

Organization for Women in Science for the Developing World (OWSD)

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OWSD 6th General Assembly announced!

OWSD, the Organization for Women in Science for the Developing World, announces its 6th General Assembly and International Conference, which will be held from November 8-19, 2021.

The conference will be held entirely online for the first time in OWSD's 28-year history, allowing as many of OWSD's 7500+ members to participate as possible.

The conference theme is **'Women, science and development'**, exploring three areas of relevance: 1) the importance of basic sciences for development; 2) the impact of applied sciences on development and 3) including sex and gender as variables in scientific research.

Keynote speakers include: Fabiola Gianotti, Director-General of CERN; Bina Agarwal, an internationally celebrated economist specializing in the political economy of gender, poverty and inequality; and Angela Saini, award-winning author of *Inferior: How Science Got Women Wrong and the New Research That's Rewriting the Story, Superior: The Return of Race Science,* and other books. Professor Quadrio-Curzio, renowned Italian economist and expresident of the *Accademia dei Lincei*, will present a special edition of the *Economia Politica* journal, focusing on 'Pandemics, women and the Global South' which includes an editorial by Nobel laureate Amartya Sen. OWSD members will also present their own scientific and personal responses to the COVID-19 pandemic.

The conference will include a handover of the previous OWSD Executive Board to the new members, elected in June-July 2021. On the last day of the conference (19 November), the OWSD Italy Country Network will be launched. It is hoped this will be an inperson event in Trieste, pending clearance of regulations for the ongoing pandemic. Italian government representatives and donors are invited to attend. The Trieste event will be coordinated with similar in person events being held in OWSD countries throughout the developing world and streamed online. At least 2,000 OWSD members, women scientists from developing countries around the world, are expected to participate online in the General Assembly and conference.

Conference theme: Women, Science and Development

In order to approach the complex and wide-ranging challenges of the <u>2030 Agenda for</u> <u>Sustainable Development</u>, societies around the world must access and harness all the talent and experience available to them. The concerns and perceptions of the greatest number of all possible actors and recipients must be considered in order that the most relevant issues and effective solutions are found. Women are considerably underrepresented as researchers in STEM subjects around the globe; according to UNESCO Institute of Statistics (UIS) data, in 2019 the global average percentage of women researchers was still below 30%. Yet women typically have first hand specialist knowledge of the day-to-day challenges diverse individuals face within communities, and can be key informers in the design and development of their solutions. Moreover, since women are most often the providers of informal community support, if they are not fully informed—and if solutions are developed without their consultation—it may be the case that products, services and solutions are not relevant or appropriate. Technological advances may mean improved machines on large farms, for example, potentially increasing food production, but since the key points of food insecurity in the world are on small-scale farms managed by women throughout the Global South, such capital investments will have little impact in the areas where food production is most critical—and where women's knowledgeable implementation of appropriate innovative technologies could make the most difference.

It is clear that a significant increase in the number of women entering and remaining in STEM careers goes a long way to improving the relevance of scientific research design, outcomes and implementation—and as a result, the impact on the economy. Furthermore, sustainable development requires more science and more scientists, meaning that a higher number of girls and women entering and remaining in STEM careers is not just desirable but essential. The programmes OWSD has developed over 30 years are designed to address the 'numbers problem', by increasing the opportunities for women from developing countries to do advanced STEM research at international level as well as increasing their visibility and recognition.

The 6th OWSD General Assembly and International Conference is an opportunity for women scientists around the globe (especially from developing countries) to set the agenda for relevant scientific research and to comment on the interconnecting roles of women, science and development. It is expected that edited collections of selected papers will be submitted for publication in international journals with which OWSD is in contact, as well as an OWSD Special Edition of Conference Proceedings to be published in 2022.

