

rom longstanding and successful careers in healthcare research,

Drs Brigitte Muchlenbruch and

Dora Groo have turned their attention to the pursuit of gender equality in science and innovation. Working through organisations such as the European Platform of Women Scientists and Association of Hungarian Women in Science, both these influential ambassadors represent the interests of women working within the sciences and industry



Dr Brigitte Muehlenbruch

President European Platform of Women Scientists

ou are President of the European Platform of Women Scientists (EPWS), an international non-profit organisation representing over 12,000 female scientists. Why was EPWS founded and how has it evolved since its beginning?

EPWS was founded in 2005, with support from the EC, as an umbrella organisation bringing together networks of women scientists from the 28 Member States and countries associated with the EU research programme. EPWS has the mission to represent, with democratic legitimacy and transparent decision-making structures, the concerns, needs, aspirations and interests of women scientists, in all stages of their career path through dialogue with national, European and international institutions.

How does EPWS work to increase female participation in science, and what is your role in that?

EPWS aims to promote networking among women scientists, particularly in central and eastern Europe and the private sector; enhancing the understanding and inclusion of the gender issues in science and research policy in all scientific fields, and ensuring that women scientists' interests are taken into consideration when setting the political research agenda. EPWS' main activities are networking, participation in the policy debate and developing structural links between women scientists and policy makers.

The role of EPWS President is initiating contacts between these parties, monitoring the political scene at the EU-level, developing position papers and recommendations in the field of women in science and more broadly managing the association.

A key element of EPWS' work is representing female scientists in the research policy debate. How does EPWS influence decision making processes in Europe?

To influence decision-making processes in European research policy EPWS takes part in debate through policy statements, provides responses to EC consultations, participates in lunchtime debates at the European Parliament, and establishes contacts and increases visibility among stakeholders by participating in European political networks, etc.



Dr Dora Groo

Board Member, European Platform of Women Scientists President, Association of Hungarian Women in Science

s President of the Association of Hungarian Women in Science (NaTE) since its establishment in 2008, can you describe the mission of this organisation? How do problems related to gender inequality in Hungary differ to other EU countries?

The mission of the Association is to take an active part in the local and international processes of social innovation making a multifaceted contribution. Firstly, bringing science and innovation closer to society, particularly by providing all young people with learning possibilities and a professional career suitable for their talent. Additionally, making equal opportunity a basic and unavoidable measure of value in all areas of research, development and innovation, and creating a multicultural and balanced research society.

The members of the Association are convinced that increased participation of women in academic and industrial R&D results in favourable changes for the individuals, families, society and economy.

Prior to 1990, the situation of women in science in Hungary was slightly better than in Western Europe – demonstrated by the relatively high percentage of female scientists. However, in the last two decades the social support for young working mothers has declined. New governmental measures are necessary to give security to families with small children, providing a stable background and facilitating women to pursue a scientific career.

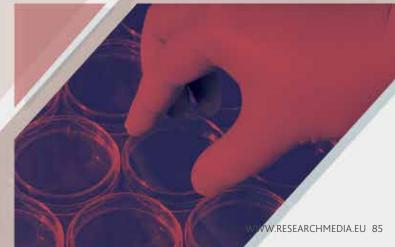
NaTE arranges interactive open days to increase female awareness of scientific careers. Could you provide some insight into 'Girls' Day'? In what other ways does NaTE work to promote women in science?

The format of Girls' Day is that of an integrative action experience where girls, aged 14-17, visit companies and engineering/informatics faculties of universities, to gain intensely hands-on experiences. The idea is to promote a trend reversal in the career choices of girls, and to alter their perspective on the world of work at an age when career orientation can still be influenced.

The Association has other programmes, for example, shadowing days when small groups of girls, ranging from school age children to university students, follow female leaders at innovative companies to gain insight into their professional and personal lives.

In 2012, GENDERA, of which you are Project Coordinator, published a booklet entitled *Practical recommendations for research organisations to lead the change towards gender equality in science and technology*. How widely was this distributed, and what are your hopes for the impact of this report?

The report was printed 1,100 times in English and 400 times in the national language of all nine GENDERA partners. The English copies were distributed to European decision makers in the European Parliament, EC, Organisation for Economic Co-operation and Development (OECD), UNESCO, European Cooperation in Science and Technology (COST), European Science Foundation (ESF), etc. and also to the foreign contacts of project partners. The national language copies were sent by each partner to the relevant ministries, governmental equal-opportunity bodies, NGOs, leaders and human resource management of universities, and libraries of research institutes and universities.



Our intention was to produce a document that is comprehensible by people who are not gender experts. We hope that the ~1,500 copies reached good hands and persuaded some people that it is worth taking action for the equal opportunities of women in science.

You also co-authored the report: Waste of talents: turning private struggles into a public issue for the EC. What were its key findings and how has the situation changed for women in science since its publication?

The report acknowledges the legacy of the communist gender policy. The importance of access to education has led to the emergence of a considerable proportion of highly qualified women active in all public spheres and in science. The transition period has led to the restructuring of the research systems in Enwise countries, a sharp decline in funding allocated to science, and a decrease in the research population. Even though this change affected males and females equally, the consequences of the transition have left women scientists in a more vulnerable situation; their prospects became very limited due to the unavailability of funding, the rigid patterns of promotion and recognition, and the lack of appropriate welfare policies. There are gender differences across various R&D sectors and fields of science, and women are squeezed out of competitive, high-expenditure areas.

