

# OWSD Annual Report 2023

ORGANIZATION FOR WOMEN IN SCIENCE  
FOR THE DEVELOPING WORLD







**2023 OWSD Awardee Haneen Dwaib**, from the State of Palestine, conducts research on gut microbiota to identify non-invasive early detection biomarkers for premature cardiovascular dysfunction and adipose tissue inflammation in pre-diabetic lab rats.

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**ORGANIZATION FOR WOMEN IN SCIENCE FOR THE DEVELOPING WORLD (OWSD) Annual Report 2023**

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# ABOUT OWSD

The **mission** of the Organization for Women in Science for the Developing World (OWSD) is to promote and strengthen the role of women scientists from the Global South in science and technology. OWSD provides training and networking opportunities, supporting women scientists' research and leadership throughout their careers, and advocating for gender equality in national science and technology systems and policies. We envision a future where women scientists from developing countries are agents of change in their communities, driving – and helping to achieve – the United Nations Sustainable Development Goals.

## SUSTAINABLE DEVELOPMENT GOALS

OWSD members' research covers all of the 17 SDGs. The organization's programmes and strategy are currently focused on **SDG 4** Quality Education, **SDG 5** Gender Equality, **SDG 9** Industry, Innovation and Infrastructure, **SDG 10** Reduced Inequalities and **SDG 17** Partnership for the Goals. In addition in 2022 OWSD awards were focused on **SDG 13** Climate action and in 2023 **SDG 2** Food security, agricultural productivity and sustainable food production.

### Women. Science. Development.

- 1987** **Abdus Salam**, founder of The World Academy of Sciences (TWAS), recognizes the need to support women scientists in the developing world during the 2nd TWAS General Meeting in Beijing.
- 1988** 218 women scientists from 63 developing countries attend a conference on 'The Role of Women in the Development of Science and Technology in the Third World' organized by TWAS in Trieste, Italy. A working group is set up to explore the creation of an organization that would champion the experience, needs and skills of women scientists in the developing world.
- 1989** The Third World Organization for Women in Science (TWOWS) is established and a constitution adopted.
- 1993** TWOWS is officially launched at the First General Assembly in Cairo, Egypt. The first executive board is elected.
- 1997** OWSD receives financial support from the Swedish International Development Cooperation Agency (Sida), to support a South-to-South PhD fellowships programme specially for women from Least Developed Countries and Sub-Saharan Africa in STEM subjects. It is the only programme of its kind.
- 1999** 2nd TWOWS General Assembly and Conference in Cape Town, South Africa.
- 2003** First TWOWS National Chapter is established in Yemen.
- 2005** 3rd TWOWS General Assembly and International Conference in Bangalore, India.
- 2010** At the 4th General Assembly and Conference in Beijing, China, members vote to adopt a new name - the Organization for Women in Science for the Developing World (OWSD).
- 2012-16** Sida increases funding to hire a Coordinator and more staff to be based at the OWSD Secretariat in Trieste. The number of PhD fellowships is increased, including funds to attend international conferences. In 2012 the OWSD annual awards (funded by the Elsevier Foundation) are re-launched and a special awards ceremony takes place at the annual AAAS meeting in 2013.
- 2017-2021** The Canadian International Development Research Centre (IDRC) joins forces with Sida to sign a new project agreement, including the Early Careers Fellowship programme.
- 2021-2026** Sida and IDRC sign a new 5-year agreement to continue jointly funding OWSD's programmes, including National Chapter support and institutional engagement. In 2021 6th OWSD General Assembly and Conference held entirely online, hosted by OWSD Secretariat, Trieste, Italy.
- 2022** The Aspen Institute Italia joins OWSD's role of donors, supporting the Early Career fellowships programme. Dominican Republic becomes the 50th OWSD National Chapter.
- 2023** New Masters programme for displaced women scientists (OWSD WISDOM) is established and presented at the Global Refugee Forum in December 2023 in partnership with UNHCR and Hashemite University, Jordan.

### The OWSD Ecosystem and Structure

In 2023, the Organization for Women in Science for the Developing World (OWSD) continued to thrive as a dynamic ecosystem where women scientists from developing countries can grow and flourish. At the end of 2023, with over 10,000 members, OWSD enters 2024 as a vibrant **network of relationships and resources**, each contributing to the overall advancement and prosperity of women in STEM

across the Global South. At the core of the **OWSD ecosystem** is a feedback loop. Women scientists from developing countries share insights and experiences from their local contexts through OWSD membership forums and National Chapters. OWSD executive board regional representatives collect this rich information and report to the executive board meeting about specific and diverse **challenges facing women in STEM around the world**. The

OWSD Secretariat processes the information, in consultation with the chapters and other partners, to create comprehensive reports and strategies and develop **robust programmes and initiatives** which positively impact women, science, and communities. Women recipients of OWSD programmes in turn spread the word, raise visibility and establish national chapters, which provide a source of **information and engagement for incoming women scientists**.

### Key Elements of the OWSD Ecosystem

#### Seeds of opportunity and resources

OWSD provides resources and training for women scientists in developing countries. These planted seeds grow into **pioneering research projects** that contribute to the Sustainable Development Goals, sustaining and enriching the scientific community.

#### Identifying and removing barriers

The 54+ OWSD National Chapters identify and address the barriers that impede progress. This may involve collecting data on cultural, social, economic, political, and academic obstacles, as well as collaborating with families and educational institutions to dismantle these barriers.

#### Inclusive and interdisciplinary research environments

OWSD fosters diverse research environments. The countries eligible for OWSD funding often struggle even with attendance of girls in secondary school. By attracting and supporting women from these countries to **participate in the design and implementation of scientific research** at postgraduate level, OWSD fellowships mean that research topics are more varied and more relevant, making the programmes more resilient and ensuring their implementation. Furthermore, OWSD encourages collaboration between experts in the arts, humanities, and social sciences, ensuring that STEM research is both innovative and relevant.



**“OWSD helped me stay in my country and do the science I wanted, without needing to travel abroad to do it.”**

**Elizabeth Bandason,**  
2018 OWSD Early Career Fellow, Malawi

OWSD also ensures resources and opportunities are accessible to all community members, welcoming LGBTQ+ members, women with disabilities, and displaced women. This inclusion provides platforms for these groups to voice their challenges and contributes to a resilient scientific community.

#### Visibility, advocacy, and policy change

**Visibility is the sunlight that allows the OWSD ecosystem to thrive.** OWSD’s communications and storytelling team highlight the achievements of women scientists, showcasing their work internationally. These visible role models from under-represented countries inspire the next generation and demonstrate the transformative power of women in STEM. OWSD also advocates for gender-transformative policies, working with academic institutions to support women

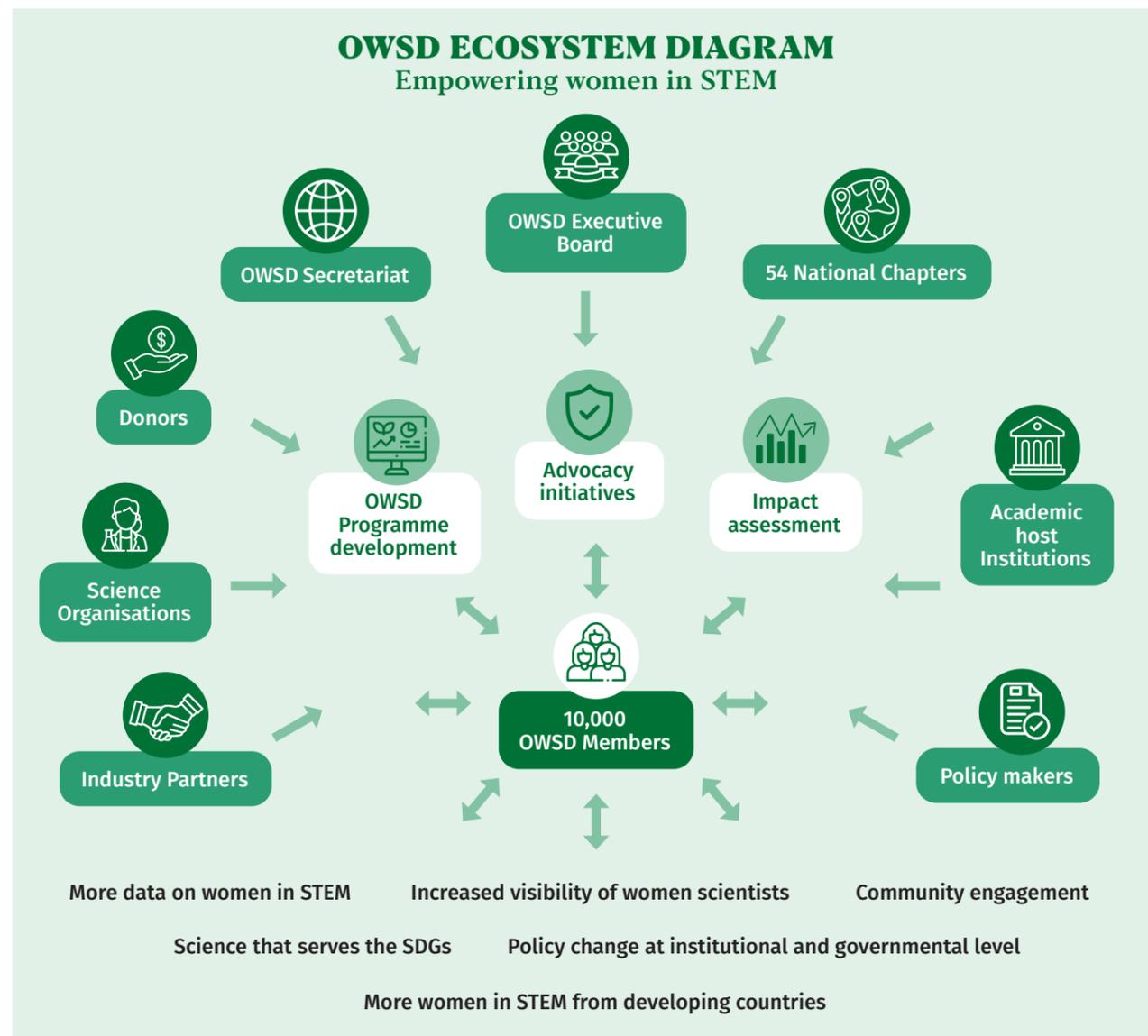
in research and decision-making roles.