To enable maximum participation of OWSD members, poster presentations are called for on the following 4 themes:

- 1) The importance of basic sciences for development
- 2) Applied science: results for development
- 3) Including sex and gender as variables in scientific research
- 4) OWSD members' responses to COVID 19

Theme 1) The importance of basic sciences for development

Research in STEM has a fundamental role to play in each of the 17 <u>Sustainable Development</u> <u>Goals</u> (SDGs) set by the United Nations General Assembly in 2015, to be achieved by the year 2030. While it is much easier to see the direct impact on economies of applied research in fields such as technology, engineering and medicine, the 'pure' or basic sciences (such as some strands of mathematics, physics, chemistry and biology) can also play a pivotal role in building and sustaining knowledge economies, as well as continually updating the theoretical basis on which much applied research will later be founded. A broad variety of theoretical scientific work can contribute to our understanding and our ability to solve problems even years after the research has been developed.

Basic sciences are curiosity-driven sciences but they also have a fundamental role in our lives. They enable the necessary means and tools to address global socio-economic and environmental challenges, such as the water crisis, infectious diseases, ocean deoxygenation and climate change.¹ Despite this, the crucial role of basic sciences is often poorly appreciated, if at all. Further awareness of the critical function of basic sciences needs to be built amongst relevant stakeholders including policy-makers, business and industry, international organizations, philanthropic foundations, university teachers and students, media, and the broader public.

Since February 2020, the world has been disrupted by the COVID-19 pandemic caused by the SARS-CoV-2 virus. But how much worse would the situation have been without the results produced by curiosity-driven scientific research?² We know that the infection was caused by a virus, what this virus looks like and what its genetic sequence and variations are because of basic research.

Viruses were discovered at the beginning of the 20th century, the first electron microscope was built in the 1930s and DNA sequencing began in the mid-1970s: basic research is at the root of countless tests, treatments, vaccines, and epidemiological modelling exercises. We even owe high-speed, long-distance communications, which allow us to coordinate the fight against the pandemic and reduce interruptions in education, economic activities, and even the practice of science, to the discovery and study of electromagnetic waves and optic fibers during the 19th century, and the development of algorithms and computer codes during the 20th century. The COVID-19 pandemic is a reminder of how much we rely on the continuous development of basic sciences for a balanced, sustainable, and inclusive development of the planet.

On many other issues, basic sciences have an important contribution to make to progress towards a sustainable world for all, as outlined in the Sustainable Development Goals (SDGs). They provide the essential means to address major challenges such as universal access to food, energy, and sanitation. They enable us to understand the impacts of the nearly 8 billion people currently living on the planet, on the climate, life on Earth, and on aquatic environments, and to act to limit and reduce these impacts.

¹ https://archive2.iupap.org/about-us/international-year-of-basic-sciences-for-development-iybsd-2022/ ² Michel Spiro, 'Why we need basic sciences for sustainable development more than ever'

President of the International Union of Pure and Applied Physics (IUPAP) and President of the Steering Committee for the proclamation of the International Year of Basic Sciences for Sustainable Development in 2022 (IYBSSD 2022). Published on the blog <u>https://blog.iiasa.ac.at/2021/05/27/why-we-need-basic-sciences-for-sustainable-development-more-than-ever/</u> May 27, 2021 | Environment, IIASA Network, Sustainable Development

POSTER SESSION:

The purpose of the session on 'the importance of the basic sciences for development' is so that women scientists can demonstrate how their work in the 'theoretical' or 'pure' aspects of maths, physics, chemistry and biology has had a **traceable impact** on the lives, well-being and/or economy of their countries and regions. For example, training other researchers in basic and advanced mathematics has an impact, since so much applied research depends on this theoretical foundation: basic research supports the 'knowledge economy', the development of which has been shown to be one of the most important factors in increased GDP. Presenters may wish to defend curiosity itself as hugely significant, stimulating 'thinking outside the box' and enabling a problem-solving mentality, which leads to new discoveries and innovations. Presenters may also demonstrate how their theoretical input has provided the means to developing other more recognisably 'applied' instruments or products.

Keynote Presentation: Fabiola Gianotti

'How basic sciences underpin development'

Live online presentation, followed by an interview with Gianotti on the challenges and rewards of being a highly visible woman in science Follow up questions from members.



