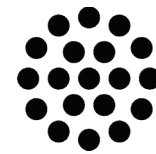




The International Science Council

The Global Voice for Science



**International
Science Council**



The **International Science Council** (ISC) was launched on 3-5 July 2018 following a merger of the **International Council for Science** (ICSU), which was created in 1931, and the **International Social Science Council** (ISSC), created in 1952.

Our vision is of science as a global public good





ISC Strategic Objectives

Vision

The ISC's vision is of science as a global public good.

Mission

Its mission is to be the global voice for science; a trusted voice that speaks for the value of all science by:

- Promoting international research and scholarship on key global challenges
- Increasing evidence-informed understanding and decision making at all levels of public policy, discourse and action
- Promoting the continued and equal advancement of scientific rigour, creativity and relevance in all parts of the world
- Protecting scientific freedom and advocating principles for the responsible practice of science.



The ISC and the SDGs



The ISC is a co-Lead Coordinator of the **UN Major Group for Science and Technology**.

In this role the Council works with the World Federation of Engineering Organizations (WFEO) to secure a mandate for science at the UN and to integrate science in major global policy processes, including the 2030 Agenda for Sustainable Development, the Paris Agreement on Climate Change, the New Urban Agenda and the Sendai Framework for Disaster Risk Reduction.



Follow the UN STC Major Group for latest updates:
[@ScienceTechUN](https://twitter.com/ScienceTechUN)



The ISC and the SDGs



SDG 5 – Achieve gender quality and empower women and girls

Call for action to address the gender gap in science and technology

What is the “gender gap”

Any difference between women and men in terms of their levels of participation, access, rights, remuneration or benefits (World Economic Forum, 2020)





A Global Approach to the Gender Gap in Mathematical, Computing and Natural Sciences (ISC 2020)

Main goal: investigate the gender gap in STEM disciplines

Methods:

- i) a global survey of scientists with more than 32,000 responses from 159 countries
- ii) an investigation of the effect of gender on millions of scientific publications
- iii) the compilation of best practices to encourage girls and young women to enter STEM fields, available as a website.
- iv) regional conferences in Africa, Asia and Latin America