#### Sustained capacity building

OWSD designs strategies to sustain resources for scientific excellence beyond initial support by training fellows to **link with industry and fundraise**, as well as improving their publishing, scientific outreach and communications skills, important for leadership in science. These efforts anchor the ecosystem, ensuring long-term stability and growth. OWSD also places an emphasis on selecting fellows and awardees with demonstrated mentoring and outreach experience, ensuring that the benefits of funding are extended to the recipients’ institutes and communities.

#### Global collaboration platform

OWSD provides a global platform for women scientists to share their research interests and initiate collaborations, creating a network of interconnected relationships that supports the ecosystem’s health and vitality. Fellows’ and awardees’ alumnae networks as well as National Chapters provide **opportunities to form deep and long-lasting connections** between women scientists on national and international levels, and OWSD actively facilitates members’, fellows’, and awardees’ **participation in collaborative research and decision-making processes** through its numerous partnerships with organizations and institutes in the global scientific community.



**OWSD Structure**

The OWSD community ripples outwards in concentric circles. At its centre are the **members**, who establish **OWSD National Chapters** and organize events and activities. They disseminate information about opportunities and share hands-on experience, reaching girls and young women even in the remotest areas of the least-resourced countries. **Alumnae** from OWSD fellowship and awards programmes join National Chapters, sharing their journeys as PhD fellows, Early Career fellows, or award winners, encouraging other members to apply and often assisting in the application process.

Each chapter has an elected **national executive committee** (including at least a chair, vice-chair, secretary, and treasurer), who serve on a voluntary basis. The chair provides an annual report of activities to the relevant regional representative of the OWSD Executive Board, who then reports to the **executive board** in its annual meeting. The **OWSD Secretariat** sends out annual report templates, gathers and analyzes data, and uses this feedback to adapt OWSD programmes, ensuring their relevance and effectiveness. Serving on the executive committee of a National Chapter provides members with leadership

and management experience. Executive committee members often progress to become elected members of the Global Young Academy or national young academies, paving the way for election to national science academies. Some OWSD national chapter members have even gone on to establish national academies in their countries. These environments offer contacts, networks, and opportunities to influence policy at various levels.

**Executive Board**

The OWSD Executive Board comprises the President, four Vice Presidents (one from each region: Africa; Asia; Arab countries; Latin America and the Caribbean), and four additional Regional Members. These board members serve as focal points for National Chapters, representing OWSD in international, regional, and local frameworks. They strive to enhance the organization’s visibility and representation, ensuring that the voice of OWSD is heard on a global stage. The executive board is elected by the global OWSD membership every 4 years, and since 2021, elections have been held online through an accountable yet anonymous voting process. Together, the ecosystem and structure of OWSD create a powerful platform for empowering women in science, driving positive change across the Global South, and fostering a global network of collaboration and support.



**CLICK OR SCAN**  
TO KNOW MORE ABOUT OWSD EXECUTIVE BOARD MEMBERS

## 2021-2025 OWSD EXECUTIVE BOARD

AFRICA	 <b>Olubukola Oluranti Babalola</b> Vice President for Africa Nigeria/South Africa	 <b>Fortunate Farirai</b> Regional Member for Africa Zimbabwe
	 <b>Jennifer Thomson</b> President South Africa	 <b>Huda Basaleem</b> Vice President for the Arab Region Yemen
ASIA	 <b>Atya Kapley</b> Vice President for Asia India	 <b>Hasin Anupama Azhari</b> Regional Member for Asia Bangladesh
LAC	 <b>Kleinsy Bonilla</b> Vice President for LAC Guatemala	 <b>Patricia Castillo-Briceno</b> Regional Member for LAC Ecuador

# OWSD Vice President accelerates growth and collaboration in Latin America and the Caribbean

OWSD Vice President **Kleinsy Bonilla** has played a crucial role in accelerating growth and fostering collaboration within Latin America and the Caribbean (LAC) since she was elected in 2021. Under her leadership, the number of national chapters in the region has expanded significantly from 4 to **16 chapters** across the continent, from Mexico to Chile.

Dr. Bonilla's efforts in enhancing the visibility of women in science and promoting regional engagement highlight her commitment to advancing science and technology in LAC. Her leadership exemplifies the growing influence and dynamic potential of the region within the global scientific community.

**Kleinsy Bonilla**, OWSD Vice President for Latin America and the Caribbean, has advanced science diplomacy, policy, and capacity building across the region, fostering collaboration and empowering women in science.



**CLICK OR SCAN**  
TO KNOW MORE ABOUT KLEINSY BONILLA'S IMPACT AS AN EXECUTIVE BOARD MEMBER

# DESCRIPTION OF PROGRAMMES

OWSD offers programmes to support women scientists in developing countries throughout their careers in four key areas: **community, mobility, capacity and visibility.**

**Community:** Membership in the international OWSD network and National Chapters ensures access to information on opportunities and skill-building activities as well as direct participation in national events.

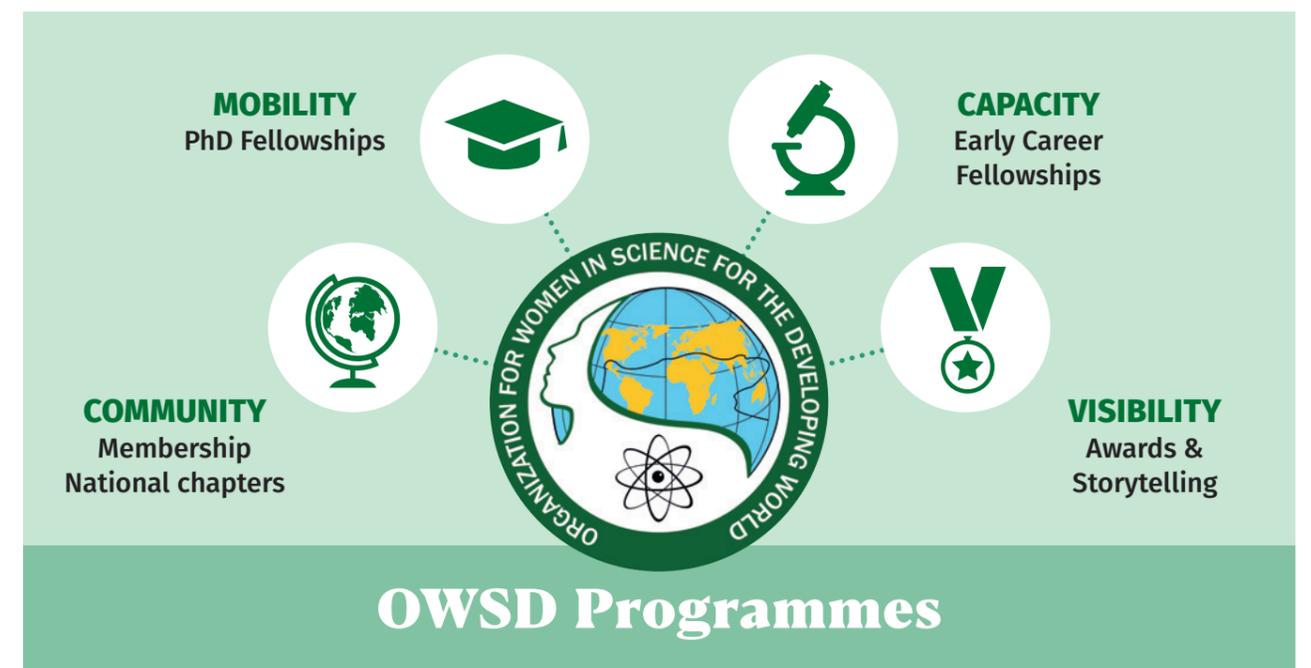
**Mobility:** South-to-South PhD Fellowships (from 1998-2022) allow women scientists from poorly resourced countries to travel to centres of excellence in developing countries to study STEM subjects.

**Capacity:** Grants for Early Career stage women scientists support research-related expenses in scientists' home countries, with the aim of building international centres of research excellence located in Science and Technology Lagging Countries (STLCs).

**Visibility:** Targeted awards recognise and celebrate the achievements of women scientists from developing countries. OWSD also provides training and opportunities for women scientists

from developing countries to showcase their achievements and contributions to their field through various kinds of scientific communications and outreach, including storytelling through film and podcasting. Raising the profile of excellent women scientists helps to break down stereotypes and biases and increase the visibility and representation of women in science.

Each of these programmes also comes with a wealth of training opportunities which OWSD is developing and providing with key partners in the South. Through these programmes, women scientists attend conferences and seminars, develop skills, receive mentorship, and ultimately become leaders in their field while advocating for the inclusion of women's knowledge and needs in research projects.



# 2023 HIGHLIGHTS

The year 2023 was a defining one for OWSD, characterized by a series of notable achievements set against a backdrop of significant financial challenges.