Dr. Fabiola Gianotti is the Director-General of CERN, the European Organization for Nuclear Research, based in Geneva, Switzerland. From 2009 to 2013 she was the project leader of the ATLAS experiment and in 2012 she announced the discovery of the Higgs boson. Dr. Gianotti has received twelve honorary doctoral degrees from universities across the world and several awards, including the *Special Breakthrough prize in Fundamental Physics*, the *Enrico Fermi* prize of the Italian Physical Society and the *Tate Medal of the American Institute of Physics for International Leadership*. She received a PhD in physics from the University of Milan. In an article published online in December 2020, Gianotti had this to say about the contribution of physics, and science in general to 21st century challenges:

"My own field, particle physics, is a young one, not quite a century and a quarter old, yet it has brought about huge

advances in both knowledge and technology. The very first elementary particle to be discovered, the electron, first observed by British physicist J.J. Thomson in 1897, is now the lifeblood of modern society as the carrier of electricity. The Higgs boson, discovered at CERN, Geneva, in 2012 is the most recent addition to the family of elementary particles, representing the culmination of Thomson's journey.

Since the beginning, the tools of particle physics have led to life-changing applications. CERN ...contributes to advanced cancer therapy as a significant player in the development of particle beam therapy. Detector technology also has important applications in medicine going back to the 1970s, when one of the earliest PET scanners was developed through a collaboration between CERN and the Geneva Cantonal Hospital. Today, our Knowledge Transfer team manages a portfolio spanning 18 domains of technology, ranging from superconductivity to environmental protection. Science is more than a source of knowledge and progress, it is also a value system. Science is universal and unifying. It is universal because it is based on objective facts and not opinion, and because the laws of nature are the same everywhere on earth and always have been. It is unifying because the quest for knowledge and the wish to understand how things work are aspirations and values shared by all humanity. Scientific knowledge has no passport, gender, ethnicity or political affiliation. For these reasons, science is intrinsically and inherently inclusive. When shared in an open way with everybody, science is also a powerful tool to reduce inequities within and across countries.

Even though 2020 has undeniably been a testing year, one positive outcome could be that society becomes more engaged with and supportive of science, recognising that science is not only the foundation of knowledge and progress, but also the promoter of indispensable and irreplaceable values for a sustainable world."

Adapted from: Fabiola Gianotti, 'Science's valuable lessons from journeys into the unknown', published on Geneva Solutions website, 05 December 2020, updated 09 December 2020. https://genevasolutions.news/science-tech/science-s-valuable-lessons-from-journeys-into-the-unknown

Theme 2) Applied science: impact on development

Applied research focuses on solving a specific, practical problem of individuals or societies. Unlike basic research, applied research is directly concerned with resolving common problems that affect life, work, health, and overall well-being and prioritizes fixing particular problems that frequently affect people. However, basic and applied research are still closely connected. Basic research often informs applied research; applied research often helps basic researchers refine their theories. Basic research is essentially curiosity-driven while applied research is problem-oriented and used for a mission for a specified period.

It is well documented that advanced research in the applied sciences such as technology, engineering, medicine, agriculture and the environment can lead to improvements and solutions to many of the challenges that individuals and communities face in the developing world, including climate change and natural disasters, disease, sanitation, housing and food security.

Applied research begins with the identification of a real-world problem. Furthermore, applied researchers discern the cause of the problem and investigate alternative solutions for that problem. While the primary objective of applied research is solving real-world problems, it also adds to the knowledge base about the evolution and consequences of different problems. Such information serves as a useful future reference for related problems. The very little money available for research in low income countries can be justified when it gets attached to daily lives with implications.

POSTER SESSION

The purpose of the session on 'Applied science: impact on development' is to provide clear and compelling examples of research that has a direct impact on communities, countries, and regions. Researchers might want to highlight links with industry; implementation of products in the community; impact on lifestyles, economies, health and well-being. The objective is to provide cogent examples of how scientific research is a force for development in your country, and worth investing in. The aim is to show how women scientists are making a difference because of direct knowledge of the needs of the community, and therefore an ability to ensure

the relevance (and therefore enthusiastic take-up and implementation) of the products of research.

Keynote Presentation: Bina Agarwal

"Re-Thinking the Way We Farm"

Live online presentation, followed by an interview on Agarwal's background, career choices, challenges, highlights.