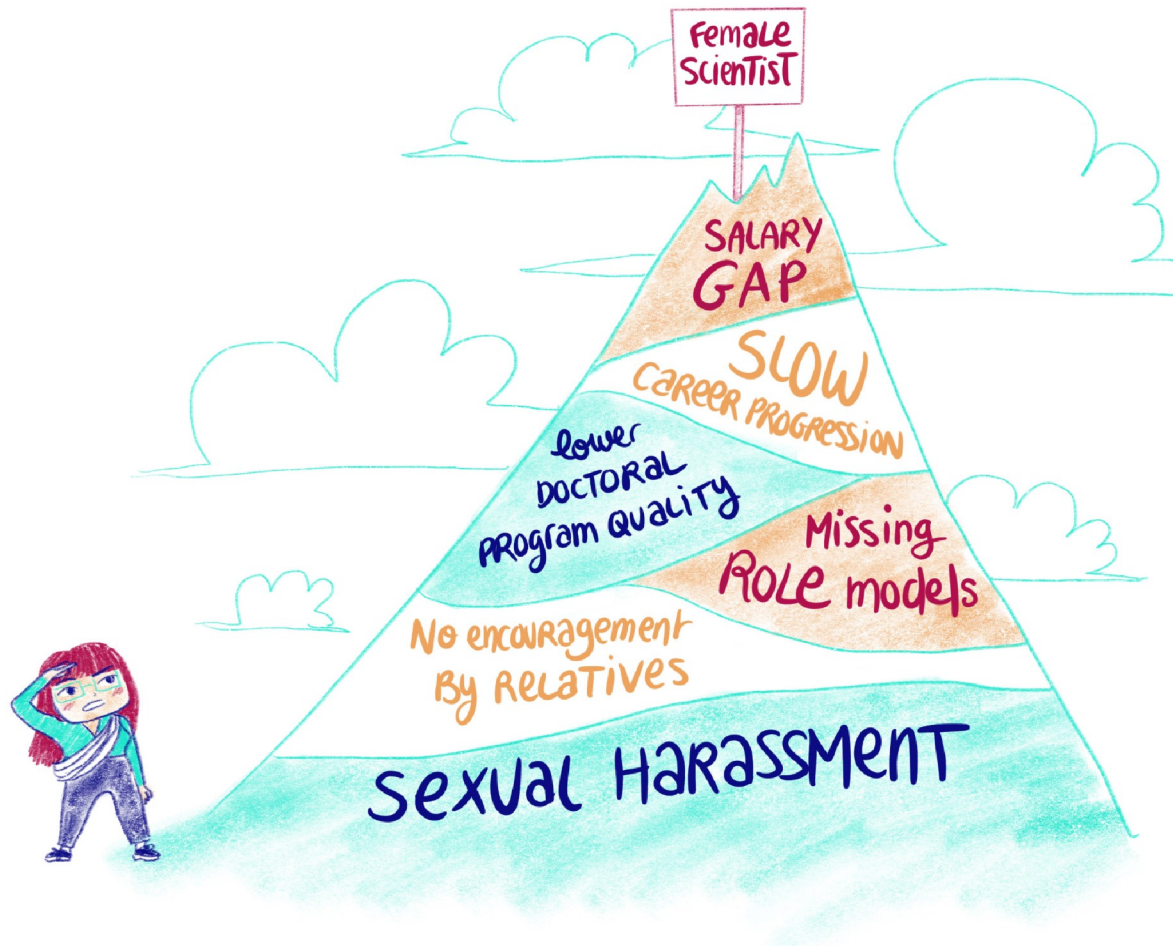
A Global Survey of Scientists

- 32, 346 responses from 159 countries – half men, half women
- We analyzed the data across 12 regions and 8 disciplines:
 - Astronomy, Biology, Chemistry, Computer Science, History and Philosophy of Science, Mathematics, Mathematics-Applied, Physics

Findings:

The Gender Gap is very real across all regions, all disciplines and development levels







An investigation of the effect of gender on millions of scientific publications

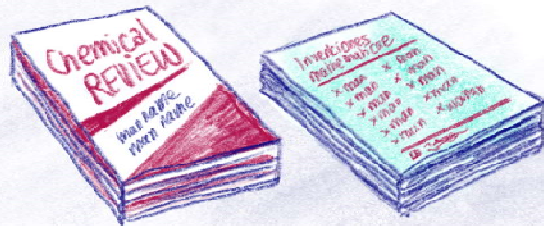


Productivity gap is narrowing between male and female researchers (Theoretical physics and math 1995-2002 rate of 80-90% output of males)

Proportion of women authors increasing in astronomy, math and physics

Highest proportion women authors in Europe; USA: math and astronomy for women at average for all ; few other continents with relatively good representation of women; poor data

1970



< 10% of top journals
papers are authored by women

2020



20% in astronomy, astrophysics
and chemistry and still < 10%
in mathematics and theoretical
physics