One of the most substantial challenges OWSD encountered was a notable reduction in funding from one of our major donors, The Swedish International Development Cooperation Agency (Sida), which has supported OWSD, and in particular the South-to-South PhD fellowship programme, for more than 25 years. This change, driven by shifting global priorities and affecting all of Sida's beneficiaries, was keenly felt by OWSD, impacting approximately

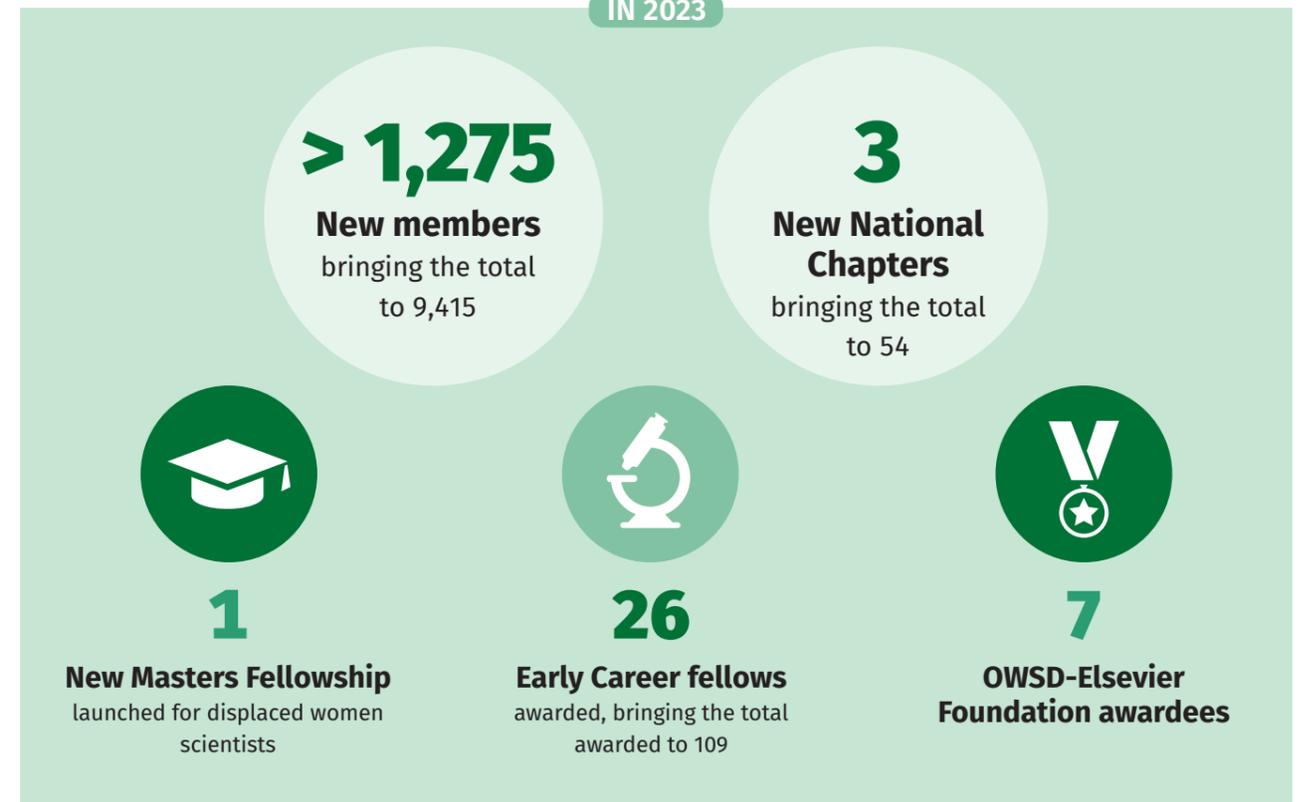
50% of the Organization's approved budget until 2026, and 20% of the annual budget in 2023. The immediate result was a cancellation of the PhD Fellowships programme. In response to this challenge, OWSD swiftly adapted its strategies to maintain its commitment to advancing women in science. A key initiative was the development of the **new WISDOM Masters programme** for displaced women scientists. Established in collaboration with UNHCR

and Hashemite University, this programme was showcased at the Global Refugee Forum in December. The innovative design of WISDOM not only addresses the immediate needs of displaced scientists but also positions OWSD for potential additional support through a multi-donor pledge system. Throughout these challenges, OWSD programmes continued to achieve significant milestones. The **Early Career Fellowships programme saw an unprecedented number of 28 new fellows** selected from scientifically- and technologically-lagging Countries (STLCs), reflecting



***“What a tumultuous year it has been! While we faced significant funding cuts leading to the suspension of our PhD Fellowships, we also forged stronger collaborations with Italian institutions and launched the innovative WISDOM Masters programme for displaced women scientists. Our new partnerships have invigorated our fundraising and outreach efforts, enhancing our visibility and impact, particularly across Africa. I am incredibly proud of the resilience and dedication shown by the OWSD executive board members in the 4 regions, the national chapters in 54 countries of the global south and our hardworking Secretariat for their dedication and enthusiasm which has helped OWSD remain such an important agency for change in the lives of so many people in the varied countries in which we work.”***

Jennifer Thomson, OWSD President



**Angela Gerald Mkindi**, 2023 Early Career Fellow from The Nelson Mandela African Institution of Science and Technology (NM-AIST), Tanzania, is working to enhance access to naturally pesticidal plant species and develop sustainable pest management formulations. Her research will document the chemical profiles of these plants and evaluate formulations to improve their efficacy, contributing to safer and more sustainable agricultural practices in Tanzania.



2022 Early Career Fellows in Trieste, Italy, during the Orientation Workshop held in May 2023.

OWSD’s ongoing commitment to nurturing emerging scientific talent. OWSD took the opportunity to collect evidence of the long-term impact of the PhD fellowship programme, designing and conducting an extensive survey sent to over 300 alumnae and conducting in-depth interviews with selected graduates to demonstrate how investment in one individual woman scientist can have far-reaching consequences,

not just for the fellow’s own personal career but makes a significant contribution to research in that field and even to the economic and social development of her country. The OWSD Secretariat is based in Italy and in 2023 strengthened **collaborations with Italian institutions**, including the Italian government, the Accademia dei Lincei, and the Aspen Institute Italia. These partnerships have facilitated impactful events

and bolstered OWSD’s mission through increased recognition and collaboration.

**OWSD’s innovative communications**, including a short film series (OWSD Visions), in-depth narrative interviews, and National Chapters events have diversified engagement and supported fundraising efforts. Our partnership with the Nairobi-based Training Centre in Communications further enhanced OWSD’s visibility across Africa through the creation and dissemination of podcasts and articles highlighting the impact of OWSD scientists, as well as webinars for members on how to communicate their own stories through these media. A comprehensive **overhaul of OWSD’s information management and reporting systems**, including a redesigned website to be rolled out in 2024, will improve the Organization’s ability to communicate impact and track progress effectively. The year also saw continued steady **growth in membership and the expansion of national chapters**, reflecting OWSD’s global reach and relevance.

In summary, 2023 was a year of both formidable challenges and significant achievements for OWSD. The Organization’s ability to navigate funding changes while expanding impact and maintaining a commitment to advancing women in science underscores our resilience and dedication to supporting the global scientific community.

# COMMUNITY: OWSD MEMBERSHIP & NATIONAL CHAPTERS

OWSD’s membership is the foundation of the organization, providing a much-needed sense of community for women scientists in the developing world who are often isolated; frequently the only woman in their department (especially in maths, physics or engineering) and sometimes the only female researcher in the entire institute!

**OWSD full members** are women scientists living in developing countries who have a postgraduate degree in science subjects.

**Affiliate members** are at earlier stages in their careers, with undergraduate degrees only.

**Friends of OWSD** are women and men from developed and developing countries with at least an undergraduate degree.



**Full Member**

- Woman with a postgraduate degree in natural or social science subjects
- Living in developing countries

**Includes**

- Access to OWSD international network, mentoring and opportunities
- Membership of National Chapter
- Right to vote in the OWSD General Assemblies

 **CLICK OR SCAN**  
TO BECOME A MEMBER



**Affiliate Member**

- Woman with a bachelor’s degree in natural or social science subjects
- Living in developing countries

**Includes**

- Access to OWSD international network, mentoring and opportunities
- Membership of National Chapter

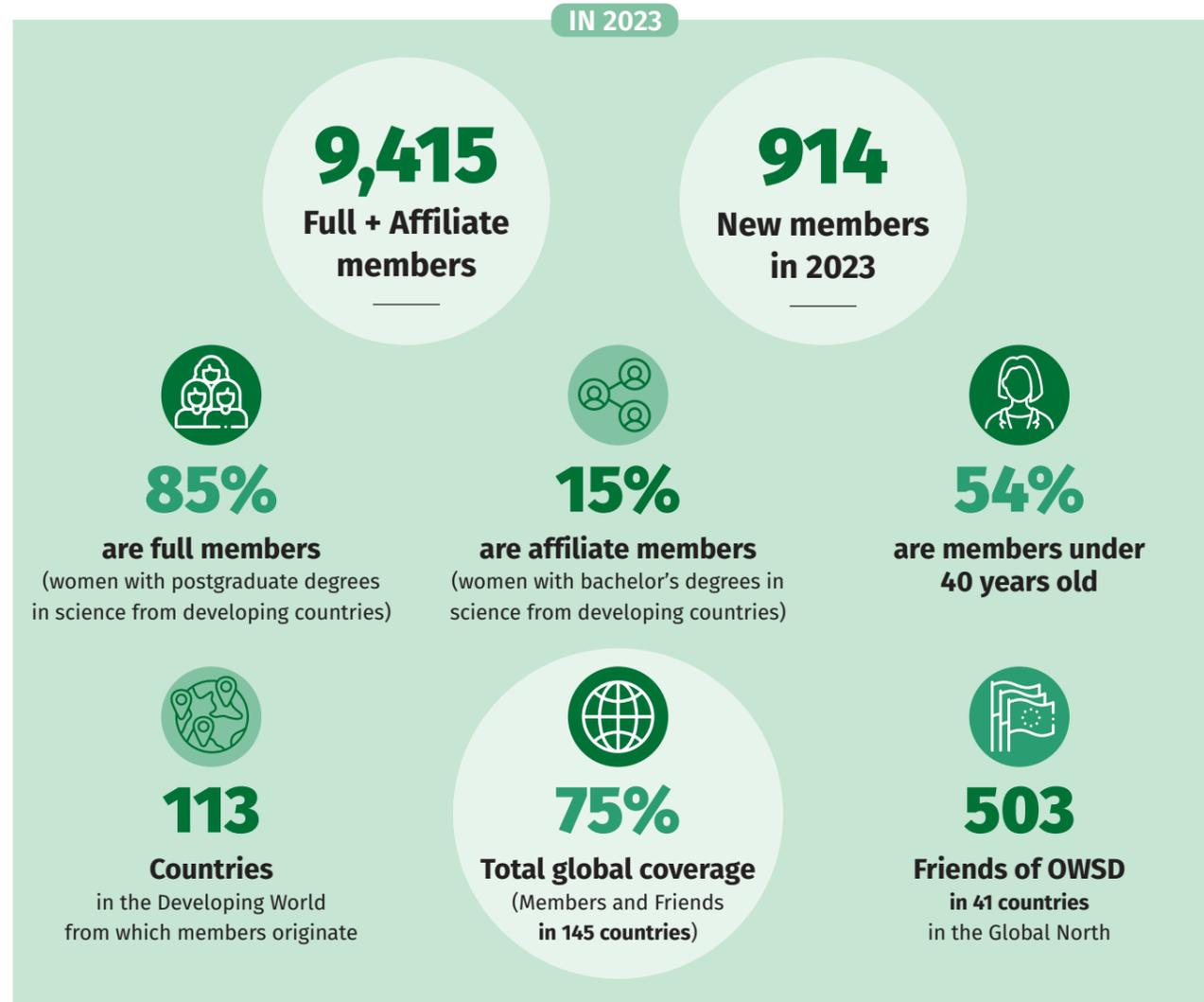
 **CLICK OR SCAN**  
TO BECOME A MEMBER



**Friend of OWSD**

- Woman or man with a bachelor’s degree in any subject
- Living in developing or developed countries
- Committed to promoting the objectives of OWSD
- Can be invited by National Chapters to participate in events

 **CLICK OR SCAN**  
TO BECOME A FRIEND



**OWSD Namibia National Chapter members**, network and exchange insights with Sera Markoff (second from left), a visiting Professor at University of Amsterdam and renowned astrophysicist, currently working on a cutting-edge telescope project in Namibia.

