THE ELSEVIER FOUNDATION Annual Report 2023



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Foreword from Youngsuk "YS" Chi President, The Elsevier Foundation, and Ylann Schemm, Executive Director, The Elsevier Foundation

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Foreword

2023 was another turbulent year for the world, with geopolitical tensions, economic challenges and effects of the climate emergency visible around the world. Against this backdrop, it is more important than ever to accelerate action that supports the achievement of the United Nations Sustainable Development Goals (SDGs) by 2030. This year, STM Association, the academic publishing industry organization launched the <u>Sustainability Roadmap</u> to provide a concrete guide for publishers. Elsevier, a scientific publisher and information analytics company and funder of the Elsevier Foundation, is a key contributor to the Roadmap and has long been focused on supporting the SDGs. In particular, we are focusing our efforts and resources on making unique

contributions to advance inclusion in research and healthcare, as well as climate action. But what does this mean in practice? For Elsevier, this translates into many intentional, data-led actions including tracking diversity in senior leadership and gender equity across 2900 journal editorial boards, embedding a gender dimension in the research, embracing responsible AI, health product innovation, supporting Elsevier Foundation programs and continuing to share with the communities we serve the latest data and insights into gender balance in research.

Elsevier's 2024 Gender Report, Towards Gender Equity in Research & Innovation, is a landmark examination of gender equity in research across 18 countries and the European Union's 27 member states. Twenty-five years ago, women made up only 34% of researchers globally and approximately 15% of senior researchers. Today, those numbers are 41% and 30%, respectively. Looking beyond participation, women are strong in areas such as SDGs and interdisciplinary research, health disciplines, policy and citations—indicating their significant commitment to societal impact. But even as women enter the "parity zone" in many areas, progress is still uneven across scientific fields, geographies and patent applications, underscoring the need for vigilance and

targeted, evidence-based interventions from decisionmakers, as well as funders large and small.

The Elsevier Foundation has been able to use findings like these to inform which issues, projects and groups to focus on to have the most impact. Over the past two decades, we have built a portfolio of partnerships that support underrepresented researchers, librarians and health care professionals through role modeling, mentoring, raising their visibility and spotlighting their contributions. Our partnerships range from the Chemistry for Climate Action Challenge, Aidsfonds' sexual and reproductive digital health program in Indonesia, awards for women scientists from developing countries, to an Implementation Science Fellowship program tackling health inequities in North Carolina and the Research₄Life Country Connectors program growing research capacity in the global South. It is by working in and crucially with — communities most affected by complex global issues, and tapping Elsevier's content, data, analytics and networks, that we believe we can have the most impact and bring much needed diverse perspectives into the research and health

Throughout 2023, we worked closely with our partners, colleagues and our Board members to ensure that our strategy supports the Elsevier Foundation's ability to operate as a catalyst for innovative, early-stage initiatives. We found that the words of one of our Board members really embodies the impact we are striving to achieve: "The vision is around the impact that we're having on individuals as well as the communities that we serve. One person, one impact has this huge ripple effect like throwing a pebble in a pond, and you start to see ripples, and it goes on for miles and miles and miles"

22nd April, 2024

Youngsuk "YS" Chi President, The Elsevier Foundation

Ylann Schemm Executive Director, The Elsevier Foundation



The Elsevier Foundation Board

The Elsevier Foundation is governed by a Board of 6 external and 5 Ex-Officio members. External Board members serve 3-year renewable terms, and are experts in sustainability, development, innovation, diversity, education, research and health. Ex-Officio members are leaders within Elsevier and RELX, Elsevier's parent company, who are deeply supportive of the Foundation's mission.

The Elsevier Foundation Board meets bi-annually to provide strategic guidance for the Foundation's programming and governance. Throughout the year, Board members also provide expertise and advice around new partnership development opportunities. The President of the Board, Youngsuk 'YS' Chi, presides over the annual meeting which provides strategic guidance on program priorities, new partnerships, emerging issues and best practices as well as sound ethical, financial and legal governance.



Alexandra Brewis Regents Professor Arizona State University



Joyeeta Gupta Professor University of Amsterdam



Yuko Harayama Co-Director



Michael Makanga **Executive Director EDCTP**



Edwige Thomas VP, Clinical Solutions Northwell Health Holdings



Kumsal Bayazit CEO Elsevier



Márcia Balisciano Global Head of ESG and Corporate Responsibility, RELX



Youngsuk "YS" Chi **President.** The Elsevier Foundation Chairman, Elsevier Director, Corporate Affairs, RELX



Esra Erkal Executive VP, Global Communications, Elsevier



Jan Herzhoff President, Health Markets Elsevier



Kevonne Holloway Managing Director Global Content Partners Elsevier

The Elsevier Foundation Team

On a day-to-day basis, the Elsevier Foundation is run by Ylann Schemm, the Executive Director of the Foundation and supported by a small core team consisting of a Partnerships Director, a Partnerships Manager and a Communications Director, as well as a specially appointed Treasurer and Legal Counsel. The Foundation team also regularly draws on the technical insights of a small number of Elsevier advisors in data science, health informatics, nursing education and inclusion and diversity.

In addition to annual programmatic funding, Elsevier covers the administrative costs of running the Foundation and offers in-kind support through office space, marketing, media outreach, content, data, analytics, expert networks and volunteer support as needed.



Ylann Schemm Executive Director The Elsevier Foundation Elsevier



Domiziana Francescon Partnerships Director The Elsevier Foundation Elsevier



Maha Rhannam Partnerships Manager The Elsevier Foundation Elsevier



Rebecca Clear **Communications Director Corporate Responsibility**



Michal Jablonka Treasurer Elsevier



Kenneth R. Thomson II **Legal Council** RELX



Mevan Samarasinghe **VP and Technical Fellow** Elsevier Elsevier Foundation Advisor



"I'm proud of how the Elsevier Foundation has matured over the past 19 years, and how it helps Elsevier to give back. The Foundation now serves as a catalyst and experimental incubator of new, innovative and exciting projects, sharing and embracing the same goal of driving inclusive research and health."

Our strategy

In 2023, we undertook a root and branch review of our progress in the last 19 years and consulted widely with partners, colleagues and our Board members on our direction in the years ahead. The result is a renewed strategic focus on advancing inclusion and equity in research and healthcare by increasing the participation of underrepresented and underserved communities in research and health ecosystems.

In our vision, the Elsevier Foundation serves as a catalyst for early-stage interventions that are founded in an innovative proof of concept that can ultimately lead the programs to bring on new partners, scale up and drive systemic change. We believe this pragmatic and agile approach can have a powerful multiplier effect by adopting and accelerating proven ideas.

We recognize that the issue of inequity in research and healthcare is a major obstacle to achieving the UN SDGs and that this cannot be solved by any one organization alone. To drive systemic change, we need diverse stakeholders to work in partnership, take evidence-based action and measure progress.

Our theory of change involves a 3-pronged approach. First, we partner with changemaker organizations to support early-stage interventions. Second, we enable scaling-up through partner, alumni and funder communities. Third, we leverage our broad networks through the Elsevier Foundation and across the research and healthcare communities, as well as Elsevier's cutting-edge capabilities and the support of colleagues around the world who lend their time and expertise to amplify our impact.

Everything we do is rooted in a strong evidence base and dataled impact evaluation. The measurable effects of our work include established indicators for successful project implementation, awards and grants to support change agents and influence career success and networks, new pathways for sustainable funding and knowledge exchange. As we unlock the power of networks and as change agents become role models, the wider benefits of our work include influencing policy and funding decisions with longterm impact on equity in the research and healthcare ecosystems.

Our vision: Where we want to be in 2030.

We are a catalyst for inclusive research and health partnerships, convening and spotlighting changemakers to accelerate early-stage interventions for systemic change in research and health equity.

ose.

To build capacity and equity in research and health for an inclusive and sustainable future.

Our values.

- Inclusive. We are passionate about inclusion, supporting underserved and underrepresented groups via equitable
- partnerships
- Collaborative. We work in partnership with research and health communities to foster knowledge exchange.
- Impactful. We are evidence based and systematically measure our progress.
- **Experimental.** We stimulate early-stage innovative projects to support scale up.
- Sustainable. We support our partners to develop lasting solutions with a community of funders.

2005

Mission-driven grants focused on women in STEM and libraries in the gloabal South.

2015

A new partnerships-driven approach better aligns with the UN Sustainable Development Goals.

2021

Climate action-focused partnerships portfolio with a strong gender focus.

