Report OECD ministerial meeting on science and technology

The OECD ministerial meeting on science and technology was held on 23 and 24 of April. The first day of the meeting was dedicated to a Multistakeholder Dialogue of discussions and engagement in science, technology, and innovation to support sustainability transitions, with stakeholders from different OECD Countries representing government, academia, industry, civil society. The topics addressed in the different panels include:

- Shaping science and technology policies for our future: how to engage diverse audiences?
- Making open science a reality for the benefit of society
- The digital and green transitions: the role of skills and capabilities
- The ocean we want by 2030: the role of ocean observation data for research, growth, and wellbeing
- Partnerships for climate change and biodiversity
- Developing talent and promoting diverse research career paths in a world in transition
- Human enhancement: emerging technology and the human future

The second day held a Ministerial-level meeting with Science and Technology Ministers and high-level representatives of institutions of OECD countries. The Ministers and high-level representatives adopted a new OECD Framework for Anticipatory Governance of Emerging Technologies that promotes responsible innovation and offers tools to help governments identify and address the ethical, social, and legal implications for technological developments and a new Agenda for Transformative Science, Technology and Innovation Policies, designed to drive responsible and equitable research, development and a practical guidance for policymakers to formulate and implement Science, Technology and Innovation reforms.

The Canadian Association of Postdoctoral Scholars CAPS

The Chair of the Canadian Association of Postdoctoral Scholars (CAPS) and ICoRSA Research Staff Association member, Dr. Henrietta “Henny” Bennett participated in the first day, Panel B2.2 - Developing talent and promoting diverse research career paths in a world in transition, a roundtable discussion on the challenges of the workforce in research and the main opportunities. Dr. Bennett presented some challenges that researchers face based on the results of the longitudinal study conducted by CAPS - the Canadian National Postdoctoral Survey Report. In Canada, postdoctoral researcher, “postdoc”, is a temporary position between the obtaining a doctoral degree and a permanent position, usually of a period of 6 years. The results of the study indicate that 80% of postdocs start their postdoc with an academic goal, however most postdocs will not stay in academia. One third of postdocs change their career goals during postdoc. Reasons for goal change include a limited number of academic positions, lack of interest or due to family reasons. Challenges are not unrelated to opportunities. That highly educated PhD holders are going into a range of employment sectors broadens the impact that their
Uncertainty is a key challenge for postdocs. 80% of postdocs experience severe mental health challenges. Dr. Bennett mentioned the low pay and lack of benefits that postdoctoral researchers face. Almost 40% of Canadian postdocs do not have employee status, which would support access to benefits. Over half of postdocs also lack access to professional development resources beyond the academic track, and gender disparities in the postdoctoral career trajectories reveal gaps in supporting researcher diversity.

Three (3) recommendations that CAPS advocates for to support their postdoc community include:

1. Access or funds for professional development to support career transitions
2. Independent funding to conduct research (not only to support postdoctoral salaries)
3. Employee status for full-time researchers

Other challenges addressed in the panel

Dr. Javier Garcia Martinez, President of the Young Academy of Spain and Past-President of the International Union of Pure and Applied Chemistry, Spain, referred to challenges faced by researchers as the mismatch between the training and the skills and the knowledge needs of the research work nowadays, and also the recent transformations in artificial intelligence. Dr. Martinez also noted challenges in the mobility of researchers, with increased problems of obtaining visa or work permit, the ability to attract and recruit research talent as creating a divide between countries of varying resources, and lack of employer engagement and unclear career paths. Remote working is an opportunity for researchers, particularly with visa difficulties, to improve work force development and geographical diversity in research. Increased funding for “middle class” research based to support good quality research can broaden the access to research opportunities beyond the current demands for “excellence” that support only the top 1% of researchers.

Verity Elton, Co-Director Graduate Campus University of Lausanne, highlighted the challenges that the research community must face from the rise of artificial intelligence including current skepticism of science and the scientific process, as well as the time-consuming consequences of expectations in increased efficiency and productivity. The opportunities are many, including transdisciplinary research, and that more researchers are prioritizing work-life balance.

Dr. Jorunn Dahl Norgård representing the Norwegian Association of Researchers, Norway and the Trade Union Advisory Committee (TUAC), reflected on how precarity is affecting the attractiveness in research careers in Norway where only one (1) in five (5) early-stage career researchers would recommend research career as a career option due to uncertainty, the constant race for funding, and high workloads. To address these, sustainable working conditions and long-term investment in public funding must be improved. Precarity is often connected with funding which has negative impacts on gender balance, equity, diversity and inclusion. Finally, Dr Norgård highlight the danger of recruiting only researchers with a strong financial safety net which endangers diversity and perspectives in research. A final key message is the importance on social dialogue and collective bargaining to address the challenges with precarity.

Carla Cartwright, from Global Head of Digital and Regulatory Policy at Johnson & Johnson, Business at
OECD (BIAC), referred to the opportunities for progress as planning and mapping in terms of education at an early stage with policy makers, involvement and trust of community stakeholders, diversity of research work and workforce with investment in access to literacy, digital access and fundamental education.

Vanessa McBride, Science Director at the International Science Council, addressed the importance of diversity of research career paths as fundamental to address fundamental issues, including interdisciplinary and mission-based science. For more action-based knowledge researchers need to work more with society which requires investment in time, producing “slow research”. This means different skills, as transversal skills, negotiation and communication among others, as well as redefinition of research assessment models, quantifying and qualifying and recognizing the diversity of profiles and contributions. Vanessa McBride also highlighted the need to adjust measures and policies to regions and different socio-economic contexts.

Key themes of the panel
- Precarity
- Career Paths and training
- How we do research (remote work, building trust, digital & data)

The second half of the panel focused on the policy changes that can be made to support research career development. Panellists emphasized the need for good data to make evidence-based policy decisions. The session ended with the announcement of a joint project of the European Commission and the OECD: the Research and Innovation Career Observatory.

The recordings of the meetings are available online here.