In addition to the sense of community, OWSD membership offers access to a wide range of opportunities, such as training, travel, research visits, and funding, which are announced through international and regional OWSD mailing lists.



**CLICK OR SCAN**  
IF YOU ARE INTERESTED IN CONTACTING ANY OWSD MEMBER

### National Chapters

If members are the foundation of the organization, National Chapters serve as its backbone. Any developing country with more than 20 members is eligible to apply to the OWSD Secretariat and Executive Board for National Chapter status. In 2023, OWSD welcomed **three new chapters: Burundi and Lesotho** in Africa, and **Haiti** in the Caribbean. It is noteworthy that, excluding the small island developing states, over half of all developing countries now host an OWSD National Chapter. This reflects the organization's reach and influence despite ongoing challenges in regions facing instability (including Myanmar, State of Palestine and Yemen).



**OWSD Bangladesh** members celebrate International Women's Day at the Bangladesh Agricultural Research Institute in Gazipur, Dhaka, as part of their annual nationwide observance of the day



Chapters are headed by national executive committees elected by members which organize regular meetings and events and provide resources and training opportunities for local women and girls in STEM. In addition, the chapters are key disseminators for information on all OWSD programmes, informing members about the PhD, Early Career and Awards programmes, inviting Fellows to give first hand testimonials and assisting with grant and awards applications.

### National Chapters Activities

In 2023, OWSD National Chapters saw a resurgence of in-person gatherings and activities after the World Health Organization

(WHO) declared "with great hope" an end to COVID-19 as a public health emergency. Throughout the year, OWSD National Chapters organized **over 100 diverse events**, including webinars, conferences, science talks, training sessions, and workshops. Leading these efforts were chapters such as **Guatemala**, which organized 10 significant activities, ranging from conferences on environmental sustainability and marine conservation to outreach campaigns aimed at indigenous girls. Similarly, the **OWSD Mexico** Chapter hosted 7 events, and formalized their governance structure through online elections of its Executive Committee. **OWSD Nigeria** was especially vibrant, celebrating the



International Day of Women and Girls in Science (IDWGS), February 11, across branches in the north, south, east, and west of the country. The chapters conducted visits to primary and secondary

schools, delivering career talks, donating books, and engaging with students through interactive activities. Students participated in talk shows, as well as theatre and dance performances,

confidently engaging with women scientists and asking insightful questions about various fields of science. National Chapter branches at institutions such as the University of Lagos, the Federal College of Education in Yola, and the University of Nigeria Nsukka were among those actively involved in this nationwide outreach.

**OWSD Uganda** also made an impact by participating in the National World Environment Day celebrations, where they advocated for women's leadership in environmental science and sustainability.

In August, OWSD launched a call for applications to fund National Chapter activities



**OWSD Nigeria** members from Michael Okpara University of Agriculture Umudike engage with students during International Day for Women and Girls in Science 2023.



**CLICK OR SCAN**  
 TO KNOW MORE ABOUT OWSD ACTIVITIES FOR INTERNATIONAL DAY OF WOMEN AND GIRLS IN SCIENCE

aimed at promoting women's participation in science, with grants of up to USD 3,000 awarded to 22 chapters. While some events were held towards the end of 2023, the majority are scheduled for early 2024. These initiatives will culminate in a month-long celebration around the International Day of Women and Girls in Science and International Women's Day. The celebrations will feature seminars, conferences, and science fairs organized by OWSD and its 54 National Chapters, providing platforms for knowledge-sharing and showcasing the vital contributions of women in STEM worldwide.

**New Gender in STEM research and outreach initiative: working in depth with 4 national chapters**

In 2023, OWSD laid the groundwork for a new initiative aimed at enhancing Gender in STEM research and outreach in specific countries. Set to launch in 2024, this **pilot project** focuses on four National Chapters to foster collaborative networks, advocate for gender-inclusive academic institutions, and promote data-driven policies to overcome barriers to women's participation in the design and implementation of scientific research.

**Bolivia, Nepal, Rwanda, and Zimbabwe** national chapters will work with an expert consultant in 2024 to collect and map data on challenges faced by women in science, with the goal of informing policymaking and enhancing STEM education accessibility for girls and women. This initiative exemplifies OWSD's commitment to creating an environment where women in science can thrive, and will serve as a model for OWSD National Chapters to collect data and develop responsive outreach programmes across the globe.



The "OWSD Conference on Biosafety: Navigating Biorisk Management in Pakistan", organized by **OWSD Pakistan**, brought together experts and stakeholders from across the country.

# OWSD NATIONAL CHAPTERS

- Countries with National Chapters
- Countries without National Chapters
- Countries with National Chapters established in 2023



**OWSD Guatemala** members participate in Expo Biodiversidad in Antigua Guatemala, September 2023, engaging in outreach activities with children to promote awareness about biodiversity and science.



**OWSD Chile** recording the first episode of 'CientíficaMente: Science from a Woman's Perspective,' a new radio talk show fostering conversations among women in STEM launched in collaboration with Universidad Austral in La Serena.



**OWSD Kenya** members from the University of Kabianga conduct mentorship visits to Kipsitet, Kaborok, Tengecha, and Kabianga Girls High Schools, inspiring young women to pursue careers in science.



**OWSD Egypt** organizes the 2nd International Conference "Together to Solve the Problem to Achieve the Sustainable Development Goals," with the opening day on 12 November 2023 at the National Research Center in Cairo.



**OWSD Rwanda National Chapter** holds workshops to boost the confidence and innovation of young women in higher learning institutions and mentorship through the STAR Program.



**OWSD Mauritius** hosts a Leadership Movie screening at SARO State Secondary School, supported by funding from the Australian High Commission, to inspire and empower young women in leadership and science.

**2003**  
Yemen

**2006**  
India

**2008**  
Egypt

**2009**  
China  
Bangladesh  
South Africa

**2018**  
Indonesia  
Mauritius  
Myanmar  
Zimbabwe  
Kenya  
Sri Lanka  
Rwanda

**2010**  
Nigeria

**2017**  
Sudan

**2019**  
Botswana  
Zambia  
Cameroon  
Tanzania  
Jordan  
Malaysia  
Namibia  
Pakistan  
Peru  
Turkey  
Uruguay

**2020**  
Malawi  
Honduras  
Senegal  
Guatemala  
Mozambique  
Palestine  
Nepal  
Brazil

**2021**  
Mexico  
Uganda  
El Salvador  
Benin  
Colombia  
Central Asia  
(Uzbekistan,  
Kyrgyzstan,  
Kazakhstan)  
Bolivia  
Morocco  
Ecuador

**2022**  
Paraguay  
Dominican Republic  
Chile  
Nicaragua  
Venezuela  
Niger  
Congo

**2023**  
Lesotho  
Burundi  
Haiti. Republic

# OWSD's First Regional Meeting of National Chapters in Asia

In October 2023, OWSD proudly hosted the 2nd regional meeting of national chapters in Kuala Lumpur, Malaysia, for the Asia region. The first meeting was held in Pretoria, South Africa in 2022 for the African region. These meetings have been made possible through our partnership with the **International Science Council (ISC)**, which provides funding for members of OWSD national chapters to attend their Global Knowledge Dialogues. This arrangement has proved to be mutually beneficial, with ISC gaining valuable and specific insights from excellent women scientists in the regions who are experienced in communicating their science and speaking up for their needs, while OWSD members liaise with high-level speakers and policy makers and are visible on the international scientific stage. The OWSD regional meeting was held prior to the ISC conference, at **Tunku Abdul Rahman University (UTAR)**, where the OWSD Malaysia National Chapter is based. OWSD National Chapter leaders from six countries addressed key challenges faced by women in science across Asia, exchanged best practices, discussed funding opportunities, and explored innovative administrative procedures. The event highlighted the crucial role of National Chapters in empowering women scientists, with discussions centered on access to fellowships, leadership skills, mentorship, resource sharing, and scientific conferences. The OWSD Chapters of Malaysia and Myanmar discussed joint initiatives such as organizing webinars



Members of six **OWSD National Chapters in Asia** come together at Tunku Abdul Rahman University (UTAR) in Malaysia to exchange best practices, discuss funding opportunities, and explore administrative procedures.



Members of **OWSD Asia NC** visit Universiti Putra Malaysia (UPM).

## OWSD in Asia

OWSD has been working in Asia and the Pacific since 1997 to improve the number and quality of women scientists. With over **1,896 members in the region** and several active National Chapters, OWSD's efforts have significantly impacted the scientific landscape. Our **PhD fellowships programme** has provided full scholarships to over 77 women in the Asia and Pacific region, including Afghanistan, Bangladesh, Bhutan, Cambodia, Myanmar, Nepal, and Sri Lanka. PhD fellows from 13 countries worldwide have pursued their scholarships at prestigious host institutes in China, India, Malaysia, Pakistan, the Philippines, Sri Lanka, Thailand, and Turkey. **Early Career Fellowships** have also been awarded to **18 women** in Bangladesh, Lao PDR, Mongolia, Myanmar, Nepal, and Sri Lanka,

further demonstrating OWSD's commitment to nurturing emerging scientific talent. **OWSD Vice President Atya Kapley**, from India, exemplifies the leadership and vision driving the organization's mission in the region. The active engagement of **National Chapters**, such as those in India, Pakistan, Bangladesh, Sri Lanka, Indonesia, Malaysia, Nepal, Turkey, and Myanmar, plays a crucial role in facilitating networking opportunities, providing leadership skills training, and promoting the achievements of women scientists.