2012

OWSD-Elsevier Foundation Awards recognize women researchers in the Global South.

2020

Race & ethnicity portfolio aims to tackle health and research disparities in underrepresented communities.

2022

New portfolio supports inclusive research partnerships for early-career researchers.



The Elsevier Foundation and Elsevier: Advancing the UN SDGs

Creating a healthy, equitable and environmentally sustainable world is the most pressing challenge of our time. It is vital that research is representative of all communities – designed, conducted, disseminated and implemented in a way that drives impact on the UN SDGs. By using our high-quality content, innovative tools, data-led insights and convening power to enable progress on sustainability, we support research and health communities that contribute to an equitable and inclusive society.

The Elsevier Foundation forms an integral part of Elsevier's <u>corporate responsibility program</u>, which centers on unique contributions to sustainable development in health, gender, reduced inequalities and climate action.



Inclusive research and health

Health is our most valuable asset, and we believe that everyone deserves access to the best possible care. The 2023 <u>Clinician of the Future</u> report offers a comprehensive overview of healthcare professionals' thoughts on industry changes and challenges, particularly the emergence of generative Al solutions. <u>The Lancet Global Health commissions</u> identify key actions and inform policy makers by bringing together experts to reflect on burning health issues. Technology also plays a vital role in training future clinicians. In 2022, <u>Complete Anatomy</u>, released fully interactive 3D models of the female body, and has added diverse <u>skin colors</u>, <u>faces and complexions</u> to reflect patients more accurately – and the <u>medical students hub</u> offers free content, new tools and advice from experienced professionals.

Elsevier, including The Lancet and Cell Press, is also partnering with the MESSAGE (Medical Science Sex and Gender Equity) project, improving the integration of sex and gender considerations in data collection, analysis and reporting in biomedical, health and healthcare research in the UK. The Elsevier Foundation, in turn, provides a special focus on inclusive health partnerships tackling health disparities and increasing access to training and care for those who need it most.



Making progress towards a more inclusive research ecosystem.



World's first & most expansive 3D human anatomy model featuring different skin tones & facial features to tackle racial bias in healthcare.

"From Elsevier's 2023 Clinician of the Future report, we learned that many nursing students are under pressure and thinking of dropping out of nursing as a career. The Elsevier Foundation's longstanding support for nursing scholarships, faculty excellence and nurse leadership shows we are focused on tackling the right issues." — JAN HERZHOFF,

PhD. Member of the Elsevier Foundation Board





Our mission is to help science and healthcare realize its full potential through quality content, analytics and inclusion. We bring together the best minds in our <u>I&D Advisory Board</u>, cooperating on meaningful partnerships with the <u>Gender Summits</u> and publishing <u>analytics reports</u> on women's participation, career progression and perceptions such as the 2024 Progress Toward Gender Equity in the Research Workforce. In addition, the Elsevier Foundation has supported accelerators, training and awards for women in STEM.

As a partner in the research community, Elsevier has a role to play in reducing inequalities. We are a founding and driving partner of Research4life, a UN-publisher partnership providing training and online access to research in the global South. To address persistent bandwidth inequities, we have continued to support the donation of physical resources with more than 700,000 books to Book Aid International alone over the past decade.

"Since the launch of the UN SDGs in 2015, the Elsevier Foundation has gone through some real soul-searching to embed the ethos, practice and approach of the SDGs across all of their partnerships." — MÁRCIA BALISCIANO, Member of the Elsevier Foundation Board



10 ways Elsevier is using data to drive inclusion

Elsevier also aims to be accountable to communities affected by racism and discrimination by spearheading the development of a gender, race and ethnicity self-reporting identity schema and working with the Joint Commitment for Action on Inclusion & Diversity in Publishing to ensure a strong evidence base for benchmarking and interventions, and ensure adoption by over 60 publishers. We also support inclusive initiatives such as patient access, the Rising TIDE program, and are committed to reducing biases in the publishing industry. At the Elsevier Foundation, we work to increase opportunities, visibility and inclusion for STEM researchers from the global South, women scientists and underserved youth.

Ensuring that knowledge is accessible is also an integral part of our commitment to a collaborative, inclusive and transparent world of research where authors, researchers and academic institutions can share knowledge and build on each other's work. As a leading open access publisher with over 150,000 open access articles in 2022, a year-on-year increase of over 26%, we have crafted transformational agreements with over 1,800 institutions around the world to publish open access.

Through initiative such as <u>accessible design</u>, the IPA's <u>SDG Publishers Compact</u>, STM's <u>SDG Roadmap</u> and national associations like The Publishers Association (UK), we are helping to drive the sustainability agenda across the publishing sector.

"The Elsevier Foundation can make the biggest difference when it finds that sweet spot—supporting their partners with funding and collaboration while tapping Elsevier's unique contributions in content, data, analytics and expert networks. That's the real multiplier effect." — ESRA ERKAL, Member of the Elsevier Foundation Board



Responsible business

At Elsevier we strive to be a <u>responsible business</u>, and one that inspires the industry to evolve in a way that supports the advancement of the SDGs. We are committed to the rapid reduction of greenhouse emissions, aming to achieve <u>net zero emissions</u> before 2040. To help with this, our parent company RELX developed an in-house reporting tool, the <u>RELX CO2 Hub</u>.

Guided by our <u>Climate Advisory Board</u> of experts in the fields of climate research, we have also launched Press Zero – a dedicated project to reduce print copies that has already saved aroubd 370,000 copies of journals, equivalent to 471 tonnes of greenhouse gas emissions.

In 2023, we combined the vast amount of information in Elsevier's Scopus database with subject-matter expertise to gain unique insights into data. This is crucial for meeting our most urgent challenges, as highlighted in our recent reports, <u>Biodiversity research in the Netherlands and worldwide</u>, and <u>Pathways to Net Zero: Global South Research in the Transition to Clean Energy</u>. In our books team, the "Energy with a Purpose" project ensures that all newly contracted titles positively contribute to the energy transition. The SSRN's <u>Climate Action hub</u> continues to highlight early-stage research and helps present curated insights informing the ongoing climate change conversation.



Solar Sister empowers women to eradicate energy poverty

"Climate action is not only a key focus of several important Elsevier Foundation partnerships — such as the Chemistry for Climate Action Challenge--but it has also been integrated as a crucial intersectional lens across many others. This is precisely the kind of approach in development that needs to become best practice." — JOYEETA

GUPTA, PhD, Member of the Elsevier Foundation Board



<u>Chemistry for Climate Action winners develop biodegradable packaging and green energy for cooking and irrigation</u>

Crucially, Elsevier supports prizes and awards, including the Renewable Transformation Challenge — as well as partnerships to advance climate action through the Elsevier Foundation, such as the Chemistry for Climate Action Challenge, which is a cocreation with Elsevier's chemistry journals.

Our work

Since 2005, the Elsevier Foundation has contributed over \$19 million in grants to support over 100 partners in more than 70 countries around the world. The Elsevier Foundation works to champion inclusive health and research through grants and partnerships with non-profit organizations that incubate new approaches, highlight inequities and catalyze change toward the UN Sustainable Development Goals (SDGs).

Funded by Elsevier, a global leader in scientific publishing and information analytics, the Elsevier Foundation is part of Elsevier's <u>corporate responsibility program</u>. By leveraging Elsevier's funding, networks and unique insights in content, data and analytics, the Elsevier Foundation can greatly expand its impact in gender, health, climate action and reduced inequalities.

From 2005-2015, the Elsevier Foundation awarded over 100 grants worth millions of dollars to non-profit organizations focusing on library training, education, infrastructure digitization, as well as nurse faculties, career skills and recognition, benchmarking studies and the advancement of early to mid-career women scholars. In 2016, the Elsevier Foundation launched a series of new partnerships supporting innovations in inclusive health and research — more effectively aligning to the key science, health and technology challenges, as outlined in the UN SDGs. In addition, the Elsevier Foundation offers a special fund to support disaster relief, matching employee donations and volunteering to enable employees to work closely with Foundation partners and support their communities.



- Cluster of beneficiaries: US HBCUs Schools of Nursing scholarships, US Rising Black Scientists Awards, Water First! workshops for African women researchers.
- Country-specific partnerships: with RIKEN in Japan, Aidsfonds in Indonesia, Asian Scientist in Singapore, Concern Worldwide in Somalia, Vitae in the UK, IMC Weekendschool in the Netherlands, Falling Walls in Germany (with global participants).
- Individual awards and grants: OWSD-Elsevier Foundation awards, TWAS Climate Women, Chemistry for Climate Action Challenge, Agents of Change awards, Research4Life Country Connectors.

