 16%
 Relative Productivity: ■ 0.58
 Relative Seniority: ■ 0.88
 FWCI: ■ 0.98

Where to learn more:

- Download the **Report & Infographic**
 - https://www.elsevier.com/research-intelligence/resource-library/gender-report/_nocache – **Full Report**
 - <https://www.elsevier.com/research-intelligence/campaigns/gender-17> – **Infographics**
- Access the **References**
 - Public **Mendeley** group, a community resource
 - <https://www.mendeley.com/community/gender-in-the-global-research-landscape/>
- **Gender & Research Resource Center**
 - **Dynamic resource** with information about gender and women in STEM activities, initiatives, and programs
 - <https://www.elsevier.com/connect/gender-and-science-resource-center>

