

# **WOMEN IN SCIENCE**

## **REFLECTIONS AND EXPERIENCES FROM THE NORTH AND SOUTH OF EUROPE AND UNITED STATES**

### **FROM JUNE 29 TO 3 JULY**

**Code:**

**Director:** Marta Arregi García-Miguel. Universidad Complutense de Madrid, director of NILS Science and Sustainability.

**Secretary:** Andoni Alonso Puelles. Universidad Complutense de Madrid.

**Sponsors:** EEA Grants (Financial Mechanism of the European Economic Area), Ministry of Finances and Public Administrations.

**Collaborators:** Spanish Ministry of Health, Social Affairs and Equal Opportunities and Ministry of Education, Culture and Sports; Norwegian Centre for International Cooperation in Education (SIU), Icelandic Centre for Research (RANNIS), National Agency for International Education Affairs, Liechtenstein (AIBA), Faculty of Social Work of Universidad Complutense de Madrid.



Women have contributed to science from its beginning, although this has not been fairly acknowledged. From the studies of science, it is widely described the lack of equality among women and men concerning scientific and technological production, as well as the existence of obstacles that are specific to women when accessing relevant positions in the academia, the industry and the administration. Such barriers have led to a deep reflection on the social nature of science and technology and on the strategies in order to overcome this inequality.

This school aims at facing this reflection, as well as at deepening on the situation of women in the science systems in various countries such as Spain, Norway, Iceland and United States. We also aim at identifying best practices on the promotion of scientific entrepreneurship enhancing women's and men's initiatives, at knowing the personal experience of researchers face to face, as well as at identifying what is the gender treatment in the main source of funding for science in Europe, the Horizon2020 programme.

The course gathers internationally well known researchers who will talk us about the conclusions of number of studies, approaches and perspectives in Europe and United States of America, as well as about their experience and proposals for a higher equality in this field. The combination of lectures and round tables shall allow participation and exchanges among attendees and speakers. The school is addressed to bachelor and post-degree students in experimental and social sciences, to active researchers and technologists, and to professionals in the administration related to scientific, educational, entrepreneurship and equality policies. We aim at exchanging knowledge and experiences and also at identifying further cooperation opportunities.



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### **Monday, 29 June. The gender of science**

**10.30 h.** Opening.

**Johan Christopher Vibe.** Ambassador of Norway in Spain.

**José María Piñero Campos.** Director General of European Funds. Ministry of Finances and Public Administrations.

**Andrés Arias Astray.** Vice-rector for international relations, Complutense University of Madrid. President of NILS Science and Sustainability programme.

**10:30 h.** ***Situation of women in Science.***

**Carmen Vela.** State Secretary of Research, Development and Innovation. Studied chemistry in Complutense University, specialized in biochemistry. She stayed five years at the Department of Immunology of the Fundación Jiménez Díaz researching on allergy. In 1982 joined Ingenasa, a company of the field of biotechnology applied to animal and alimentary health created by the National Institute of Industry. Carmen Vela is author of numerous scientific publications and patents approved in Europe and United States. She is member of evaluation committees of national and European programmes and organizations, such as the Advisory Board of the programme People of the FP7, the Board of CSIC or the Advisory Board on Science and Technology of the ministries of science and technology, education and science and innovation. Until October 2010 she was president of the Association of Women Researchers and Technologists (AMIT). From September 2010 until January 2012 she was president of the Spanish Association of Biotechnology. Since January 2012 she is State Secretary of Research, Development and Innovation.