Executive Committee members of **OWSD Nepal**, one of the most active National Chapter in Asia

on leadership skills. A standout success was the OWSD Myanmar National Chapter's fundraising strategy, which secured substantial grants through United Nations Development Programme (UNDP) projects.

Discussions with representatives from Universiti Putra Malaysia (UPM) opened new opportunities for activities aimed at providing psychological support to OWSD Fellows during their PhD studies.

# MOBILITY: OWSD PHD FELLOWSHIPS

With nearly 400 graduates over its 25-year history, the OWSD PhD Fellowships programme has demonstrated outstanding success in fostering scientific talent and advancing research capacity in developing countries.

A total of 576 fellowships have been awarded to women scientists from eligible developing countries. Of these, 389 fellows have graduated and 126 remain enrolled, due to finish their studies by end 2026, reflecting a **very low dropout rate** (61 fellows in total, equivalent to 10%). This impressive retention rate compares very favourably with other PhD programmes around the world: in the USA, attrition

rates for both men and women in STEM fields range from 36-51% and in Europe the average rate is 60% across all subjects and for both genders. Women embarking on academic careers in STEM subjects from developing countries (and we only include 66 of the least resourced) arguably face multiple challenges on their academic journeys, yet OWSD fellows' impressive retention rates and average completion time (4-6

## PhD Fellowship

### ELIGIBILITY

- Women in STEM with a master's degree
- Citizens from 66 eligible countries
- Study outside of home country in any developing country in the Global South

### INCLUDES

- Monthly stipend, travel grant, tuition fees, support allowance

### FUNDED BY

- Swedish International Development Cooperation Agency (SIDA)

years) are testament to both the individual fellow's determination, motivation and resilience as well as **OWSD's administrative and pastoral support**, developed and



**Global Refugee Forum** in Geneva, Switzerland, in December 2023. As part of Multi-Stakeholder pledges led by UNHCR Education #15by30 and #GAIN #localisationofknowledge OWSD has pledged to contribute its 30 years experience in supporting women in science across the developing world to ensure no refugee woman scientist is left behind.

improved over many years. A key factor is the **continuous support and communication** between OWSD Fellowships staff and

students, which is both attentive and flexible, offering assistance with stipends, travel, study fees, and personal support allowances.

Despite the remarkable progress made over the years, 2023 marked a pause in the programme's momentum, as the call for new



**OWSD Coordinator Tonya Blowers and OWSD Programme Manager Sena Galazzi** present the new OWSD Wisdom Programme at the Global Refugee Forum in Geneva, Switzerland.

## Launch of OWSD WISDOM Master's Scholarships

OWSD is proud to announce the launch of the OWSD WISDOM (Women In Science Displacement Outreach Master's Program) for displaced women scientists. This new Master's scholarship initiative is focused on supporting women from OWSD's list of 66 'Scientifically and Technologically Lagging Countries' (STLCs). In collaboration with Hashemite University in Jordan, OWSD will provide at least 10 full scholarships for a 24-month duration. This initiative is backed by an Implementation Partners Agreement approved by UNESCO's contracts committee in December 2023.

The WISDOM program will partner closely with the United Nations High Commissioner for Refugees (UNHCR) and the Global Academic Interdisciplinary Network (GAIN). The Masters programme aligns with the UNHCR Albert Einstein German Academic Refugee Initiative Fund (DAFI) scholarships, offering opportunities to a pool of qualified displaced women scientists.

The program was highlighted at the 2023 Global Refugee Forum (GRF), reflecting OWSD's commitment to supporting displaced women scientists and seeking additional funding to expand the initiative.



**CLICK OR SCAN**  
TO LEARN MORE DETAILS AND WATCH THE NEW PROGRAMME TRAILER

fellowship applications was not opened due to funding cuts. This was the first hiatus in 25 years, providing an opportunity to reflect on the programme's achievements and consider sustainable options for the future.

Meanwhile, the OWSD Secretariat continues to support the enrolled PhD fellows by collecting progress reports, sending payments to host universities, organizing extensions and return visits, and highlighting success stories.



**2021 OWSD Fellow Elodie Dimon** from Benin, was awarded her PhD from Université de Parakou in the zootechnical productivity of small ruminants in the context of climate change in northern Benin. Thanks to the OWSD PhD Fellowship, she completed a sandwich programme at the Institute of Rural Development, University of Nazi Boni, Burkina Faso, which allowed her to establish new scientific collaborations, handle advanced data collection equipment, and expand her network in climate change and livestock farming.

**IN 2023**

**19**  
New graduates  
(11 full-time and 8 sandwich)

---

**47%**  
New graduates from LDCs

---

**126**  
Active fellows  
enrolled in ongoing PhD programmes  
(80 full-time and 46 sandwich)

---

**389**  
Total graduates  
since the programme began in 1998

---

**576**  
Total Fellowships  
awarded 1998-2023  
359 full-time 217 sandwich

As a silver lining, OWSD re-purposed the remaining funds towards a new Master's scholarship to support displaced and refugee scientists. This pilot project is a highly relevant and coherent addition to the suite of programmes offered by OWSD.

Looking forward, OWSD maintains that supporting PhDs in STEM to women from developing countries is fundamental to OWSD's vision and mission – and in creating a coherent career trajectory for women scientists based in poorly resourced regions

of the world. OWSD remains one of the few organisations to focus on the highly productive **intersection of women, science and development in academia** throughout the global south. Over the next two years, OWSD management, executive board and partners will develop and propose new and sustainable models to ensure the hugely important work begun can resume.

**Support Allowance: A Vital Tool for Retaining Women in Research**

In January 2023, OWSD took a significant step to further support women scientists by transforming the existing conference support grant into a more comprehensive Support Allowance (**USD 4,000 per Fellowship**), designed to address the multifaceted challenges faced by female researchers. The support extends beyond academic expenses to include personal and family needs and covers essential costs such as travel expenses for fellows to visit their families during the fellowship, support for accompanying family members, childcare costs, and necessary research and study tools like computers, software licenses, publication fees, and internet access. The impact of this one-off allowance in addition to the monthly stipend has been profound. In 2023, 66 fellows benefitted from the Allowance which has proven to be a crucial factor in keeping women engaged in their research, allowing them **to balance their academic and personal responsibilities.**

**“The Support allowance was incredibly beneficial. My studies would not be the same without this support. It would certainly leave my family in debt because I had no other means of covering these expenses other than a bank loan. After finishing my courses, I would spend another couple of years paying back instead of advancing my profession. As a result, it was critical that OWSD revised the use of these funds. I want OWSD to be proud of women’s lives they are improving. “You educate a woman, you educate a generation.”**



**Ms. Chinama Rusizana Jeanne D'Arc, 2019 awardee,** spent the support allowance for additional tickets to travel back home, childcare, technology grant, publication fees, research fees and other expenses contributing to the PhD completion

**Celebrating OWSD's 2023 PhD Graduates**

In 2023 nineteen women scientists from 13 countries in the developing world graduated with their doctorates. Every year, we celebrate those OWSD PhD fellows who have recently graduated. These women have overcome many obstacles to reach where they are today, including the COVID-19 pandemic that spread across the world between 2020 and 2022, right in the middle of their fellowships. Now, PhDs in hand, they are ready to embark on the next phase of their careers. From an agronomist studying ancestral forest species

in Benin, to a physicist from Syria developing ultrasensitive sensors to diagnose dopamine deficiencies, to a pharmacologist researching differences in susceptibility and treatment response in patients with cervical cancer in Zimbabwe, they are already making big changes to a world that needs their vision, their knowledge and their talent. **We congratulate the new Drs., and wish them luck on their onward journey!**



# CAPACITY: OWSD EARLY CAREER FELLOWSHIPS

The Early Career Fellowship is more than just financial support—it is an investment in scientific leaders in the Global South. Each fellowship, worth USD 50,000 over three years, enables women scientists to establish robust research activities, develop laboratories, and build research groups that address critical development challenges.

By the end of 2023, the Early Career programme had supported 112 fellows, with 54 successfully completing their fellowships

and the remaining fellows due to complete by 2026. The fellows, selected from across 66 scientifically-lagging countries,

represent a **growing network of exceptional women** who are leading transformative research projects in their home countries. Their work spans a broad range of disciplines, including agricultural, biological, chemical, and medical sciences, and their research is making significant contributions to local and global knowledge. In 2023, the OWSD Early Career Fellowships Programme reached a new milestone with the selection of 28 outstanding women scientists from 16 Science and Technology Lagging Countries

## Early Career Fellowship

### ELIGIBILITY

- Women in STEM with a PhD degree
- From 66 eligible countries
- Employed at a university or research institute in any of the 66 eligible countries

### INCLUDES

- Up to USD \$50,000 over 3 years for equipment, training, & more

### FUNDED BY

- Main donor: Canadian International Development Research Centre (IDRC)
- 1 fellowship is supported by Aspen Institute Italia



**Paola Andrea Alvizuri Tintaya**, OWSD 2023 Early Career Fellow from Bolivia (second from the right), pictured with her team on a research expedition, is developing an ultrafiltration membrane from recycled polymers to remove heavy metals from Bolivia's Milluni Lake, aiming to create a more cost-effective and environmentally-friendly water purification process.



**2023 Early Career Fellow Abena Boakye** (centre), based at Kwame Nkrumah University of Science and Technology, Ghana, is researching the nutritional potential of indigenous 'soul crops' and building an accompanying database, as well as exploring the added nutritional value of updating traditional recipes in the Saboba district of Northern Ghana, where malnourishment is severe. Ghana has 3.6 million food-insecure citizens and over 700,000 more were expected in 2023. Dr. Boakye's research guides national and regional policies for community-specific nutrition and food security interventions.