Follow up questions from members.



Bina Agarwal is Professor of Development Economics and Environment at the University of Manchester, UK. Prior to this, she was Professor and Director at the Institute of Economic Growth, Delhi University. She was educated at the Universities of Cambridge and Delhi. Agarwal has been President of the International Society for Ecological Economics, President of the International Association for Feminist Economics, and Vice President of the International Economics Association. She holds honorary doctorates from ISS, The Hague, and the University of Antwerp, and is an elected member of the Accademia Nazionale dei Lincei, Italy as well as a Fellow of The World Academy of Science (TWAS).

She has written extensively on agrarian change, environmental governance, property and land rights, food security, and poverty and inequality, especially from a gender and political economy perspective. Her 13 books include the award-winning, <u>A Field of One's Own</u>

(Cambridge University Press, 1994); <u>Gender and Green Governance</u> (Oxford University Press, 2010); <u>Gender</u> <u>Challenges</u> (OUP, 2016), a three volume compendium of her selected papers, and <u>Gender Inequalities in</u> <u>Developing Economies</u> (2021, in Italian trans.). She has written for the *New York Times*, and writes often for *Indian Express, Times of India* and *Outlook*.

Among her many awards and honours are several book prizes; a *Padma Shri* prize in 2008 from the President of India; the *Leontief Prize* 2010 'for advancing the frontiers of economic thought'; the *Louis Malassis International Scientist Prize* 2017; Order of Agricultural Merit, France, 2017; and the *International Balzan Prize* 2017, 'for challenging established premises in economics and the social sciences by using an innovative gender perspective'.

Theme 3) Including sex and gender as variables in scientific research

To begin, it is important to make a distinction between sex and gender as there is some confusion as to the meanings of both words. Sex and gender are often used interchangeably, but they should not be used as synonyms. In general, sex refers to the biological, genetic (two chromosomes XX, as opposed to XY), and physiological processes related to sexual beings. Gender, on the other hand, refers to the roles, relationships, and relative power that people relate to or that societies generally attribute to women and men, irrespective of their genetic make-up.

However, it is very difficult to separate sex and gender because they are multi-dimensional, entangled, and interactive. Thus (following Franconi et al), we recommend using the mixed term "sex–gender", in order to recognize the value of both the biological and social contexts.³

Researchers (especially in clinical medicine for example) have mainly studied only the male sex, and this has generated a lack of high-quality evidence. Nowadays, at least among the academic community, awareness of sex–gender relevance in health and illness is present. Aside from sex–specific organs, differences between men and women occur for a multitude of diseases and the related treatments. Sex–gender impacts on pharmacological therapies have been considered with a relatively low relevance and, in general, male subjects are mainly used in research. Results are often extrapolated and thought to be applicable to women, which may not be true.

There has been a recent swell in activity by health research funding organizations and science journal editors to increase uptake of sex and gender considerations in study design, conduct and reporting in order to ensure that research results apply to everyone. However, examination of the implementation research literature reveals that attention to sex and gender has not yet infiltrated research methods in this field.⁴

POSTER SESSION

We want to see your examples of how considering sex-gender variables may have dramatically changed your own, or others', results. Or, how a new awareness of sex-gender variables as a researcher may have had a direct impact on your methodology? Do you have recommendations for other researchers? Can you describe the differential outcome of your research had you NOT considered sex-gender variables? How will you convey the importance of sex-gender variables to your students? What does it actually mean to take sex-gender variables into consideration? Concrete examples are appreciated!

Keynote presentation: Angela Saini

'How Science got women – and race – wrong': Live online interview with Saini, focusing on some examples to illustrate what happens when the sex-gender variable is not considered in scientific research. Based on the material from her award-winning books *Inferior* and *Superior* (see descriptions below). Follow up questions from members.