**12.00 h.** ***Women and Science. My experience.***

**Margarita Salas.** Doctor in Biochemistry by Complutense University, professor ad honorem of the Center of Molecular Biology Severo Ochoa of CSIC, that she has directed (1992-1993) and professor of research (1974-2008); *doctor honoris causa* by ten Spanish universities and member of the Royal Academy of Sciences. She studied with Alberto Sols in Spain and with Severo Ochoa in United States, together with his husband Eladio Viñuela (1937-1999). Among her numerous research projects the most known and to which she has dedicated a great part of her professional life, the study of the bacterian virus *phi29*, on which she works from 1967. She has been professor *ad honorem* of molecular genetics at Complutense University. She has been member of the Scientific Advisory Board of the Max-Planck Institute für Molekulare Genetik in Berlin (1989-1996) and of the Institute Pasteur (2001). She has also been president of the Instituto de España (1995-2003) and of the Foundation for the Biomedical research of the Gregorio Marañón Hospital (2001-2004). Since 1997 she is President of the Foundation Severo Ochoa and member of the Foundation Carmen y Severo Ochoa. She also belongs to the European Molecular Biology Organization, the Academia Europaea, the American Academy of Microbiology and the American Academy of Arts and Sciences.

She has been awarded with the Rey Jaime I Research Award (1994), Prize of Research and Technological Innovation of Madrid Region (1998), National Award of Research Santiago Ramón y Cajal (1999). She has also received the Medal of the Principality of Asturias (1997), the Gold Medal of the Madrid Region (2002), the Medal of Honour of Menéndez Pelayo International University (23003), the Grand Cross of the Civil Order of Alfonso X the Savant (2003), the Medal of Honour of the Complutense University (2005) and the Medal of Honour of Labour Merit (2005).

<http://www.rae.es/academicos/margarita-salas-falgueras#sthash.mNKLIXEI.dpuf>

**16.30 h. Round table: Is science gendered?**

**Moderator:** Andrés Arias Astray.

**With:** Margarita Salas; Carmen Vela; Amelia Valcárcel.

**Presentation by: Amelia Valcárcel.** Professor of Moral and Politic Philosophy at UNED. Member of the State Council. Vice-president of the Royal Patronage of the Prado Museum. Board of the IUMP. Author of ten books, fifty chapters of books in collective works and more than a hundred papers, she has been twice finalist of the National Prize of Essay with the books *Hegel and the Ethics* (1987) and *On the fear to equality* (1993). Editor of *The concept of Equality* (1995), she has published *Sex and Philosophy* (1991, 93, 95 and 97), *The politics of women* (1997, 98, 2004), *Ethics versus Aesthetic* (1998, Brasil 2005), *The challenges of Feminism before XXI century* (2000), of which she is Editor, *Rebels* (2000), *Thinkers of XX Century* (2001), of which she is also coordinator and editor. Other works are *The sense of Freedom* (2001), and *Ethics for a global world* (2002-2007). Her more recent books are *Let's talk about god* (2007), in collaboration with Victoria Cams and *Feminism in a global world* (2008, 2009). She has been Responsible of Education and Culture in the Government of the Asturias Region. Director or member of ten Research projects during the last fifteen years. She is member of various Councils and Boards (Carolina Foundation, Royal Elcano Institute), Edition Boards, Jurys, Commissions and Patronages. She has presided and directed numerous courses and seminars, at a national and international level, and cooperated with the PhD programmes of universities in Spain and in South America, at the UIMP, the Centre for Constitutional Studies and the General Council of the Judicial Power.

**Tuesday, June 30. Ethics, gender and science. International and Spanish persepective; the approach from mass media.**

**10.00 h. *Ethics, science and gender.***

**Stephanie Bird.** Co-Editor-in-Chief of *Science and Engineering Ethics*. Dr. Stephanie J. Bird is a laboratory-trained neuroscientist whose graduate work at Yale and post-doctoral fellowships at Johns Hopkins and Case Western Reserve University dealt with the effects of psychoactive substances on brain function. Current research interests focus not only on neuroethics but also on the ethical, legal and social policy implications of research and technology in general. She lectures and consults on professional ethics, and the integration of the responsible conduct of research and ethics into science and engineering education and the development of training programs. Her theoretical and laboratory training have been complemented by work in areas of ethical and legal philosophy. As Special Assistant to the Provost and Vice President for Research at the Massachusetts Institute of Technology (MIT) from 1992 to 2003, Dr. Bird worked on the development of educational programs that addressed ethical issues in science and engineering, professional responsibilities, and ethical issues in research practice and science and engineering more generally. While at MIT she also taught courses on the responsible conduct of research, and those that consider the ethical and social policy implications of science and technology. In addition, she headed the Ethics Domain of the VaNTH biomedical engineering educational consortium consisting of Vanderbilt, Northwestern, the University of Texas, and the Harvard-MIT Health Science and Technology program. Dr. Bird has written numerous articles on issues in the responsible conduct of research and on mentoring and other responsibilities of science and engineering professionals.