Fast facts

19 years

of activity

From innovatives libraries in the global South to new scholars, early-career scientists and underserved researchers worldwide.

100 +

partnerships since 2005

Over the years, we have supported organizations working to solve key science, health and technology challenges.

70 +

countries since 2005

We have reached communities worldwide through our programs, partnerships, Awards and Challenges.

6 SDGs

where we focus our work

Our programs are strongly intersectional. The charts represent the percentage of funding allocated to specific SDGs.

\$19m+

donated since 2005

Our spending goes to grants that catalyze change towards the UN Sustainable Development Goals.

60+

women scientists

We have awarded researchers from 30+ global South countries through the OWSD-Elsevier Foundation Women in Science Awards. The prize acknowledges the scientists' achievements, and their commitment to leadership, mentoring and engagement with their communities.

10+

green chemistry projects

From natural biopesticide in Malaysia to ecorestoration in Nigeria, from butterfly attractant in India to wastewater treatments in Jordan, we have awarded excellence in chemistry research through the Chemistry for Climate Action Challenge.

49%

projects in global South in 2023

In 2023, most partnerships and awards targeting low- and middle-income countries focused on the Africa region, with a growing number of projects in the Asia region, and a small cluster in the Latin America one.

51%

projects in the global North in 2023

In 2023, a number of partnerships and awards focused on the European region, especially Germany, the Netherlands and the United Kingdom — while others specifically targeted health inequities in underserved communities in the United States of America.

13

Inclusive Research projects in 2023

In 2023, we consolidated our collaborations with partners working to advance inclusivity in research. Of our 21 total partnerships, 8 were focused on supporting Inclusive Health.

78.1% 63.9% 70% 63.9% 70% 60% 30.8% 30.8% 17.7% SDG3 SDG3 SDG4 SDG5 SDG13 SDG17 Health Education Gender Inequalities Climate Partnerships

Our programs











Our programs address key challenges in research, health and underrepresentation identified by the UN Sustainable Development Goals. Since the launch of the Goals, we have evolved a partnership-driven model to develop our knowledge and networks while facilitating closer, more sustained and impactful involvement in the work of our partners and more effectively leveraging Elsevier's content, data, analytics and networks.

The partnerships we support are strongly intersectional and highlight our commitment to supporting underserved communities around the world for better health outcomes and a more sustainable research ecosystem. They represent our core SDG Focus areas.

Inclusive Research

The future of science requires a robust and diverse workforce drawn from all corners of society. Our partnerships support equity in research across gender, race & ethnicity, and the global South.



Inclusive Health

Our partnerships support organizations working to improve health outcomes in underserved communities around the world, advancing the delivery of health equity for vulnerable populations.



Employee Giving

To encourage community involvement and maximize the impact of charitable giving, the Elsevier Foundation contributes to global disaster relief efforts and provides matching funds to eligible charities supported by Elsevier employees.



"Crucially, recognition and role modelling are some of the essential career accelerators used by the Elsevier Foundation to empower women researchers from Japan to Singapore, Germany, the US and the global South."

— DR. YUKO HARAYAMA, Member of the Elsevier Foundation Board

"The partnerships I see developing within the Elsevier Foundation reflect a deep commitment to the best practices of Inclusion and Diversity in its broadest sense — including an acute awareness of why such factors as gender, ethnicity and geography matter."

— DR. ALEX BREWIS, Member of the Elsevier Foundation Board



II. Our 2023 partnerships

Inclusive research



OWSD-Elsevier Foundation Awards for Early-Career Women Scientists in the Developing World

Celebrating over 50 women across 22 low income countries for their talent and contributions to research.



The Elsevier Foundation Chemistry for Climate Action Challenge

Honoring innovative green and sustainable chemistry solutions which address climate change research.



Material Sciences Agents of Change Awards

Recognize initiatives that focus on intersectionality & encourage systemic change in the Material Sciences community.



Cell Press Rising Black Scientists Awards

Celebrate Black researchers' talent and achievements, and help them grow their networks and opportunities.



Falling Walls
Women Science Talents

Inspire and empower women to take their next career step, and promote female leadership in STEM.



RIKEN
Envisioning Futures

Map the journey of senior women scientists in Japan, shedding light on challenges and best practices.



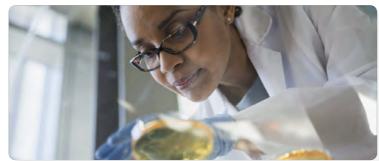
COACh Water First

Expert workshops to build capacity, collaboration & networks to African women scientists working in water research.



The Asian Scientist-Elsevier Foundation Salon for Leadership in STEM

Empower women to take on leadership positions in STEM, tackling underrepresentation of Asian scientists.



Vitae — Tackling the under-representation of UK early career Black researchers

Create a self-sustaining community of Black researchers in STEM via a consortium of Black-led organizations.



The World Academy of Sciences Climate Women

Support projects led by women scientists to address climate change issues through interdisciplinary research.



Research₄Life Country Connectors

Deliver local interventions to enhance access and improve usage of Research4Life resources.



IMC Weekendschool Amsterdam STEM program

Inspire pre-teens from underserved communities to explore STEM careers and pursue their goals.



Girls Inc. of NYC
Pre-G3: The Elsevier Foundation Data
Analytics Preparatory Program

Targeted program to equip and empower underserved teen girls by teaching data analytics through a social justice lens.





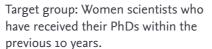






OWSD-Elsevier Foundation Awards for Early-Career Women Scientists in the **Developing World**

Location: Low- and middleincome countries.



Budget: \$60,000 a year (2011, 2013-2018), \$80,000 a year (2019-2021), \$100,000 a year (2022-2024).













Primary outcome

The more diverse the pool of scientists, the more robust the science. Women scientists from the global South often make life-changing contributions to the advancement of the Sustainable Development Goals (SDGs), identifying problems and finding solutions that others have not considered.

Overview

Women scientists in developing countries often experience isolation, lack of role models and visibility. For the past ten years, the Organization for Women in Science (OWSD) has collaborated with the Elsevier Foundation to address these issues through a unique awards and recognition program for early career women scientists from the global South. Since 2013, more than 60 researchers from over 35 countries have won the awards. Each winner receives a cash prize and is sponsored to attend a prominent scientific conference in their field where they receive their awards at a special ceremony, attend workshops and sessions, meet experts, visit local laboratories and institutions, and attend a celebratory networking event.

In 2021, OWSD and the Elsevier Foundation decided to re-focus the awards to align more closely with the United Nations SDGs. The awards' annual focus was shifted from specific scientific disciplines to broader SDG topics and research areas welcoming a range of interdisciplinary approaches. The 2022 awards focused on Climate Action, the 2023 awards on Food Security, and the 2024 ones on Water, Sanitation and Hygiene.

Goals

- Recognize the achievements of outstanding women scientists in the global South, increasing their visibility and helping to advance their careers.
- Inspire and support future generations of women scientists, who often struggle in a research environment that is often indifferent and even hostile to their needs and expertise.

Activities and milestones

- Due to a lack of relevant conferences related to food security in 2023, the 2023 award winners were invited to participate in Elsevier's April 2024 Global Food Security Conference in Leuven, Belgium. The Elsevier Foundation team has worked closely with the conference organizers to ensure the winners' active participation in the event as speakers, moderators, presenters, and more.
- Many winners received additional travel grants through the Elsevier Foundation partnership to continue broadening their networks at conferences and workshops. For example, 2019 winner Uduak Okomo was sponsored to attend the Africa Health Agenda International Conference in March 2023 in Kigali, Rwanda. The 2023 Latin American winners Carla Fabiana Crespo Melgar and Gabriela Montenegro-Bethancourt, and 2016 winner Dr. Magaly Blas, participated in a panel on media, gender and SDG research during the World Conference of Science Journalists in March 2023, co-organized by Elsevier and SciDev. In May 2023, the 2023 Asian winners, Dr Munkhjarga Tserendorj from Mongolia and Professor Renuka Attanayake from Sri Lanka together with 2022 winner, Gawsia Wahidunnessa Chowdhury from Bangladesh, were featured as speakers in the EcoSystem Summit for Leadership in STEM in Singapore.
- The majority of the awards' Selection Committee are from the global South. The Committee includes past OWSD-Elsevier Foundation winners, experts in the SDG field, early career alumnae and OWSD Executive Board members.