³ 'Sex-Gender Variable: Methodological Recommendations for Increasing Scientific Value of Clinical Studies' by Flavia Franconi, Ilaria Campesi, Delia Colombo, and Paola Antonini

in <u>Cells</u>. 2019 May; 8(5): 476. Published online 2019 May 17. doi: 10.3390/cells8050476 PMCID: PMC6562815 PMID: 31109006

⁴ 'Why sex and gender matter in implementation research' by Cara Tannenbaum, Lorraine Greaves, and Ian D. Graham. BMC Med Res Methodol. 2016; 16: 145. Published online 2016 Oct 27. doi: 10.1186/s12874-016-0247-7. PMCID: PMC5084413 PMID: 27788671



Angela Saini is an award-winning British science journalist and broadcaster. She presents science programmes on the BBC, and her writing has appeared in *New Scientist, The Sunday Times, National Geographic* and *Wired*. Her latest book, *Superior: The Return of Race Science,* was a finalist for the LA Times Book Prize and named a book of the year by The Telegraph, Nature and Financial Times. Her previous book, *Inferior: How Science Got Women Wrong,* has been translated into fourteen languages. Angela has a Masters in Engineering from the University of Oxford and was a Fellow at the Massachusetts Institute of Technology. In 2020 she was named one of the world's top 50 thinkers by *Prospect* magazine.

Extract from a (June 2016) <u>review</u> of Saini's book *Inferior: How Science Got Women Wrong* in *The Guardian* (online newspaper):

"With Inferior, Angela Saini sets out to examine the research, looking at everything from whether little boys really do prefer playing with cars rather than dolls, to whether the structure of the female brain is different from the male, and even whether it was inevitable that humans would end up with a patriarchal society. 'This doesn't always make for comfortable reading,' she warns, pointing out that not all studies overturn the stereotypes. The stakes are high: claims of sex differences have fuelled the idea of 'inferior woman', leading not only to casual sexism but a host of practices including the termination of pregnancies based solely on the gender of the unborn child. Disturbing, too, is that Charles Darwin himself thought women were inferior, claiming not only that they were less intelligent than men but that they always would be.

But in charting research into sex differences from cradle to old age, Saini discovers that many of society's traditional beliefs about women are built on shaky ground. Gender identity is very different between boys and girls, and there are also slight differences in toy preferences – with some evidence that biology might play a small role. But for everything from fine motor skills to vocabulary, colour preferences to aggression, the overlap between boys' and girls' behaviour is huge. Differences, if they exist at all, are tiny.

Sex differences in the brain, too, are a matter of hot debate. While some are adamant that large differences exist – not least in the wiring of the brain – others question not only the conclusions of such work, but the techniques upon which they are based. As Saini points out when it comes to brain scans, functional magnetic resonance imaging (fMRI) has shown regions of activity in the brain of a dead salmon."

Theme 4) OWSD members' response to the COVID-19 pandemic

The impacts of the COVID-19 pandemic have been felt by scientists and scholars worldwide, as universities and industries have closed their campuses and standard funding and publishing pipelines have slowed down or shifted priorities. These impacts, however, are not felt equally by everyone; both institutions and individuals in developing countries often have fewer resources to support remote learning and working, and women often have different responsibilities that make working from home a bigger challenge than for men.

To describe the true impact of the pandemic on women scientists in developing countries, many members have already responded to an OWSD survey on the pandemic (June 2020), answering questions about their work and studies, family and home lives, as well as their

mental wellbeing. <u>A report and analysis of the survey is provided here</u>. More in-depth accounts from members have also been published on <u>the OWSD website here</u>.

While sobering, these stories also inspire hope: from a Sudanese molecular biologist who led an initiative to make ventilators using 3D printers, to a Sri Lankan biochemistry professor who volunteered her lab for diagnostic testing, to the professors in a Palestinian university who organized a special course on COVID-19 to teach students the principles of epidemiology, OWSD members are applying their knowledge and skills to helping their countries, and the world, rise to this challenge.

POSTER SESSION

The purpose of the session on 'OWSD members' responses to COVID-19' is so that women scientists can fill in the specific details of what is often and predominantly 'dry data' available so far in their countries and regions about the pandemic in general (when and for how long there was a lockdown, number of intensive care hospital beds occupied, number of deaths, impact on employment and the economy, availability of goods and services, etc.) We do want you to provide this data, if you can, since it provides a comparative context between countries and regions. We also want you to consider 'dry data' and commentary that is available – for example, on the impact of COVID-19 on scientific research output, or how scientists in general have responded.