Distribution good practice examples: UNESCO GOL aims

Social norms and stereotypes 21

Primary and secondary education-58

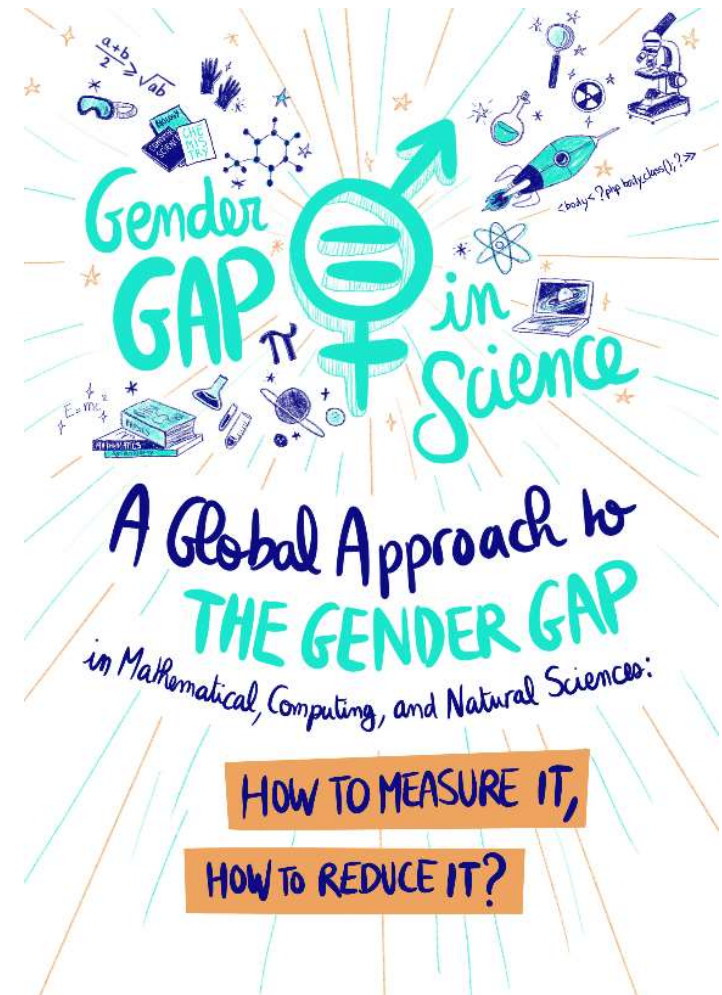
Higher education-25

Career progression-45

Research content and practice 12

Policy-making process-13

Entrepreneurship and innovation-6





Compilation of best practices to encourage girls and young women to enter STEM fields



Support UNESCO GOL aims and added:

- engage families and communities in promoting STEM careers in girls, especially if contrary to cultural expectations and norms
- engage females in exploring socio-scientific issues
- promote social support for females , such as peer networks and mentoring by more experienced STEM researchers and professionals
- develop females' STEM leadership, advocacy and communications skills



An Urban focus could bring together STEM disciplines



SDG 5-Gender Equality
SDG 11– Sustainable
Cities and Communities

An opportunity to engage
science, technology,
engineering and
mathematics professionals
to address a major global
health challenge and close
the gender gap together



GOAL 11: MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

- Housing, Basic Services,
- Slum Upgrades
- Transportation
- Participatory, integrated human settlement planning
- Preservation of Cultural/Natural Heritage
- Disaster Preparedness
- Air Quality and Municipal Waste Management
- Green/Public Spaces
- National and Regional Development Planning to strengthen urban, peri-urban and rural linkages
- Mitigation and adaptation to climate change
- Construction of sustainable and resilient buildings



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The Urban Health and Wellbeing Programme (UHWB) is a global science programme and interdisciplinary body of the **International Science Council**, supported by the InterAcademy Partnership (IAP), the International Society for Urban Health (ISUH) and the United Nations University (UNU). Its International Programme Office (IPO) is hosted by the Institute of Urban Environment (IUE) of the Chinese Academy of sciences (CAS) in Xiamen, China.



The International Society for Urban Health (ISUH) is the only global non-governmental organization solely focused on advancing urban health and health equity by addressing the broad determinants of health.

Cities as Drivers of Global Health

70%
ECONOMY
(GDP)

70%
GREENHOUSE
GAS EMISSIONS

OVER 60%
GLOBAL ENERGY
CONSUMPTION

70%
GLOBAL
WASTE

Broad determinants of health

Experts now know that in order to achieve healthier urban communities worldwide, we must improve the built, social, and physical environments in which people live.





Work with the ISC to advance science as a global public good

International Society for Urban Health

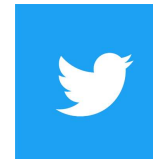
www.isuh.org

ISC Programme on Urban Health and Wellbeing

urbanhealth.cn/en/

A Global Approach to the Gender Gap in Mathematical, Computing and Natural Sciences (ISC 2020)

<https://gendergapinscience.files.wordpress.com>



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