(STLCs). This cohort, the largest to date, reflects the programme's growing influence and the increasing recognition of the importance of supporting women scientists in these regions. The

new fellows, from countries such as Bangladesh, Benin, Bolivia, Kenya, and Uganda, are set to embark on **research projects that tackle some of the most pressing development challenges.**

IN 2023

**28**

EC Fellows selected from

**16**

Science and Technology Lagging Countries

**151**

eligible applications

## Impact of the OWSD Early Career Fellowships Programme

The OWSD Early Career Fellowships Programme continues to be a **game changer for women scientists from developing countries.** The results from a 2023 survey of 40 active Fellows highlight the far-reaching impact of the fellowship on research, capacity building, community engagement, and personal growth.

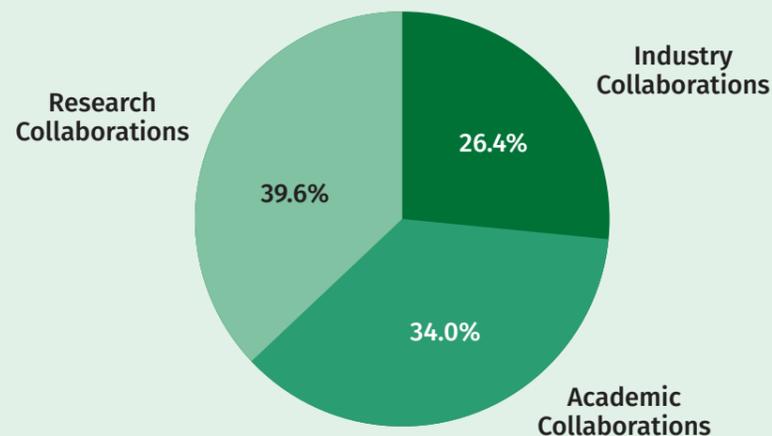
In 2023, the majority of Fellows (93%) stayed committed to their research focus, thanks to critical funding from the fellowship to establish or upgrade laboratories. Nearly three-quarters of Fellows (71%) used OWSD funds to equip their research spaces, and 11 new laboratories were created. This **enhanced infrastructure** allowed Fellows to break new ground in their fields, from pioneering research on climate resilience to creating novel pest control technologies. Many Fellows not only progressed their own

research but also **empowered their teams**, with almost 50% training students and researchers to use advanced equipment.

The fellowship has been a springboard for collaboration. Over 60% of Fellows reported **building partnerships with local and international institutions**,

with new collaborations forming across scientific, academic, and industrial sectors. These partnerships allowed Fellows to expand their networks and amplify their research impact. For many, the fellowship also opened doors to **international conferences and scientific events**, with nearly half (48%)

**Distribution of Collaborations**



**2023 Early Career Fellow Tahsina Farah Sanam** from Bangladesh University of Engineering and Technology is using machine learning to detect multi-stroke gestures and recognize Bangla Sign Language in children with autism spectrum disorder (ASD) through non-intrusive Wi-Fi-based signals, aiming to improve communication and diagnosis methods for children with ASD in Bangladesh

**IN 2023**

**11**  
**new laboratories**  
set up in 2023

**71%**  
**of fellows**  
used their fellowship funds either to set up or upgrade laboratories

**153**  
**outreach activities**  
implemented

**453**  
**beneficiaries of activities**  
(202 female, 180 male, 71 unspecified)

reporting that the fellowship significantly boosted their ability to travel and engage in global discussions.

The fellowship's ripple effect extended beyond academia. Fellows were active in their communities, leading over 150 **educational and outreach activities** in 2023. They inspired the next generation of scientists, mentored women in rural communities, and introduced sustainable practices in agriculture and water sanitation. Moreover, one quarter of the Fellows reported **influencing local or national policies, advocating**

**IN 2023**

**92%**  
**of fellows**  
reported that the fellowship was highly beneficial for their professional growth

**75%**  
**of respondents**  
have been involved with the National Chapters

**48%**  
**of fellows**  
reported a significant impact of the fellowship on their ability to travel for research, while 20% indicated some impact

**25%**  
**of fellows**  
have proposed or influenced policy changes

**for changes** that benefit not only their scientific fields but also their societies. From shaping climate resilience strategies to pushing for intellectual property reforms, their research is paving the way for real-world change.

The fellowship has also been transformative for the Fellows' careers. Over 90% said **the programme significantly boosted their professional development**, with many achieving promotions and securing additional funding.



**2023 Early Career Fellow Christine Betty Nagawa** from Makerere University, Uganda, is developing reinforced bricks and pavers using recycled plastic and sawdust waste. Her project addresses Uganda's plastic waste challenge while creating affordable, eco-friendly construction materials to support the country's urbanization efforts.

**Responses to survey question:**  
 “Since receiving the OWSD Early Career Fellowships I ...”

- Was promoted **41%**
- Received an increase in salary at my institute **31%**
- Received more authority and/or responsibilities within my institute **69%**
- Received more recognition outside of my institute **67%**
- Was successful in being awarded additional grant funding or fellowships **46%**

A growing number of Fellows are **stepping into leadership roles**, both within their institutions and in broader scientific communities. The fellowship has provided a

platform for women scientists to not only pursue their research but also to become role models and leaders, inspiring those around them.



**“The fellowship helped me upgrade my status from being a scientist to an industrialist. I am a national figure now, with 11 media coverages, including an interview by Nature magazine”**

**Hemu Kafle**, 2019 Early Career Fellow from Nepal and Chair, OWSD Nepal National Chapter



**2019 Early Career Fellow and Awardee Tista Prasai Joshi** delivers a presentation to incoming Early Career Fellows, sharing advices on how to get the most from the fellowships.



**2022 OWSD Early Career Fellows** attending the orientation workshop in Trieste, Italy in June 2023

In 2023, the OWSD Early Career Fellowships programme demonstrated its power to propel women scientists forward, even in the face of significant challenges. With the support of this fellowship, Fellows are making groundbreaking discoveries, leading their communities, and reshaping the future of science.

**The 2022 Early Career Fellowships Orientation Workshop**

In June 2023, OWSD hosted the annual Orientation Workshop for the 2022 cohort of Early Career Fellows in Trieste, Italy. This event marked their **first in-person gathering since the pandemic**, bringing together 18 exceptional women scientists from developing countries. Over the

course of five days, the researchers received training in establishing world-class research centres and laboratories in their home countries. The return to an in-person format allowed for richer

interactions, enhanced learning experiences, and the opportunity to build lasting professional connections.



**“I settled in at my office today, and I am reflecting on the past week’s events with a grateful heart. It was an impactful week, and I have so much to share with my students. Thanks to the OWSD team for this session,”**

**Mary Adjepong** 2022 Early Career Fellow from Ghana and participant in the orientation workshop. Dr. Adjepong is the first OWSD Early Career Fellow whose grant is funded by a new donor, Aspen Institute Italia. She is also made a video for her YouTube channel, sharing her experiences from the week.

# An environmental engineer fighting a battle against pollution in El Salvador's largest river

Water contamination is a global crisis, with pollutants like microplastics, pesticides, and pharmaceuticals increasingly threatening ecosystems and public health worldwide. These emerging contaminants, often invisible to the naked eye, pose severe risks, particularly in regions where water treatment

**“We should acknowledge what we are lacking, so that we can keep working.”**

**Violeta Alejandra Chichique Martínez**

2023 OWSD Early Career Fellow based at Universidad Centroamericana José Simeón Cañas in El Salvador



infrastructure is inadequate. **El Salvador's Lempa River**, the lifeline for over three-quarters of the country's population, is no exception. Once a vital source of drinking water, agriculture, and energy, the river is now dangerously polluted, with far-reaching consequences for the millions who depend on it. In response to this urgent issue, OWSD Early Career Fellow Violeta Martínez has committed her research to investigating and mitigating the pollution in the Lempa River. Since 2021, Violeta has been at the forefront of studying emerging contaminants, using advanced techniques to detect and analyze the presence of harmful substances in the river and the drinking water it supplies. Her research not only highlights the severity of the contamination but also seeks to develop **innovative, cost-effective solutions to remove these pollutants and protect the health of the Salvadoran people.**

By leveraging international collaborations and cutting-edge technology, Violeta's work is offering hope for a cleaner, safer future for El Salvador.



**CLICK OR SCAN**  
TO READ THE STORY OF VIOLETA ALEJANDRA CHICHIQUE MARTÍNEZ

# VISIBILITY: OWSD AWARDS

The OWSD-Elsevier Foundation Awards (OWSD-EF) recognize exceptional women each year who have overcome significant social, economic, and cultural barriers to produce internationally competitive research in their early careers.

Awardees benefit from visibility at high-level conferences and events within their area of research and are often celebrated by national media in their home countries and recognised by government officials.

From 2021 the yearly focus of the awards has been on **research areas related to the United Nations Sustainable Development Goals (SDGs)**. In 2023 the focus was on **SDG 2: Food Security,**

## OWSD Awards

### ELIGIBILITY

- Women in STEM with a PhD degree
- Citizens from 66 Eligible Countries
- Demonstrable impact on the research environment
- Contribution to UN SDGs.

### INCLUDES

- USD 5,000 prize
- Attendance at international events and visibility

### FUNDED BY

- The Elsevier Foundation

**agricultural productivity & sustainable food production.**



**2023 OWSD Awardee Gabriela Montenegro-Bethancourt**, was appointed to a high-level government position as Guatemala's National Secretary for Science and Technology in 2024. She is a nutritionist and food scientist whose work strengthens primary health care in rural Guatemala. Her research focuses on addressing maternal mortality and child malnutrition in impoverished communities, providing health care in Mayan languages, and promoting access to clean water, while empowering women and designing effective nutrition policies.

**2023 Awardees**

In February 2023, OWSD announced the seven awardees selected in 2022, who have made significant contributions in the area of food security, agricultural productivity, and sustainable food production. Awardees were offered travel grants to attend the **5th Global Food Security Conference** in Leuven, Belgium in 2024.