We also want to see and hear about your personal and professional experience and responses – has it made a difference being a woman? What has become more difficult for you in your research during the times of COVID-19? Has anything instead become easier? What do you think will be the longlasting impacts? What do you hope might change in future for your professional and personal life as a result of the pandemic?

Keynote Presentation: Alberto Quadrio Curzio

Quadrio Curzio will give a short presentation on an upcoming special edition of the international *Economia Politica* journal, focusing on 'Pandemics, Women and the Global South' which includes an editorial by Nobel laureate Amartya Sen as well as a chapter including details from the OWSD survey of members.

Professor Curzio's introduction will be followed by 3 compelling stories from OWSD members, describing their own personal and professional responses to COVID-19.



Professor Alberto Quadrio Curzio is an Italian economist whose work has concentrated largely on institutional political economy and economic structural development, both in theory and in policy. He is Professor Emeritus at *Università Cattolica del Sacro Cuore*, Milan, and President Emeritus of the Italian academy of science, the *Accademia Nazionale dei Lincei*. He was Full Professor of Economics at Università Cattolica from 1976 to 2010, and Dean of the same faculty from 1989-2010. He founded and directed the Research Center of Economic Analysis and International Economic Development (CRANEC) from 1977 to 2010. Curzio was a member of the Advisory Board of the Centre for Financial History at the University of Cambridge (2013-2015), President of Società italiana degli economisti (the Italian Economics Association), and the representative for Italian economists at CNR (the Italian National Research Council) for 10 years. He is a member of various Boards and Committees including Fondazione Edison, the International Balzan Prize Foundation, II Mulino publishers, Aspen Institute Italia. In 1984 he founded and became Editor-in-Chief of the journal *Economia Politica: Journal of Analytical and Institutional Economics*, and sits on the Editorial Boards of several other international journals. He has also written regularly for *II Sole 24 Ore* and currently for *Huffington Post Italia*. He is also a member of the Steering Committee of TWAS, the World Academy of Sciences.

OTHER SESSIONS Workshop: Storytelling for Impact

Creating podcasts with Joy Owango Creating films about your research stories with Nicole Leghissa Taking photos and constructing narratives with Alison Bert

There will be an online workshop/ panel discussion available to all OWSD members dedicated to 'story telling': the importance of communicating research in a compelling way to a variety of audiences, including experts in your field but also for the general public. A clear story can capture the attention of journalists, social media influencers, policy makers, sponsors, donors, partners as well as research collaborators. Your story can be aimed at listeners, readers or viewers in your country, or in your region; or further afield. Depending on the audience – and your objective - you may want to adapt where your story starts and where it ends. But the important thing is that you have the power and the control over the story you tell. You decide the context, the audience, the goal. Professional trainers are on hand to guide you in the technical aspects of storytelling through photography, film making and podcast creation as well as good old-fashioned narrative. The hope is that you will then be able to pass on those skills to other OWSD members – and work together in your national chapters to make sure that the successful stories of women scientists working in developing countries – despite all the challenges you have faced – are made available to the world.

This workshop will build on the very positive experience of the OWSD Visions project - where aspiring film makers based in developing countries have undergone online training with a film maker and produced their own 3-5 minute videos starring women scientists. This workshop will introduce a new branch of OWSD Stories: to be called OWSD Audios, and focusing on the voice (through podcasts).



Joy Owango

Joy Owango, Executive Director, Training Centre in Communication (TCC Africa)

Joy Owango is an experienced award winning Founding Director with a demonstrated history of working in capacity support for early career researchers. She is skilled in Management, Business Strategy and Research Metrics. She is experienced in matters relating to Research Capacity, Higher Education, Research Analytics, Donor and Government Relations.

Her strengths come in creating and building collaborations using the triple helix in industry, academia and government. She has created such collaborations with the set up of the Training Centre in Communication (private/Non-Governmental Organisation), with, the University of Nairobi (the leading university in East Africa). The objective of the collaboration was to create a support system to help researchers disseminate their research. The programme is celebrating its 14th year anniversary.