Sustainability and future plans

The 2024 winners will attend the International Water Week conference in Singapore in June 2024 as well as the Elsevier Foundation-COACh Water First! Workshop, which will take place immediately after the conference focusing on success strategies for women in water research and policy. Additionally, the winners from the Asian Region have been invited to join the Asian Scientist-Elsevier Foundation Summit for Leadership in STEM as speakers following the Water First! Workshop.

Spotlight on the 2024 winners — Water, Sanitation and Hygiene

The research conducted by the 2024 award winners explores pioneering ways of tackling the water quality challenge, from using hydrological modelling to plant virology and ranging from socioecological systems to microbiology. The prize also acknowledges the scientists' commitment to leadership, mentoring and engagement within their communities, including the use of innovative technologies in their research.

- Augustina Clara Alexander, University of Dar Es Salaam, Tanzania: water supply and treatment, hydrological modelling, climate change. (collage, third from left)
- Tasrina Rabia Choudhury, Bangladesh Atomic Energy Commission, Bangladesh: environmental restoration, water quality improvement. (collage, second from left)
- Shirani Manel Kumari Widana Gamage, University of Ruhuna, Sri Lanka: applied microbiology, plant virology, bioinformatics. (collage, fourth from left)
- Lidia Antonella Rivera Peñalva, Coral Reef Alliance, Honduras: marine biology, fisheries, socioecological systems. (main photo)
- Zubeda Ukundimana, Kampala University, Uganda: wastewater treatment, sanitation and hygiene. (collage, first from left)

How science can help feed the future

Personal experience with food insecurity led Prof Eugénie Kayitesi to pursue research into making indigenous foods more nutritious — and publish it open access.

Eugénie Kayitesi spent the first seven years of her life moving from one refugee camp to another as she and her parents fled the civil war in Uganda. She experienced first-hand the devastating effects caused by not having enough food:

"From one country to another, a lack of food was part and parcel of that experience. I saw people die from hunger or malnutrition-related issues." The experience led her to the path she is on today. Through her research, Eugénie hopes to improve nutrition, diet and food security in Africa and beyond. "I think for most people, your career choices, your drive, is based on some of your experiences."

Eugénie is an Associate Professor in the <u>Department of Consumer and Food Sciences at the University of Pretoria</u>, South Africa. She has published more than 30 peer-reviewed international journal articles and book chapters, received multiple awards and is a World Academy of Science (TWAS) Young Affiliate. This year, she received an <u>OWSD-Elsevier Foundation Award for Early Career Women Scientists in the Developing World</u>.

"Education was a saving grace"

It was in a refugee camp in the Democratic Republic of Congo that Eugénie started primary school. This inspired another professional desire: the wish to be a teacher: "Our teachers were all volunteers that decided to bring the children together and start—teaching.—That teaching environment took us away from our everyday experiences and allowed us to just be children learning, playing and singing together. It felt like education was a saving grace."

After the war in Uganda came to an end, Eugénie and her family returned to the country. She started upper primary school education, walking kilometers each day to get there. By this time, she had discovered an aptitude for science. Her father, who was a champion of her education, hoped for her to become a doctor while Eugénie maintained her dream of going into teaching:

"My father has been a great anchor in my life. My mum died when I was young as we moved between camps. Since then, my father has been the person I could really depend on."

Despite being part of a community that considered marriage more useful for girls than education, her father remained adamant that she deserved her chance with schooling: "My father didn't see any reason to stop me going to school. He believed that as long as I was good at something, I should be allowed to pursue it."

Another traumatic experience ignites "a passion for living a life where I am useful."

A further shattering event would firmly cement Eugénie's desire to do good through her education. Eugénie's parents were from Rwanda, and following the Rwandan Genocide in 1994, Eugénie and her family moved there to seek out surviving family members and see how they could help. It had a profound impact: "I was 14 and arrived in a country that was completely dismantled. It was another traumatic event. But what it did to me is to ignite a passion and dream of living a life where I am useful."

As Eugénie considered how best to help, her thoughts turned again to the pressing issue of lack of food: "The agricultural system was a big mess. There was hunger all around. The whole country was dependent on support."



Prof Eugénie Kayitesi, PhD, in the lab at the Department of Consumer and Food Sciences at the University of Pretoria, South Africa.

As Eugénie progressed through high school, the time came to choose a university course. During a careers show, the prospect of food science as a degree subject was brought to her attention. A woman from a visiting university gave a presentation on malnutrition. Curious, Eugénie asked if this wasn't an issue for doctors to resolve via medicine? The response was an emphatic "no — malnutrition is cured through eating good, nutritious food."

This connection and realization spurred Eugénie to include food science in her university options. She went on to get a degree in Food Science and Technology from the <u>University of Rwanda</u>, followed by a master's degree and PhD from the University of Pretoria.

As her research and scientific career began, she realized she could combine looking into nutrition and food security with teaching, allowing her to continue her first love.

Re-thinking indigenous crops

The core of Eugénie's research involves finding ways to improve the use of readily available, indigenous African plant foods. These include beans, cereals, and green leafy vegetables. There is a strong reason to focus on traditional, locally grown crops:

"You can bring the best ideas from around the world, but will it be a sustainable solution? These crops are well adapted to African soil. Food is also cultural, and these are culturally acceptable solutions. It makes more sense to look within people's existing food basket and see how to improve its nutrition." Through her research, Eugénie has found that combining indigenous crops can help create food products that have nutritional significance:

"Cereals like sorghum and maize are staple foods in sub-Saharan Africa," she explained. "But they have deficiencies in some key micro and macro molecules, like proteins, iron, and zinc. So, we got legumes that are rich in protein, like soybeans and peanuts and combined with the cereals to try and create a food source with an increased level of nutrition."

Her research looked in depth not only at the nutritional level of the product but also at how it was then metabolized in the human body when consumed. This eventually directed the work towards the use of the historic bioprocessing technology around fermentation:

"Fermentation is a very old technology," she said. "Through it, microorganisms break down food and give access to good nutrients. All over the world, people are getting interested in what it does to both the quality of food and its effect on nutrition, health and wellbeina."

One of the next steps is to bring new, nutritionally improved products into the shops and homes of those who need them. Eugénie and her team have been collaborating with colleagues in the USA and Jamaica, looking to see if a product can be created that cuts across and could be readily grown by local farmers in each market:

"At the University of Pretoria, we made products relevant to South African consumers using a combination of flour types," she explained. "And in the USA, they created a gluten-free pasta made from beans. That's a product that's convenient but also healthy. We're looking at how to help our communities to eat the food they have, but in a nutritious manner."

The role of open access

Collaboration with other research teams is one way to help drive development of more nutritional foods around the world. Ensuring wide access to the research findings is another vital route. Here, Eugénie believes open access publishing can play an important role.

It is not only the opportunity for the work to be seen that is crucial. Eugénie notes how feedback on research can be encouraging, along with validation from citations. Widely available research work also opens opportunities to interact and create a network with like-minded researchers.

However, she does sound a note of caution around the need to preserve the high quality of research work that gets published: "It's important that open access still maintains rigorous reviewing processes so all the work people do is credible and valid."

A further challenge is finding funds to publish, with costs often still prohibitively high:

"There's still some work that could be done to make open access feasible for all, including those of us in the developing world," she said. "The discussions we are having now are not unique to Africa. Food, as it always has been, will continue to be a commonality, and we are having less and less of it. So if one idea can help others through a published paper, then that is a plus."

As throughout her formative years, the question of food security is the one that preoccupies Eugénie's thoughts for the future:

"The mark I really want to leave on the science of food is how do we help communities help themselves? How does science feed the future? Populations are growing. Any solutions we offer must be sustainable — for all of us."

This article originally appeared on Elsevier Connect: <u>How science can help feed the future</u>, Milly Sell, 13 September, 2023.









The Elsevier Foundation Chemistry for Climate Action Challenge

Location: Low- and middle-income countries.

Target group: Researchers.

Budget: \$55,000 a year (2018-2020), \$33,000 a year (2021-2024).













Primary outcome

The Challenge awards projects that use green and sustainable chemistry solutions to tackle some of the global South's greatest challenges identified by the UN Sustainable Development Goals.

Overview

Climate change is the most important challenge affecting the future of our planet as underscored by the latest Intergovernmental Panel on Climate Change (IPCC) reports. The need for sustainable ideas to tackle global issues is now more pressing than ever, and chemistry can play a key role in finding practical solutions to urgent challenges and advance the achievement of the UN Sustainable Development Goals agenda.