**CLICK OR SCAN**  
TO KNOW MORE ABOUT THE 2023 OWSD AWARDEES

Each year, OWSD provides additional opportunities for awardees and alumnae to showcase their work on global platforms, fostering collaborations and enhancing their professional networks. Notable conferences attended in 2023 include:

**IN 2023**

**53**

Eligible applications

**7**

Awardees

**32-58**

Age range

**SDG 2**

Focus on SDG 2, Food and agriculture

**2023 OWSD AWARDEES**



**Renuka Attanayake**

plant and molecular biology;  
crop disease identification and management  
Sri Lanka



**Carla Fabiana Crespo Melgar**

biotechnology and microbiology;  
increasing agricultural productivity  
Bolivia



**Haneen Dwaib**

nutrition and dietetics;  
obesity and dietary interventions  
State of Palestine



**Eugenie Kayitesi**

food science and technology;  
improved use of indigenous plant-based foods  
South Africa



**Gabriela Montenegro-Bethancourt**

life sciences and nutrition;  
maternal mortality and child malnutrition  
Guatemala



**Munkhjargal Tserendorj**

veterinary medicine, animal and food hygiene;  
diagnosis and treatment of animal diseases  
Mongolia



**Yeyinou Laura Estelle Loko**

entomology, plant genetic resources and crop  
protection; insect pests and resistant crops  
Benin



**2023 OWSD Awardees** celebrated at the 5th Global Food Security Conference in Leuven, Belgium.

- **Dwaib (State of Palestine):** Oxford Statistical Genomics Summer School, UK (18-23 June 2023).
- **Kayitesi (Rwanda) and Loko (Benin):** African Continental Conference on Basic Sciences for Transformation in Kigali, Rwanda (13-14 June 2023).
- **Attanayake (Sri Lanka) and Munkhjargal Tserendorj (Mongolia):** Asian Scientist-Elsevier Foundation Salon for Leadership in STEM, Singapore (25-26 May 2023).
- **Crespo Melgar (Bolivia) and Montenegro-Bethancourt (Guatemala):** World Conference of Science Journalists, Medellin, Colombia (27-31 March 2023).
- **Nkansah (Ghana - awarded 2021):** World Chemistry Congress IUPAC CHAINS, The Hague, Netherlands (20-25 August 2023).



**2023 OWSD Awardee Munkhjargal Tserendorj**, a Veterinary Doctor with a PhD in Animal and Food Hygiene, holding her award. Her work focuses on controlling significant tick-borne diseases in Mongolia, where her research has led to effective strategies for reducing economic losses related to small ruminant populations and supports national prevention and control programmes.

# STORYTELLING, PARTNERSHIPS AND ADVOCACY

OWSD recognizes that advancing the role of women scientists from the developing world requires more than providing resources. Training and tools for telling compelling stories can be game changers.

In 2023, OWSD placed storytelling, partnerships, and advocacy centre stage as **critical tools** that women scientists from developing countries can use to amplify their contributions to both research and economic sustainability. Through compelling narratives, strong collaborations, and targeted advocacy efforts, OWSD continues to promote visibility for women scientists, **driving the global agenda for gender equality in science** and ensuring that fellows' research and activities inform policies, inspire future generations, and address global challenges.

## Partnering with the Training Centre in Communication (TCC Africa) to amplify women scientists' voices in Africa

Based at the University of Nairobi, Kenya, TCC Africa plays a crucial role in advancing the visibility and representation of women scientists, particularly in developing countries. In 2023,

the partnership with OWSD focused on three key objectives: supporting the OWSD Visibility Plan, strengthening external communications at both regional and national levels, and enhancing the dissemination of research outputs.



More than 130 OWSD members joined an **online 'podcast production' training** on July 5, 2023, led by Adelle Onyango, host of the Legally Clueless podcast, and Joy Owango from TCC Africa. Adelle guided participants through the essentials of content creation, sustainability, and podcast marketing, sharing tips on crafting engaging episodes and leveraging social media. The session also covered technical aspects like low-cost equipment options and AI tools for editing.

Initiatives such as “OWSD Talks”, featuring interviews with OWSD members, and impactful webinars on topics like social justice in universities and gender mainstreaming, were central to this effort.

**Training sessions on podcast creation** and how to improve scholarly communication equipped OWSD members with essential skills for further promoting their work within the global scientific community.



## Strengthening a long-term partnership with the International Science Council to advance gender equality in science

Since 2020, OWSD has fostered a robust partnership with the **International Science Council (ISC)**, collaborating on initiatives that promote gender equality and diversity in science. In May 2023, OWSD actively participated in the **ISC General Meeting in Paris**, where OWSD Coordinator, Tonya Blowers, presented on the inclusion and participation of women in science, alongside strategies for navigating digital communications in the face of evolving technologies.

This long-term collaboration was further strengthened through OWSD's participation in the **ISC's Global Knowledge Dialogue Asia** in October. OWSD members shared valuable perspectives on diversity in science systems and ethical challenges for scientists in their home countries. ISC's financial support for the participation of six OWSD national chapter leaders from Asia highlighted the continued impact of this enduring partnership.

## Aspen Institute Italia partnership to support Early Career Fellowships

In 2023, **Aspen Institute Italia** sponsored an OWSD Early Career Fellowship, awarding a USD 50,000 grant to **Mary Adjepong**, a researcher at Kwame Nkrumah University of Science and Technology (KNUST) in Ghana. Mary Adjepong's work aims to develop nutrient-rich



Prativa Pandey, 2019 Early Career Fellow from Nepal, speaks at the **ISC Global Knowledge Dialogue** in Kuala Lumpur (October 6, 2023). She was part of an OWSD delegation of National Chapter Executive Committee Members and Fellows, sponsored by ISC, representing OWSD at the event.

complementary food products in Ghana and improve cognitive development. This partnership

represents a shared commitment to fostering diversity and inclusion in scientific research, laying the foundation for future



**Aspen Institute Italia** invited Mary Adjepong to Rome, where she was honored at the Aspen Institute Italia Awards for scientific research and collaboration between Italy and the United States. During the event, Dr. Adjepong delivered a compelling presentation on her innovative food-based approaches to improving childhood development through nutrition in Ghana. Her participation, which included speaking on a panel, underscored the critical importance of early diagnosis through biomarkers and tailored diets to address malnutrition and neurocognitive deficits.



Participants at **Trieste NEXT 2023** engage with a memory card game created by OWSD, an experiment in gamification designed to raise awareness and shift perceptions about women scientists from developing countries. Trieste NEXT is an annual festival of science and innovation, where OWSD tested this interactive approach to highlight the vital contributions of women scientists from the Global South.

collaborations to uplift women scientists in the Global South.

**Alberto Quadrio Curzio**, President Emeritus of the Italian Academy of Sciences and OWSD Ambassador, was instrumental in initiating this partnership, which seeks to bridge the gap between Italian scientific institutions and OWSD. Aspen Institute Italia acknowledges the crucial role of women scientists from developing countries, not only as participants in global scientific discourse but as leaders shaping its future.

**The role of storytelling and communications in driving OWSD's mission**

In 2023, OWSD made significant strides in **aligning communication strategies with fundraising efforts**, laying the groundwork for sustained

✓ Subscribe to **OWSD mailing list** to receive updates: <https://lists.ictp.it/mailman/listinfo/owsdw-update>

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

**OWSD Instagram:**  
owsdsecretariat

**OWSD X:**  
OwsdSecretariat

**OWSD Facebook:**  
owsd.net

**OWSD Youtube:**  
OWSD Secretariat

**IN 2023**

**LINKEDIN**  
**+ 142%**  
Followers

**FACEBOOK**  
**+ 24%**  
Followers

**X (EX TWITTER)**  
**+ 20%**  
Followers

**INSTAGRAM**  
**+ 12%**  
Followers

**+ 12,500**  
Subscribers  
to OWSD mailing lists

**50**  
selected opportunities  
and announcements  
disseminated over the year

support and better information management. **Innovative storytelling** was a highlight this year, through special projects to celebrate the **25th Anniversary of the OWSD PhD Fellowships** (funded by Sida since 1998). These projects employed creative tools to highlight the fellowship's impact and demonstrated OWSD's

commitment to amplifying the voices of women scientists. OWSD also explored **gamification as a unique strategy for advocacy and policymaking**, creating engaging, interactive experiences to immerse audiences in the organization's mission. Foundations were set and partnerships established to further develop gamification as a communication tool in future projects.

**OWSD's social media platforms** experienced substantial growth in 2023, particularly on LinkedIn, Facebook, and Instagram. By aligning with global digital trends, especially the rising popularity of short-form video content, OWSD was able to increase engagement and extend its reach. Additionally, OWSD continued to make effective use of its **mailing lists** to maintain consistent communication with members and stakeholders.

Between 2022 and 2023, OWSD produced and released 15 short videos as part of the **OWSD Visions project**, a storytelling initiative that shines a spotlight on the inspiring journeys of women scientists from the Global South. Guided by Italian filmmaker Nicole Leghissa, audio visual communicators were trained online and in person with support from OWSD national chapters. The films highlighted the stories of 10 Early Career Fellows from countries including Benin, Bolivia, Cameroon, Congo, Ecuador, Ghana, Nepal, Tanzania, and Uganda, as well as OWSD members from Colombia, Jordan, Pakistan, and Senegal.



A still from the **OWSD Visions** episode. Dr. Rana Basem Dajani is a pioneering molecular cell biologist from Jordan whose research explores the genetics of ethnic populations and the epigenetic effects of war and displacement on future generations in Jordan. This episode highlights the impact of her groundbreaking work and its significance for the region.

IN 2023

15

New films

10

Early Career fellows are protagonists in the films

3

Film festivals



OWSD screened selected OWSD Visions films at the Sguardi Altrove Film Festival in Milan, Italy, in March 2023, an international festival showcasing films directed by women.

A selection of these films was showcased at **three major events in Italy** in 2023: an in-person event in Trieste in February, a film festival in Milan in March, and a screening at the prestigious Accademia dei Lincei in Rome

in September. These events provided audiences with a unique opportunity to engage with the **powerful narratives of women scientists** making transformative contributions in their fields and communities.

The **Short Films Showcase at the Accademia dei Lincei in Rome** in September was a standout event. Endorsed by the **Ministero degli Affari Esteri e della Cooperazione Internazionale (MAECI)**, it underscored OWSD's

pivotal role in advancing science and development. The event opened with remarks from Roberto Antonelli, President of the Accademia Nazionale dei Lincei, followed by contributions from Alberto Quadrio Curzio, President Emeritus of the Accademia and OWSD Ambassador. The government's appreciation was further conveyed through a message from Maria Tripodi, Undersecretary of State for Foreign Affairs and International Cooperation. Presentations by OWSD Coordinator Tonya Blowers, filmmaker Nicole Leghissa, and Aspen-funded Early Career Fellow Mary Adjepong emphasized the significance of the films and their role in elevating the work of women scientists globally.

