

Open science: intervention on behalf of WFSW (World Federation of Scientific Workers) in the meeting with INWES (International Network of Women Engineers and Scientists)

It is my turn to congratulate the organizers of today's webinar and to wish a long-term and effective partnership between our organizations.

As my talk is about open science, let me first clarify the term "science" which is included in the name of both of our organizations. Etymologically speaking, "science" derives from the Latin word *scientia*; like its Greek counterpart, *episteme*, *scientia* refers to knowledge as a whole, while the modern concept of "science" and "scientist" narrows the focus to experimental disciplines, STEM etc. Promoting science in general and women scientists in particular enlarges the perspective, addressing the gender gap in all scientific disciplines and fostering knowledge and gender equality.

WFSW has been working for a long time with UNESCO on topics related to scientific research, including the status and working conditions of scientific workers. Our current work in progress is about the UNESCO recommendation on Open Science, whose first draft has been issued last fall, the second one will be discussed in May.

Open Science is a global movement aiming at making science a common possession for humanity and increasing its efficiency. This will be possible through a radical shift of perspective, considering science not a "competition", but the result of global cooperation. The current pandemic has highlighted that science for humanity can only thrive when scientists from all over the world share their findings and work together in transparency. Cooperation is a key topic for women scientists, whose concern has little to do with power and much more with exchange and equality.

Open Science introduces new evaluation standards, based not on the so-called productivity, which means quantity and "bibliometrics", but on quality. The pandemic has showed that women scientists' "productivity" dramatically decreased during lockdowns, not only because of the family burden or of a lack of "a room of their own", but also because women, more than men, were taking care of their "academic family" (colleagues, including precarious ones, and students), focusing on group cohesion.

Open Science guarantees the right to knowledge for all peoples, including indigenous ones. Women often play a key role in preserving and disseminating indigenous knowledge, whose status as knowledge *tout court* will be effective through Open Science.

Thanks to their community commitment, women scientists can play a key role in promoting mutual confidence, resulting from Open science, between scientists and "lay people", setting them free from obscurantist and anti-science pressures. Such confidence and cooperation is indispensable for high-level literacy for all, as well as for a large-scale initiation into scientific methods and thinking, and into critical thinking.

Needless to say, Open Science, i.e. open access to scientific publications and data, as well as opening to society, is crucial for academic freedom, good working conditions, and goes hand in hand with a nonprofit use of knowledge.

Some challenging questions we need to address: scientific research is costly; this is often used as an excuse to put publications and data behind *paywalls*. Open Science needs sustainable funding, mostly public. Businesses are interested in Open Science because it gives them free access to scientific publications and results; yet they are reluctant to waive the so-called "business secrecy/confidentiality": Open Science should help to establish partnerships between the public and the private sector based on fairness and transparency, and thus eliminating the risk of putting science under the control of capitalistic interests in the globalized market. Let us mention as an example the current demand about the COVID-19 vaccine patents waiver in order to allow equitable vaccine distribution and production, and accelerate vaccination worldwide, in particular in low-income countries.

WFSW is looking forward to working with you on the upcoming UNESCO Open Science recommendation. We think that women scientists should stand up for science, peace and democracy in the post-pandemic world, as they always did in critical moments in history.

Dina Bacalexi