She co-edits the international journal *Science and Engineering Ethics* which explores issues of direct concern to scientists and engineers related to both the practice and application of science and technology. The journal, published by Springer, is widely abstracted and indexed and was recently cited by the National Academy of Science as a leading resource for scholarly articles on research integrity.

Dr. Bird is an active member and Fellow of the American Association for the Advancement of Science (AAAS) and has been Secretary of the Societal Impacts of Science and Engineering Section of the AAAS since 1995. She is also an active member of both the Society for Neuroscience, where she chaired the Social Issues Committee from 2003-2005, and the Association for Practical and Professional Ethicsineering Ethics". In addition, in 1990 and 1991, Dr. Bird served as President of the Association for Women in Science (AWIS), a national organization with 5000 members and over 80 chapters across the US.

She was Director of the first AWIS Mentoring Project which was designed to encourage and support undergraduate and graduate students in their pursuit of careers in math, science and technology. As an independent consultant and speaker Dr. Bird has worked on a variety of projects with a number of educational institutions, government agencies, professional societies, corporations, and law firms <http://www.stephanie-j-bird.com/>

**12.00 H. *Science and gender. A Spanish perspective.***

**Eulalia Pérez Sedeño.** Studied and obtained her PhD in Philosophy at Universidad Autónoma de Madrid; she is professor of philosophy and logics of science at Universidad de País Vasco and Professor of Science, technology and gender at the Consejo Superior de Investigaciones Científicas. She has written *El rumor de las estrellas* (1986), *Las mujeres en el sistema de ciencia y tecnología. Estudios de casos* (2001), *Ciencia, tecnología y valores desde una perspectiva de género* (2005), *Igualdad y equidad en ciencia y tecnología: el caso iberoamericano* (Arbor, 2008) and, published by Plaza y Valdés, *Un universo por descubrir. Género y Astronomía en España* (2010). She has directed numerous research projects on science, technology, gender and history and philosophy of science.

**16.30 h. *Round table:***

Moderator: **Andoni Alonso Puelles.**

With: Stephanie Bird, Eulalia Pérez Sedeño, María Teresa García Nieto.

**Presentation by María Teresa García Nieto: *Women, science and mass media. How we see us, how they see us.*** Associate professor, Universidad Complutense de Madrid. She has been vice-dean of the Center of High Studies Felipe II of the Universidad Complutense de Madrid. She compatibilizes her teaching and research tasks with advising consultancy on communication. She is director of a research project which aims to promote the equality in scientific information, funded by the Ministry of Health, Social Affairs and Equality.

**Wednesday, July 1. Promotion of the scientific and technologic entrepreneurship. Some programme and project examples.**

**10.00 h. *Advice to women's entrepreneurship with a gender perspective. The programme Woman Entrepreneur.***

**Eva López.** Director of the programme Woman Emprende, Santiago de Compostela University. Coordinator of the agreement signed between the Institute of Woman and the Santiago de Compostela University for the development of the project Innovatia 8.3, addressed to create an intervention scheme integrating the gender approach to the processes of technology based entrepreneurship in universities. Bachelor in Economics in Santiago de Compostela University and Master in Management of Foreign Trade. She follows a double professional way: she carries out doctorate studies in the Department of Econometrics and Quantitative Methods at the School of Economics where she received theoretical contents but has also known the functioning and generation of research, and on the other hand she has directed departments in important entrepreneurial groups in Galicia. She has also created a company.