**Events and international influence**

OWSD members played a prominent role in international panels and conferences in 2023, contributing valuable insights on gender in STEM, science communication, and the role of women in addressing global challenges.

In March 2023, OWSD participated in the **5th United Nations Conference on the Least Developed Countries (LDC5) in Doha, Qatar**. During this event, OWSD hosted a panel session where young OWSD members from LDCs shared their stories, demonstrating the organization's support for their leadership and scientific contributions.

In June 2023, OWSD Secretariat leaders participated in a **Gender in STEM Workshop in Accra, Ghana**, sponsored by Canada's IDRC. The workshop brought



Aspen-funded Early Career Fellow Mary Adjepong, OWSD Coordinator Tonya Blowers, and filmmaker Nicole Leghissa during the panel discussion at the Short Films Showcase at the Accademia dei Lincei in Rome, Italy.



Prativa Pandey, 2019 Early Career Fellow, Tonya Blowers, OWSD Coordinator, Fathiah Zakham, 2020 OWSD Awardee and Romain Murenzi, TWAS Executive Director at the **Fifth United Nations Conference on the Least Developed Countries (LDC5)** in Doha, Qatar.



Veronica Okello, Saphina Biira, 2020 and 2022 Early Career Fellow (respectively), Mamadou Ossenatou, 2019 PhD Fellow, and Laura Okello, 2023 Awardee at the **African Continental Conference on Basic Science for Transformation** in Kigali, Rwanda.



OWSD delivered a compelling presentation in Trieste, at the **#InsiemepergliSDG** event sponsored by the Italian Ministry for Development and Cooperation (MAECI).

together research teams from across the Global South to examine barriers to women's participation in STEM disciplines and share best practices for promoting gender equality. OWSD also played a significant role in the **African Continental Conference on Basic Science for Transformation in Kigali, Rwanda**, in June 2023. The conference promoted sustainable development through the application of basic sciences in Africa, and OWSD moderated panels and facilitated discussions on promoting basic sciences among women and girls.



At the **#InsiemepergliSDG event in Trieste, Italy**, in November 2023, OWSD highlighted the crucial link between women in science and the achievement of the Sustainable Development Goals (SDGs). The presentation showcased success stories of women scientists supported by OWSD, emphasizing their contributions to local communities and global challenges.

In December 2023, OWSD participated in the **Global Refugee Forum in Geneva** as part of the UNESCO delegation, where OWSD presented the new WISDOM Master's fellowships for displaced women scientists, seeking matching funding through the forum's pledge mechanism.

# OPERATIONAL STRUCTURE AND DONOR COMMITMENT

OWSD is a programme unit of UNESCO, the United Nations Educational, Scientific and Cultural Organization, and is **administered under TWAS**, the World Academy of Sciences. OWSD is governed by an Executive Board elected by OWSD members every five years.

The Secretariat of OWSD is **hosted on the campus of the Abdus Salam International Centre for Theoretical Physics (ICTP)** in Trieste, Italy. OWSD is grateful to the following donors for their generous support of OWSD programmes in 2023:



Swedish International Development Cooperation Agency (Sida)

PhD fellowship programme and Secretariat support



Canada

International Development Research Centre (IDRC) - Canada

Early Career fellowship programme and Secretariat support

THE ELSEVIER FOUNDATION

The Elsevier Foundation

Awards programme



Aspen Institute Italia

Aspen Institute Italia

1 Early Career fellowship

OWSD additionally thanks the following private donors who contributed to our programmes in 2023:

One Skin Technologies, John Campbell, Nadia Deen, Karin Perez Leguia  
Leticia Alves da Silva, Omneya Attallah

# FINANCIAL SUMMARY

Financial income and expenditure for the year 2023 is reported in the tables below.\*

INCOME <sup>1</sup>	AMOUNT (USD)
<b>Balance brought forward 01.01.2022</b>	<b>1,279,354,71</b>
International Development Research Centre (IDRC), Canada	3.770.459,93
Swedish International Development Agency (Sida)	2.407.229,73
Elsevier Foundation, USA	200.000,00
Contributions from OWSD members	8.480,21
Interest	496.730,00
Transfer to OSWD Reserve Fund	(200.000,00)
<b>TOTAL INCOME</b>	<b>7.962.254,58</b>

EXPENDITURE	AMOUNT (USD)	
	APPROVED BUDGET	SPENT
<b>1) Fellowships</b>		
1.1 PhD Fellowships	2,000,000.00	1.023.574,41
1.2 Early Career Fellowships	2,050,000.00	1.675.643,80
1.3 Additional Early Career Fellowships	785,000.00	772.526,04
1.4 Fellowship grants continuation	551,000.00	516.076,53
<b>Subtotal for (1)</b>	<b>5,386,000.00</b>	<b>3.987.820,78</b>
<b>2) Workshops, Trainings and Resources</b>		
2.1 PhD Fellows Additional Support Allowance Funds	200,000.00	76.000,00
2.2 Early Career Orientation Workshops	90,000.00	89.662,73
2.3 Fellows and Members Training Curriculum - Global South Partner 1	100,000.00	46.926,41
2.4 Fellows and Members Training Curriculum - Global South Partner 2	100,000.00	98.547,93
2.5 OWSD Mentoring Network	10,000.00	4.945,00
2.6 OWSD Conferences and Events	20,000.00	8.896,93
<b>Subtotal for (2)</b>	<b>520,000.00</b>	<b>324.979,00</b>

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1. All contributions are expressed in US dollars and have been converted using the UN official rate of exchange in effect at the time the contributions were received.

EXPENDITURE	AMOUNT (USD)	
	APPROVED BUDGET	SPENT
<b>3.1) OWSD Membership</b>	115,000.00	75.241,24
3.1.1) OWSD Executive Board (including elections)	15,000.00	4.884,53
3.1.2) OWSD General Assembly	0	0
3.1.3) Alumnae support	100,000.00	70.356,71
<b>3.2) OWSD Awards Scheme</b>	120,000.00	109.761,36
3.2.1) Awards	50,000.00	60.000,00
3.2.2) Travel of awardees	50,000.00	31.776,36
3.2.3) Alumnae support	20,000.00	17.985,00
<b>3.3) Communications, Visibility and Outreach</b>	174,000.00	78.838,13
3.3.1) Video consultant	30,000.00	22.545,92
3.3.2) Graphic design consultant	10,000.00	4.381,16
3.3.3) Global online search portal for OWSD members and fellows	90,000.00	18.741,09
3.3.4) Software licenses and tools	4,000.00	1.949,39
3.3.5) Digital and print materials (including website)	30,000.00	14.246,22
3.3.6) Staff travel	10,000.00	16.974,35
<b>Subtotal for (3)</b>	<b>409,000.00</b>	<b>263.840,73</b>
<b>4.1) Monitoring &amp; Evaluation</b>	60,000.00	34.039,40
4.1.1) M&E Consultant	30,000.00	29.135,46
4.1.2) Research (e.g. indicators and eligibility)	20,000.00	0
4.1.3) Mid-term evaluation	0	0
4.1.4) Database (FileMaker) consultant	10,000.00	4.903,94
<b>4.2) Implementation costs</b>	1,928,600.00	1.603.846,17
4.2.1) Programme support staff	1,368,600.00	1.171.232,11
4.2.2) Administrative and finance support staff	430,000.00	341.646,89
4.2.3) Operational expenses	130,000.00	90.967,17
<b>Subtotal for (4)</b>	<b>1,988,600.00</b>	<b>1.637.885,57</b>
Management costs	487,732.00	344.814,63
<b>TOTAL EXPENDITURE</b>	<b>8,791,332.00</b>	<b>6.559.340,71</b>
<b>Savings on prior years' obligations</b>		<b>507.328,96</b>
<b>Excess (shortfall) of income over expenditure</b>		<b>1.910.242,83</b>

RESERVE FUND <sup>2</sup>	AMOUNT (USD)
Amount available at the beginning of the period	200,000.00
Transfer from OWSD account	200.000,00
End of service entitlements	-44.606,81
<b>Reserve Fund balance end of period</b>	<b>355.393,19</b>

2. The purpose of the Reserve Fund is to cover the end of service entitlements of OWSD Staff.

# LOOKING FORWARD

## OWSD's path to sustainability and impact



**2022 Early Career Fellows** in Trieste, Italy, during the orientation workshop in May 2023.

In 2023, OWSD faced significant financial challenges, but the **resilience and adaptability of the OWSD community** turned this into an opportunity for **institutional transformation**. The Secretariat responded to funding constraints with innovation, fostering partnerships, and shifting to an **advocacy-centered approach**. This process of positive re-evaluation touched every aspect of the organization, from communication and fundraising strategies to programmatic objectives, laying the groundwork for a more sustainable future. The **creation of the WISDOM Master's Scholarship program**

for Displaced Women Scientists in STEM, in collaboration with UNHCR, exemplifies OWSD's capacity to adapt and expand its global reach, even in challenging times. OWSD remains deeply rooted in the success of its core programmes, particularly the PhD Fellowships, which have been a cornerstone of OWSD's contribution to gender equality in global research for the last 25 years. Although on pause for now, the programme, alongside the Early Career Fellowships and

Awards, is the foundation on which future initiatives will be built. OWSD's strategic vision for 2024 and beyond will continue to draw on the power of committed individual women scientists from developing countries to transform their environments, creating sustainable research cultures and gender-aware academic institutions. OWSD will diversify funding sources and develop new institutional partnerships, working at national and regional level.

**OWSD calls on members, supporters, and potential donors to share suggestions and funding proposals to help sustain and expand these vital programmes.**

For those inspired by OWSD's mission, we invite you to join us in shaping the future of women in science. **Your suggestions and support are crucial** in helping OWSD continue to make a lasting impact. Together, we can ensure that women scientists from developing countries have the resources and opportunities they need to thrive and make an impact on the quality and relevance of scientific research throughout the world.

**Please reach out to us at [owsd@owsd.net](mailto:owsd@owsd.net) with the subject line "OWSD for the future" with your suggestions or pledges to help sustain our mission. Together, we can secure the future of women in science. #FundTheFutureOWSD**



## ***Women. Science. Development.***



**The Organization for Women in Science for the Developing World**

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