After 5 successful editions of the Elsevier Foundation Green & Sustainable Chemistry Challenge, and thousands of proposals from around the world, the Challenge was relaunched in 2022 with a new focus on Climate Action (SDG 13). As a collaboration with Elsevier Chemistry journals, the Chemistry for Climate Action Challenge raises awareness and builds networks around how chemistry can help make crucial progress towards the UN SDGs. The Challenge invites applicants from around the world to submit ideas for chemistry solutions to address sustainability challenges—energy, water, waste reduction, recyclability, chemistry, agriculture, medicine and more in low-income countries. In addition to SDG13 Climate Action, the Challenge also supports SDG5 Gender Equality, recognizing the pivotal role that women play in combating climate change. Projects submitted to the Challenge must integrate a gender dimension (such as addressing the role of women in adapting to climate shifts and participating in policymaking and leadership roles) into their projects. The winning projects each receive a prize of €25,000.

Goals

- Highlight innovative green chemistry projects that address issues in developing countries with a strong emphasis on climate resilience.
- Encourage sustainability science, international collaboration, and scientific exchange in developing countries.
- Create visibility for an emerging field in the chemistry world.
- Support the integration of sex and gender dimensions in chemistry research.

Activities and milestones

- The winners of the 2020 and 2021 editions of the Challenge joined a special panel at the 7th Elsevier Green & Sustainable Chemistry Conference to celebrate their achievements in person and share the progress they have made in their sustainable chemistry solutions.
- In 2023, a total of 98 proposals were received from 47 countries.
- The top 5 finalists, from Thailand, Philippines, Malaysia, Somalia and Malawi, were selected to pitch their projects at the 7th Elsevier Green & Sustainable Chemistry Conference in Dresden, Germany (22-24 May 2023).

"Thank you for recognizing the importance of our project. Receiving this award means a lot to us, and it will help save the lives of poor women in our communities. This transformative solution will help with the climate, social and economic challenges we are facing — and help reach the SDGs 2030 targets." — MOHAMEDWELI MOHAMED, 2023 Winner, Samplia

Sustainability and future plans

- The 5 finalists of the 2024 edition will pitch their projects at the 8th Elsevier Green & Sustainable Chemistry Conference in Dresden, Germany (13-15 May 2024). The winners of the 2024 edition will be awarded during a special Award ceremony at the Conference.
- The 2025 edition of the Challenge will be launched in September 2024.

Spotlight on the 2023 winners

The 2023 winners demonstrated how green and sustainable chemistry offers tangible ways to support Climate Action (SDG13) in their local communities.

- Mohamedweli Mohamed from Somalia, (left photo above), Co-Founder and Program Manager of the Somali Social Entrepreneurs Fund, received €25,000 for his project "Shaping an Inclusive Grassroots Energy Transition and Creation of Alternative Energy Sources for Cooking and Irrigation of Field Crops and Vegetable Gardens". The project will engage 50 female-headed households to establish a biogas system for cooking and irrigation of vegetable farms, to promote inclusive economic development, improve energy security, and mitigate climate change.
- Dr Maria Wilvenna Añora from the Philippines (right photo above), Co-Founder of social enterprise AtoANI, received €25,000 for her project "Biodegradable Packaging from combined Corn Husks, Rice Straws and Sugarcane Bagasse Agricultural Wastes", which supports the production of biodegradable packaging products as an alternative to plastic, using agro-industrial waste as raw materials. The project will ultimately reduce agro-industrial waste and decrease the reliance on unsustainable material sources, such as wood pulp and recycled paper.



Elsevier Material Sciences Agents of Change Awards





Target group: Researchers and professionals in the material sciences community.

Budget: \$15,000 a year (2023, 2025, 2024).



Activities and milestones

Goals

• 2023 award winners included:

beyond the initial award.

O Charlotte Berrezueta Palacios (right photo, with Elsevier's Executive Publishers Daniel Staemmler and SVP of Physical Sciences Peter Harrison, at the Award Ceremony during the Materials Research Society Fall Meeting in November 2023), Faculty of Physics, Freie Universität Berlin. Berrezueta Palacio, an experimental physicist from the Galapagos islands, Ecuador, organized the Nano-Science Summer School@Yachay (NSSY) for underrepresented graduate and undergraduate students, and underfunded Latin American researchers to conduct outreach to local communities, particularly local junior science schools. The Agents of Change Award will support their participation in the fifth edition of the NSSY24.

Recognize grass roots initiatives, department-level initiatives,

sustainability plan to ensure continued success of the program

or wider initiatives within the materials science community

· Give special consideration to awards that have a strong

- o **Dr. Vishal Chaudhary** (*left* photo, front forth from right, during one of the Happy Mental Health workshops), Physics Department, Bhagini Nivedita College, University of Delhi, India. Dr. Chaudhary started the Happy Mental Health Club in October 2020 during the COVID-19 lockdown by showcasing the diverse talents of materials science students and addressing mental health stigma through online sessions and international conferences, with a particular emphasis on supporting underrepresented groups and breaking down social barriers to gender and LGBTQIA++ equality in research. The Award prize will support the running of the Happy Mental Health Club to conduct awareness programs.
- An honorable mention was given to Daniel Mukasa of the California Institute of Technology, USA, and the Conference for Emerging Black Academics in STEM (CEBAS)

- acknowledging the remarkable qualities and achievements of the team, and their unwavering dedication, skills and contributions.
- Winners received their awards at a ceremony during the 2023 Materials Research Society Fall Meeting in Boston, followed by a celebratory reception.
- Recipients of the Awards will be interviewed in Materials Today to provide an overview of their initiatives.

Challenge

- The 2023 Materials Research Society Fall Meeting in Boston proved an unsuitable location to host the awards ceremony and reception due to difficulties in securing a prominent space to recognize the winners. The 2025 awards ceremony will take place at an Elsevier-organized event to ensure optimum visibility.
- In 2023, the awards attracted fewer nominations than expected. The team will work on diversifying dissemination channels and reshaping the criteria, e.g., creating categories for projects to address different focus areas, such as geographic inclusion or global equity.

Sustainability and future plans

- For the 2025 awards cycle, nominations will open in Q3 2024, and the winners will be announced in Q1 2025.
- Shortlisted candidates will be reviewed by a team of six judges, comprised of distinguished materials scientists, previous winners and the Elsevier Foundation.
- The 2025 cohort will be awarded at a ceremony during the 2025 Elsevier Materials Today Conference in Barcelona. The 2023 winner who could not join the event in Boston will also be invited to join.
- Past winners will be invited to share their progress during a special session at the Conference.
- A follow up interview and webinar will be arranged one year after the award is received to showcase how the initiatives have developed.

Primary outcome

Recognize initiatives and programs that focus on intersectionality and encourage systemic change within the materials science research community.

Overview

Through a series of gender analytics reports, Elsevier worked with global experts to understand the role of gender within the global research enterprise. The 2024 report examines 20 years of data drawn from Scopus and ScienceDirect across 18 countries and the EU 27, the report provides evidence-based insight to inform initiatives relating to gender diversity. Findings from the field of materials science show that while the proportion of female researchers is increasing, the pace of change remains slow. Globally women researchers still only represent about 32% of the materials science community, with comparable numbers across other geographies.

Each year, the <u>Materials Today Agents of Change</u> awards recognize initiatives that are taking practical steps to encourage an actively inclusive materials science research community. The awards provide two grants of \$10,000 each, presented to a researcher or team within the materials science research community actively engaged in an initiative that encourages inclusivity and diversity.

With support from the Elsevier Foundation, the awards have been able to increase their reach in 2023 through a dedicated award ceremony and gala dinner for the award winners.



Cell Press

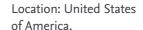
Rising Black Scientists Awards











Target group: Black scientists at U.S. institutions at the undergraduate, graduate, or postdoctoral levels across the life, physical, earth, environmental, health, and data sciences.

Budget: \$22,000/year (2022-2024) Funding is matched by Cell Signalling Technology.

Primary outcome

Celebrate US early career Black researchers' talent and achievements in STEM and help them grow their networks and opportunities.

Overview

The gaps in support, funding and opportunities are disproportionately large between white and Black scientists in the US. The Rising Black Scientist Awards offer prizes to undergraduate and graduate/postdoctoral Black scholars in the life and physical sciences recognizing that success in science is driven not only by a combination of talent and motivation but also access to strong support networks and opportunities. Initially a collaboration between Cell Press and Cell Signalling Technology, the awards were launched in 2020 to break down barriers and create visibility and funds to support talented Black scientists in the life or medical sciences on their career journey. The Elsevier Foundation joined the partnership in 2022 expanding the scope of the awards to include the physical, earth and environmental, and data sciences with 2 additional winners each year.