Unfortunately not many positive changes have been seen since the time of publication. I sincerely hope that the new generation of young female scientists will be able to achieve real equality.

Could you discuss your time at the EU Directorate-General for Research, during which you coordinated six projects within the EU framework programmes (FPs) for research and technological development?

I worked part-time for EU Directorate-General for Research as Project Technical Assistant between 2002 and 2007. My task was to follow six projects in the field of Quality of Life FP5, overview the progress of the projects, evaluate annual progress and make reports to the Commission. It was an interesting experience to see projects from an alternative perspective, and the work gave me insight into the everyday life of the Directorate-General for Research.

Representing the Hungarian Science and Technology Foundation, I took part in a great number of FP5, FP6 and FP7 projects. I was the coordinator of HEURORA (FP5), TrainNet Future, Hungary for FP6, WS DEBATE, UNICAFE (FP6) and GENDERA (FP7). The latter three dealt with issues of women and science. These projects brought me new knowledge and understanding with regard to gender issues and led to many new contacts and even friendships.

EPWS represents >12,000 women scientists in Europe and beyond

Founded in 2005

Involves >100 networks of women scientist-promoting organisations

Members come from 40 different countries around the world

Even though women make up > 50% of EU students, and 45% of European Doctoral Degrees are awarded to women, they only hold 19% of senior academic positions

As a woman with over 10 years' experience in pharmaceutical research and a PhD in experimental medicine, how have your own experiences informed your views on women in science?

I was not gender-sensitive during my years spent in pharmaceutical research and writing my PhD in experimental medicine. I did not notice any differences between the situation of women and men working in the laboratory. It was natural for me that the bosses were usually men – with the exception of my department head who was a woman. However, during the ~20 years that I have been working in research management, I have started to notice the signs of gender inequality. Sometimes I compared the number of men and women submitting proposals for international research grants and observed that there was a shocking difference in numbers. I slowly came to understand that bosses at most institutions submitted proposals under their own names, while female colleagues – who usually conducted the real cooperation with partner institutions – had the right to prepare the proposal and later take part in cooperation activities. These observations led me ever closer to the women and science initiative, and finally I became the Hungarian member of the ENWISE expert group.





Pathway to advocacy

Dr Dora Groo:

1978-1990 – Pharmacological Researcher investigating the central nervous system working at Gedeon Richter Ltd., culminating in the award of a PhD in the prevention of cerebral hypoxia induced cerebral damages by cognitive enhancers

1991-1994 – Manager, US-Hungarian Sciences and Technological Joint Fund – a government funding programme

1994-2012 – Director, Hungarian Science and Technology Foundation. Established to manage the Joint Fund – initially as a one-woman show – but grew to a medium-sized organisation responsible for the administrative and financial management of other bilateral science and technology cooperations, and ultimately involved in the EU Framework Programmes

2008-Present – President, Association of Hungarian Women in Science

2012-Present – Coordinator of International Affairs, National Agricultural Research and Innovation Center; and independent Consultant for Horizon 2020-related work

Looking forward

I hope to spend the remainder of my career involved in interesting work, providing good advice to many researchers, particularly women, who would like to receive international funding for their project. I would also like to continue my work in the Association of Hungarian Women in Science and help my young colleagues reach professional and personal success. From a personal perspective, I strive to have a happy family life with my husband, two sons, daughtersin-law and two grandchildren. It is good to feel needed

Dr Brigitte Muehlenbruch:

1966-1969 - PhD in Pharmaceutical Chemistry

 $\textbf{1969-1988} - \text{Research Scientist, University of Bonn; interests include gender equality, gender mainstreaming, and programmes and processes regarding the recruitment and retention of female scientists in Germany and the EU$

1992-1999 - First Equal Opportunities Commissioner, University of Bonn, Germany

2000-2005 – Founder and Managing Director, Center of Excellence for Women and Science (CEWS), Bonn; managing research projects funded by the German Government and the EU in the field of gender equality in science. Under Muehlenbruch's leadership, CEWS drafted the winning proposal for the establishment of the European Platform of Women Scientists (EPWS)

2003 – Member, Steering Committee for the Study on Networks of Women Scientists, Brussels. This position confirmed the need of a European-level network of women scientists

2005-2009 - Vice President, EPWS, Brussels

2009-Present – President, EPWS; Member of the EC's Network of Women in Decision Making in Politics and the Economy; Vice President of the Christiane Nüsslein-Volhard-Foundation, Germany

My main hopes for the future are to increase the participation of women scientists in European research policy, and enhance involvement of women in science, its decision-making bodies, and national and European research programmes. I want to see a much better understanding and integration of the gender dimension in science, and structural change in universities and research organisations. I strive toward a genderbalanced science culture to foster innovation. Europe needs science and innovation, and both require women scientists! EPWS is the voice of women scientists in Europe, and we hope for a much faster development of our mission and goals