She is a firm believer in open science being a conduit to democratising higher education and fulfilling SDG 4.

Nicole Leghissa,

OWSD Film Consultant and Director of Hyphae



Nicole Leghissa collaborates with international organizations who provide grants, funds and support to talented scientists in the poorest countries of the world - mainly in Africa and Asia - giving visibility to researchers and communities that are generally under-exposed in global media. She is interested in human beings, in their personal journeys, challenges and struggles.

Coming from a family of refugees from ex-Yugoslavia and growing up in a border town troubled by conflicts and ethnic diversity, she has always been curious about geo-political dynamics and different cultures. She graduated in International and Diplomatic Sciences with a thesis in macro-economy in Cuba. In Havana she dived into many interesting personal stories that intrigued her more than academic research. It became clear that she wanted to be a story-teller.

She moved to Rome where I worked for theatre festivals and television, being executive producer, assistant director and researcher for British and North-American independent production companies producing long feature historical documentaries, broadcasted on PBS, Discovery Channel, Channel 4 and HBO. She learnt by doing, starting from scratch, becoming step by step the author and director she is today.

Since then, she has directed reportages and documentaries for RAI, ARTE, Histoire and Associated Press Television News. She is currently a consultant filmmaker for OWSD and the director of Hyphae, production company.

Alison Bert, Executive Editor of Strategic Communications at Elsevier



Alison Bert works with contributors around the world to publish daily stories for the global science and health communities.

Previously, she was Editor-in-Chief of Elsevier Connect, which won the 2016 North American Excellence Award for Science & Education.

Alison joined Elsevier in 2007 from the world of journalism, where she was a business reporter and blogger for The Journal News, a Gannett daily newspaper in New York. In the previous century, she was a classical guitarist on the music faculty of Syracuse University. She received a doctorate in music from the University of Arizona, was Fulbright scholar in Spain, and studied in a master class with Andrés Segovia.

Opening and Closing Ceremonies

Of course, as always at OWSD General Assemblies, there will be an opening ceremony on the first day (8 November) and a closing ceremony on the last day (19 November). The opening ceremony will take place online and include brief presentations from OWSD partners and donors. There will be a summary of OWSD 3 main funded programmes (PhD and Early Career fellowships, and Early Career awards) presented by the Secretariat, with presentations also by Fellows and alumae of the programmes. Following this there will be a handover of the outgoing executive board members (2016-21) to the newly elected incoming board members (2021-2025).

Last but not least, on the final day of this 10-day conference, there will be a closing ceremony that will be conducted both online and in person (pandemic regulations permitting), and interventions streamed live online from national chapters throughout the developing world. OWSD currently has 42 National Chapters in all 4 continents of developing countries (Latin America, Africa, Arab Region and Asia) who, on a voluntary basis, organize activities such as workshops to improve CVs or publications, computer literacy courses, school meetings to promote the choice of science subjects by girls, produce radio programmes, organise TV interviews and interventions in the local press to promote successful women scientists and the impact of their research.

On 19 November, approx. twenty National Chapters (who responded to our earlier call for participation) will invite their Members to attend **in person** a one day event (if national pandemic regulations permit and in full compliance with local health directives). Over a period of two hours, all chapters will be expected to connect online and provide 5-minute presentations of their group, describing the activities they have organized that day and giving feedback on the conference themes discussed.

The OWSD Secretariat, based in Trieste, Italy, will also have an in person event, hosting the launch of the *OWSD Italy Country Network*, a group of 20+ OWSD Friends based in Italy who are committed to promoting the work of women scientists from developing countries and assisting women scientists from developing countries already based in Italy (and Europe). The OWSD Italy Country Network will actively seek opportunities and funding for OWSD and OWSD members. This Country Network will raise funds for OWSD members and national chapters. Italian dignitaries, sponsors and partners are expected to attend in person and online (as well as representatives from nearby European countries). Representatives from Trieste's local, national and scientific institutions, as well as long-term reviewers of OWSD's programmes will give brief presentations on the importance of working with OWSD and women scientists from developing countries.