Winners each receive \$10,000 to support their research, a \$500 travel grant and the opportunity to publish in high impact journals within Cell Press (such as Cell – a leading flagship journal in the life sciences, and Chem, Joule or Matter, leading flagship journals in the physical sciences). Each year, 4 honourable mentions, 2 undergraduate students and 2 graduate students/postdoctoral scholars, also receive \$500. The awards encourage submissions from aspiring Black scientists or active researchers at institutions within the United States.

Goals

- Increase the visibility of rising Black physical scientists through publication of their essays on widely read and recognized platforms in their field.
- Increase the exposure of talented early career Black Scientists to editors across Elsevier for further awards, recognitions, advisory positions, or other opportunities.
- Provide recognition and financial support to the next generation of Black scientists to encourage retention in their respective fields.

Activities and milestones

- · Winners were selected from an outstanding pool of over 350 applicants from across the life, physical, earth, environmental, health, and data sciences.
- Essays from the winners and honourees were published in the journals Cell and iScience on February 15, 2024.

Sustainability and future plans

• The call for applications for the 4th edition of the awards will open in September 2024.

Spotlight on the 2024 winners (clockwise in the photos above)

- Physical sciences: **Akorfa Dagadu**. In her essay "Bridging past with progress: My mission in the world of polymers," she shares how the global plastics crisis felt like a rallying cry, leading her to develop Ishara, a mobile app designed to encourage and reward recycling behaviors to benefit communities. An undergraduate at the Massachusetts Institute of Technology, she is taking her work a step further, reimagining how we both create and break down synthetic polymers to mitigate the costs of an increasingly plastic world.
- Physical sciences: Jave Antoinette Wilson. She is a National Science Foundation Graduate Research Fellow and Ph.D. student at the Yale School of Environment. Her research aims to create improved material recycling systems to both increase yield for high-value products and help industry

- develop more sustainable business practices. In her essay "Resilient wings, tangible impact: My journey from chrysalis to change-maker in STEM," she describes how her family, community, and STEM experience have empowered her with wings "to soar into a promising yet challenging horizon."
- Life sciences: Senegal Alfred Mabry. A PhD candidate at Cornell University Department of Psychology, his research unpacks how psychosocial risk factors e.g., anxiety and racial bias may explain comorbidity between Parkinson's Disease and cardiovascular disease. His essay "Enough with 'The Shakes': Fighting Parkinson's as a Black researcher and a community organizer," details how conversations in his community inspired him to pursue this research, hoping to help bridge the gaps in patient care for African Americans.
- Life sciences: Kevin Christopher Brown Jr. In his essay "From the operating table to global science: How a near-death experience sparked my passion for life.", he shares how critical surgery to repair his heart drove his interest in medical research. An undergraduate at California State University, San Marcos, his studies focus on using stem cells to better understand neurodegenerative disease, with the goal to incorporate regenerative medicine into cardiac surgical
- In recognition of the applicants' remarkable talent, 4 winners received honorable mentions. Honorees for the life sciences category incl. PhD candidate Tatjana Washington of the University of Chicago for her essay "Pecan pie and saving birds: My path to becoming an ecologist," and undergraduate Zacchaeus Wallace of the University of Southern Mississippi for his essay "Memories that last." Honorees for the physical sciences incl. PhD candidate Steve Eshiemogie of Rensselaer Polytechnic Institute for his essay "From village to lab: An African scientist's quest for a sustainable future," and undergraduate Azana Cochran of Michigan State University for her essay "When the introvert stands out."





Falling Walls

Female Science Talents













Location: Germany, with worldwide participants.

Target group: 20 early career women researchers from academia and industry including PhDs, PostDocs, junior professors, heads of labs.

Budget: \$50,000 a year (2022), \$90,000 a year (2023-2024).

Goals

- Promote a total of 60 champions in 3 years, and take 20 talents to the next level of their career each year.
- Build a sustainable community of Talents supporting each other, and establish the networking event as an annual fixture for talented young women.
- Build an efficient network of partners to support the programme financially and conceptually.
- Increase the proportion of female participants at the Falling Walls Science Summit.
- Recognize exceptional talents through the Women Breakthrough Awards who conduct interdisciplinary, groundbreaking research in their field and contribute to gender equality and diversity in science and academia.

Activities and milestones

- Female Science Talents:
- o The Elsevier Foundation co-hosted the International Spring Gathering in May and the International Fall Gathering in November together with the German Research Foundation and the Bayer Foundation – providing recommendations for mentors, contributors and speakers.
- o 20 participants were selected to take part in the Intensive Track in 2023, and attended extensive training, networking events and the Falling Walls conference in November, wrapping up with a final networking session on Dec 13 with fellow alumni.
- One intensive track participant and one Breakthrough award winner were selected to be part of a prestigious Falling Walls Circle Round Table (a combination of presentation, interview and open discussion, with topics ranging from broader issues in science and society to very specific aspects of scientific developments, and addressed by international experts), and 2 participants were invited to the Falling Walls Symposia (round table debates between global leaders from science, politics and business), both on Nov 8.

- The 2023 participants also joined the 2023 Elsevier-organized panel "Training Scientists for the Future - Is the PhD still up to date?" during the Falling Walls Science Summit.
- Women Breakthrough Award:
 - o Call, selection and implementation of the Women Breakthrough Award 2023
 - The laureates include Atinuke Chimene from Canada and Marwa Shumo from Oman/Germany (Innovation), Sudeshna Das from India (Gender Mainstreaming) and Simangele Shakwane from South Africa (Empowerment) and received a prize of EUR 3000 each.
 - Award Ceremony was hosted during a gala dinner, in conjunction with the Falling Wall Science Summit in November 2023.

Challenges

The Falling Walls Foundation Head of the program changed as of September 2023, from Dr. Zarifa Mamedova, to Julia Mildbredt. The onboarding went smoothly, with sufficient overlap to align on key aspects such as event preparation and the Women Breakthrough Award.

Sustainability and future plans

The Falling Walls Foundation is not planning to scale the program at this time, and will continue to focus on consolidation, quality management and embedding the Female Science Talents and Women Breakthrough awards in the core Falling Walls program.

Primary outcome

Inspire and empower women to make their next career step, pursue flexible career paths, build an international network, and promote female leadership in science, business and society.

Overview

The <u>Falling Walls Female Science Talents Programme's Intensive Track</u> helps promising early career researchers make the transition from science to industry, offering them an international stage at the Berlin Science Week in November each year, and providing networks to help them to raise their visibility. Launched by the Falling Walls Foundation in 2022 as a pilot, the Intensive Track increases the visibility of exceptional talents providing support to help participants achieve personal breakthroughs in their career. The selected champions meet outstanding women leaders and are matched with high-profile mentors. They participate in intensive trainings and are encouraged to build their own international success team for peer learning, peer coaching, and mutual support.

In 2023, the Falling Walls Foundation and the Elsevier Foundation established the inaugural "<u>Women Breakthrough of the Year</u>" award, designed to recognize women scientists for their visionary research in fields related to the 17 Sustainable Development Goals, while also demonstrating commitment to issues of gender justice and equality in science.

Right photo: Participants of the the Women Science Talents Spring Gathering in May 2023. Left photo: winners of the Women Breakthrough Award, left to right: Sudeshna Das , Atinuke Chimene, Marwa Shumo, Simangele Shakwane. © Ole Spata.

Before you stomp on the idea of eating bugs, see what this researcher has to say

Insects may play an important role in our diet, with the way the world is changing, says entomologist Dr Marwa Shumo.

Can insects save the world? Dr Marwa Shumo — sometimes known as Lady of the Flies but more accurately described as an Associate Researcher in the Department of Ecology and Natural Resources Management at the Center for Development Research (ZEF) — explained that at the very least, they will have an important role to play. That role is dinner.

"Our global population is growing," she explained. "We're at around 8 billion people already, and some predictions suggest we will be at 10 billion by the year 2050, and maybe even surpass that. In parallel, there are nations in the developing world that are changing economically, so for instance in China, the middle classes are expanding and therefore moving towards a more Westernized diet, with more animal products." That trend is coupled with an alarming amount of food waste, Marwa said. She estimated that about a third of the food produced worldwide is wasted.

"Here in Europe, it's because of high standards and the shelf-life requirements that supermarkets have," she said. "In the developing world, the waste happens post-harvest, as the infrastructure isn't always there to get it to people who need it, and there are not proper storage techniques."