**12.00 h.** Extraordinary conference open to participants from all courses.

**16.30 h. *Round table: programmes supporting entrepreneurship, and the experience of entrepreneurs.***

Moderates: Pilar Soler, Ministry of Financies and Public Administrations.

Participants: Eva López, Gustavo Raúl Lejarriaga, two entrepreneurs.

**Presentation: *Institutional support to university entrepreneurs by the creation of technical advice services.***

**Gustavo Raúl Lejarriaga.** Director of the Compluemprende Service, Complutense University of Madrid. Doctor in Economics (1990) by Complutense University. Professor since 1993. Researcher at the School of Cooperative Studies of Complutense University. Director of the Chair of individual company and autonomous work (2006). Honorary Director (2001) of the School of Cooperative Studies of the Faculty of Economics of the

Complutense University. He has also occupied and occupies several professional positions, such as member of the Council for the Promotion of Social Economy of the Ministry of Labour and Social Affairs, the Council for the Promotion of the Social Economy of the City of Madrid; the Board Council of the Association of Cooperative Studies; member of the Secretariat of the Center for the Research and Information on Public, Social and Cooperative Economy, and member of the advisory board of various journals.

## **Thursday, July 2. Situation, experiences and personal reflections from active researchers in Iceland, Norway and Germany.**

### **10.00 h. *The Gender Gap in Icelandic Academia.***

**Thamar Melanie Haijstra. University of Iceland.** Postdoctoral researcher. She works on the projects "Working in Academia: A perspective of Faculty and Family" and "Gendering the Academia and Research: combating Career Instability and Asymmetries (GARCIA), funded by the European Union.

### **12:00 h. *Science, Gender and Education in Norway.***

**Ma Li.** Nesna University College, Norway. Obtained her PhD in mathematics at the University CHT/Gothenburg. After her postdoctoral research in Kyoto and Cambridge, she obtained her position in Switzerland where she worked during a decade before moving to Norway. Her interest in the inter-disciplinary studies has grown and connected mathematics with history, culture, gender, language, fuzzy logics and applications, methodological issues in comparative studies, and public understanding of science. She has directed and supervised numerous projects studying and adopting the gender approach in science, technology, engineering and mathematics. She is often invited to give talks in international events and she belongs to the board of editors of various journals, including Journal of Research in Gender Studies.

### **16.30 h. *Round table: Strategies to promote the participation of women.***

Moderator: **Andoni Alonso**, Universidad Complutense de Madrid.

Participants: **Thamar Melanie Haijstra.** Ma Li, Ander Ramos-Murguialday.

**Presentation: Personal experiences and reflections of a researcher. Ander Ramos-Murguialday, University of Tübingen,** Prize Walter Kalkhof-Rose (best Young researcher of Germany).

## **Friday, July 3. And, what about European funding?**

### **10.00 h. *Gender in the new European Programme Horizon 2020***

**Inés Sánchez de Madariaga.** Director of the Unit Women and Science and the Cabinet of the State Secretary of Research, Development and Innovation of the Ministry of Economy and Competitiveness and associate professor of urban planning at the School of Architecture of Madrid. She has been Jean Monnet Visiting Professor at the School of Architecture Bauhaus Weimar, and Visiting Scholar at the Columbia University and the London School of Economics and Political Science. She has performed public responsibilities as deputy director of architecture and executive advisor of the Ministry of Housing. Founder and director of the first Spanish research group on gender, architecture and urban planning. She is author of six books and about forty papers, and represents Spain at the Helsinki Group on Women and Science, which advises the Director General of Research, European Commission. She has been president of the Experts Group of the European Commission "Structural change of scientific institutions" and co-author of the Haifa Declaration of the UNESCO Women in Science and Technology. She is co-director of the Project Gendered Innovations, Stanford University – National Science Foundation – European Commission, and president of the COST network Gender, Science, Technology and Environment (genderSTE) in which governments, universities, sme and associations from over 30 countries participate.

### **12.00 h. *Closing and diplomas.***

**Carmen Plaza Martín.** General Director. General Direction for Equal Opportunities, Ministry of Health, Social Affairs and Equality.