In addition to the increasing demand and the existing waste, Marwa also noted that there is a global trend of people leaving rural areas: "Especially in the developing world, around 60% — more than half the world's population — is going to reside in urban areas. The people who traditionally produced food for us are no longer going to be producing food for us in a traditional way and in a traditional environment because they are moving out of farm lands and rural places, where food is normally produced, and into cities. And therefore we have to come up with alternative agricultural and food production systems that can coexist with us and cities."

Let them eat bugs

Insect-based protein provides a solution. After all, not only are insects rich in high quality protein, they grow up to 100 times faster than traditional animal protein sources, and they can be fed on food waste. Instead of rotting at dumps, food can be reprocessed to offer new nutritional value.

Of course, there is a "yuck" factor that comes with eating insects. Even as someone who has dedicated their life to the study of insects — to the point of becoming an expert in the black soldier fly — Marwa understands where that impulse comes from:

"I get it! People think I'm crazy because I work with insects and talk about them all the time, but I understand it. When people started ... agricultural activities, pests were a risk to their livelihood — the value they made out of selling — and they were a risk to their food source. Diseases like malaria were associated with insects, so people became more fearful, associating bad hygiene and sicknesses to the existence of, or the coexistence of, insects."

As Marwa illustrated, however, the often-strained relationship between humans and insects is one that humans are responsible for stirring up: "It's actually people who invaded insect territory. People who damaged the environment and created, still water for mosquitoes to multiply transmit malaria. It's a problem humans created by trying to manage the equilibrium of the ecosystem and make it only competent for human pleasures and luxuries rather than taking into consideration our coexistence with other members of this ecosystem."



Marwa Shumo was a Falling Walls Labs finalist in 2016.

Marwa's specific area of expertise is the black soldier fly, which doesn't carry infections and eats nearly everything, making it a great candidate for insect-based protein. It can reprocess waste food and provide new nutritional protein to the food chain. Insect farming itself uses very little space, making it less harmful to nature compared to the deforestation required to expand existing protein sources, and it frees up food sources that would otherwise be used for animal feed. From Marwa's perspective, a move to insect protein represents the kind of evolution of food supply that humankind has always embraced:

"It's something that has co-existed with the history of mankind. People domesticated wild animals when they settled and started their agricultural farming activities. They stopped collecting things from the wild because they formed settlements of humans and they needed consistent supply. People adapted to the climate and seasonality of production — all things we now take for granted. Things are changing again, so again we need to be adaptable and come up with innovative solutions for our changing situation."

Dealing with misinformation and negative stereotypes

Marwa's commentary on insects and their huge potential for changing the way our food supply affects that planet is laced with enthusiasm and humor. However, the concept of insect-based protein, and climate action in general, can lead to polarized and aggressive debate. When Elsevier launched its Confidence in Research collaboration, the associated survey revealed that nearly a third of respondents had experienced or knew a close colleague who had experienced, online abuse. More than half

of respondents said they felt a responsibility to engage in social media discussions, and more than half also said that engaging with discussion online is essential to develop their reputation.

As someone who has embraced opportunities to raise the profile of her work through social media and beyond, has Marwa ever found herself on the receiving end of online abuse?

"Not just online — it's happened in-person," she said. "One of the comments I remember particularly well was someone questioning my womanhood because I work with insects, because I work with waste. Sometimes people will question your value as a human being because you deal with something they see as disgusting, and that there must be something wrong with me, as a woman, choosing to work in this field."

When she was younger, the negative stereotyping, the judgment and the negative criticisms would get to her, Marwa said. "Now it just makes me want to work even more."

Marwa also finds that her research area is subject to misinformation. She gave the example of recent debate in the international media around a European Union regulation that allowed the inclusion of insect protein in certain foods(opens in new tab/window). Marwa recalled how that went over online:

"There was a lot of conspiracy theory. People were claiming that you should stop buying any product made in the EU because they were going to mix in flora and insects and things. I was trying to explain that this is a standard procedure for certain products that have to receive a certain permit before being marketed and that you

will know an insect product is an insect product — it doesn't mean that every slice of bread in Europe will have insect ingredients mixed in. People would say to me, 'You're just defending them because you make money out of it."

Refuting misinformation can be exhausting and disheartening for a researcher. Marwa is of two minds as to whether researchers have a responsibility for engaging with those kinds of reactions:

"I don't think researchers are obliged to respond, but we do have a duty to enlighten people. In the past, I think many people in traditional research spheres weren't engaged with the wider society, which is why people used to say academics are trapped in ivory towers. That's why I'm a very active science communicator. I want people to see what we are doing. I want them to ask questions, and I want them to be able to be curious and then go home and start looking for further information."

Advice for dealing with criticism

When it comes to other researchers who may be dealing with criticism, she had two pieces of advice to share. At the forefront: finding a mentor:

"I think I progressed a lot because of the great mentors I had, specifically my PhD supervisor. I'd talk to him about the times that people had disparaged me or my work, and he would reflect on his experience in his early years as a researcher or a scientist. You learn that you are not alone. These experiences are universal, and as humans, we encounter people that disagree with us and who will try and downsize us and our efforts."

The second piece of advice is to embrace the love you have for your work:

"I am in love with my work and with my research. Even if I have these moments of weakness, I would wake up again the next morning excited because I was going to go to do something that I love. So keep on doing the things that you love and that make you feel happy and satisfied and that are always igniting your curiosity and interest and purpose in life."

This article originally appeared on Elsevier Connect: <u>Before you stomp on the idea of eating bugs, see what this researcher has to say,</u> Ian Evans, 25 April, 2023.

Dr Marwa Shumo sometimes uses humor to connect with her audience — as in this presentation for the Global Forum for Food and Agriculture.

Federal Ministry of Food and Agriculture















The Asian Scientist-Elsevier Foundation Salon for Leadership in STEM

Location: Singapore.

Target group: Participants across the Southeast Asian region (Singapore, Malaysia, Philippines, Sri Lanka) from different research disciplines. 90% of the participants were female.

Budget: \$50,000 a year (2022), \$75,000 a year (2023-2024).





reduce the gender gap in research.

policymaking sectors.

 Applicants to the Summit were assessed based on their motivation and objectives to advance gender equity, and how they apply them in their field and community. Additionally, male allies were selected based on how they have demonstrated support for women throughout their career.

• Empower early and mid-career women scientists with the

• Build a supportive community that enables opportunities for

skills required to be successful in the academic, industry and

Engage in conversations on critical topics that will help to

- The 2023 Summit was comprised of a series of keynotes, workshops and panel discussions over two days, including:
- Opening fireside chat with Singapore's Deputy Prime Minister and Chairman of the National Research Foundation, Mr. Heng Swee Keat.
- Workshops on: Acing interviews, developing a successoriented mindset, leadership storytelling, and communicating science to the public.
- Panel sessions on: Leadership for tomorrow, championing gender equality for all, and success strategies from the global South (with OWSD-Elsevier Foundation winners).
- Sentiment reporting based on participants' feedback was 100% positive.

Challenges

- Finding the right balance of women scientists and male allies to ensure psychological safety and provocative discussions is always a challenge.
- Given the high number of returning participants, ensuring that successful speakers are balanced with new sessions.

Right photo: Panel with OWSD-Elsevier Foundation award winners Gawsia Chowdhury, Renuka Attanayake and Munkhjargal Tserendorj. Left photo: Participants of the 2023 Summit with Deputy Prime Minister Mr Heng Swee Keat.

Sustainability and future plans

- The 2024 Asian Scientist-Elsevier Foundation Salon for Leadership in STEM will take place June 26-27 in Singapore. As in 2023, the program has been co created with the Elsevier Foundation team and includes both Elsevier speakers, as well as 2024 OWSD-Elsevier Foundation Women in Science Award winners from the Asian region.
- While gender equality and female empowerment remains a critical focus, the 2024 EcoSySTEM Summit has been designed with a broader inclusion and diversity remit to include intersectional and LGBTQIA+ issues. EcosySTEM's ambition is to support, encourage and build a strong diverse and inclusive environment for all members of the STEM community to flourish.

"The best part of the workshop is that it helps me discover more about myself and how to communicate with the partners around me. It gives me power, and it strengthens my confidence."

— PARTICIPANT, Summit for Leadership in STEM 2022

"I love the parts where we share our stories to others during the workshop activities. We won't normally share stories to our heart so easily with people we just meet, but the workshops set a good scene and safe space for such magic to happen. I feel more connected to the people we share stories with."—

PARTICIPANT, Summit for Leadership in STEM 2023

Primary outcome

Empowering women to take on leadership positions in science and technology, tackling the underrepresentation of Asian women in STEM.

Overview

According to Elsevier's 2024 Gender Report, an estimated 41% of the world's researchers are women. However, this number declines greatly when we look at the percentage of women who have taken up leadership positions in their organizations and still further looking across Asia.

The Asian Scientist-Elsevier Foundation Salon for Leadership in STEM is a two-day intensive in-person leadership program that aims to equip women with the skills required for professional development and success – as well as insights and strategies for addressing the gender gap in STEM. It is designed to create a safe space for women to gather, exchange ideas, be inspired thought leaders, participate in hands-on interactive workshops, and support one another in their professional journeys — helping to close the gender gap in Singapore through capacity building, role modelling and networking. The Summit is also sponsored by the James Dyson Foundation and science communication training from EurekAlert!, the AAAS news service.





RIKEN

Envisioning Futures





Location: Japan.

Target group: early-career women

Budget: \$40,000 a year (2022, no-cost extension in 2023-2024).

Goals

• 9 interviews conducted as of February 2024 with Dr. Yukiko Goda, Dr. Reiko Mazuka, Dr. Nobuko Mataga, Dr. Naoko Imamoto, Dr. Mikiko Sodeoka, Dr. Yuko Harayama, Dr. Emiko Hiyama, Dr. Yoshie Otake, and Dr. Makiko Naka

Produce 9 interviews with female research leaders and PI's as

· Capture leadership and management behaviors through

• Increase visibility of female research leaders in Japan and the

targeted interviews with female research leaders.

well as articles and videos in 2022-2024

challenges they encounter.

Activities & milestones

- RIKEN's dedicated website is now available in Japanese and
- 4 interviews available in English and Japanese on RIKEN's dedicated website and YouTube channel as of March 2024. The rest will be added during the course of 2024.
- Japanese chemistry magazine 'Gendai Kagaku' ("Modern Chemistry" in English) published an article highlighting the project as one with a unique purpose: "How to Record, Preserve, and Utilize Scientists' Memories."
- Presentation of the initiative at the 2023 annual meeting of the Japan Society for Research Policy and Innovation Management.

Challenges

Progress in conducting, transcribing and translating all 9 interviews was delayed given that much of the work has been conducted within RIKEN and the project lead changed positions while juggling this critical legacy project. Additionally, the video translation expenses have exceeded the project's initial budget projections.

Right photo: Dr. Yukiko Goda, RIKEN Center for Brain science. Left photo: Dr. Goda; Dr. Yuko Harayama, former Executive Director for International Affairs at RIKEN and Ms. Emiko Adachi, Diversity Promotion Office at RIKEN.

Sustainability & future plans

- Compile the interviews in a printed-format book, in Japanese
- Yuko Harayama, Elsevier Foundation Board member and Dr. Makiko Naka, Executive Director at RIKEN in charge of international affairs, promotion of young researchers, and diversity, will highlight the Envisioning Futures and the Elsevier Global Gender Report in 2024.
- Explore the possibility of a special event at Science Agora 2024, ESOF and AAAS.
- Building on the initial funding, RIKEN aims to expand the interviewees to include male professors within and outside of RIKEN. The sustainability of "Envisioning Futures" however, depends on additional funding and identifying dedicated RIKEN staffing to support the program.

"If you have never worked in a diverse environment, you won't understand the things that seem challenging to people who are different from you. And although it's not being talked about much yet in Japan, in other countries the diversity issue has gone far beyond the female/male ratio. How far behind Japan is still on those issues."—

DR. YUKIKO GODA, Team Leader, Laboratory for Synaptic Plasticity and Connectivity, RIKEN Center for Brain Science (excerpt from interview)

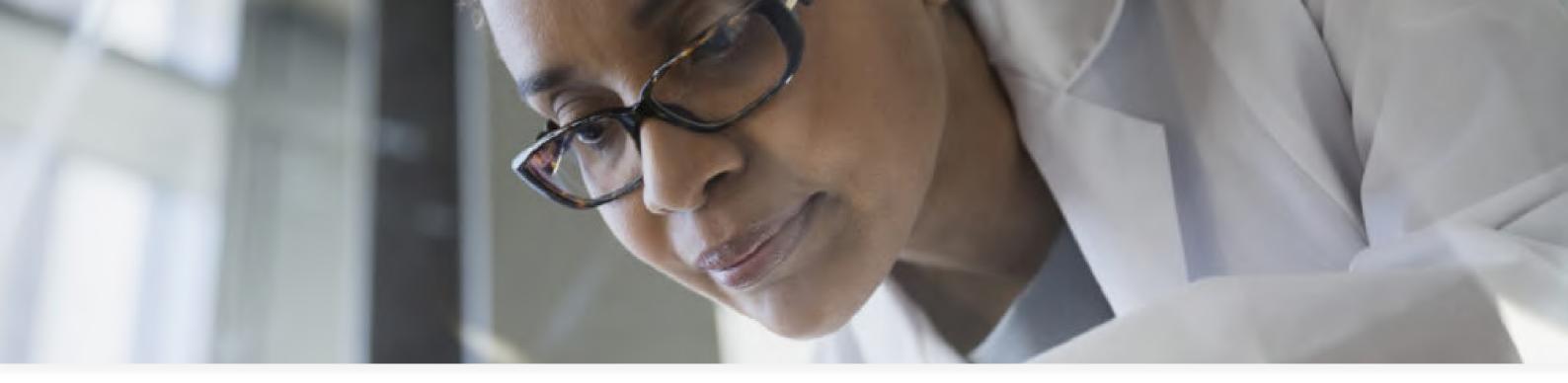
Primary outcome

Map the journeys of distinguished Japanese women scientists through targeted interviews exploring challenges and best practices in a country with persistently low numbers of women researchers and research leaders.

Overview

Although the percentage of female researchers in Japan is on a gradual upward trend, at 22% according to Elsevier's 2024 Gender Report, it is still low compared to other countries. The percentage of women in leadership positions is even lower: in 2023, 4.6% female professors in faculties of science and 2.9% in faculties of engineering at Japan's national universities. At RIKEN, one of the largest scientific research institutes in Japan, the ratio of female researchers in leadership positions is 8.4%, a far cry from the global standard. Not surprisingly, the Japanese government has postponed its goal of reaching 30% women in leadership positions to 2030.

The "Envisioning Futures" partnership focuses on interviews with Japanese women research leaders including policymakers and principal investigators, exploring how they acquired leadership and laboratory management skills, overcoming challenges throughout their careers. The interviews provide a focus on the establishment of management policies through experiential learning and trial and error. Sharing this hard-won, critical experience will serve to accelerate the growth of women's representation in leadership positions, raise awareness about intersectional diversity, support career progression, and offer policy makers guidance for positive interventions.



VITAE

Tackling the under-representation of early career Black researchers



Kingdom.

Location: United

Target Black post-doctoral and early career researchers.

Budget: \$54,500 a year (2022, no-cost extension in 2023).





Primary outcome

Create a self-sustaining community of Black researchers working in STEM disciplines via a consortium of Black-led organizations committed to providing opportunities to further their careers.

Overview

Over the past years, the UK discussion around the need for gender equity in universities has evolved to a broader debate around creating a more inclusive research culture. How the research environment and culture is impacting on the progression, inclusion and diversity of researchers, especially those from minority ethnic backgrounds, has been under the spotlight.

One of the key realizations to emerge is that the UK research environment is not contributing enough to address the inequity of representation of Black ECRs. Despite the overrepresentation of Black students in higher education (8% overall compared to UK population of 4%), researchers with Black heritage are currently underrepresented in the research environment and at senior levels of the academy with Black professors comprising only 1% of all professors. A lack of inclusive workplaces also creates an environment which excludes Black ECRs and has negative implications for research outcomes and the economy. With ongoing support from the Elsevier Foundation, CRAC-Vitae commissioned special advisor Dr. Lenna Cumberbatch to undertake an exploration of methods to tackle the underrepresentation of Black early career researchers (ECRs) in the UK.

The resulting research was conducted with Black researchers and Black-led organisations highlighting the barriers for Black ECRs and the organisations which cater to students with Black heritage. Their existing work underscored the importance of investing in those who are already making a meaningful contribution to address this critical underrepresentation. The creation of a consortium of Black ECR organisations has now been proposed to unify and provide funding, skills and enrichment for organisations which will collectively contribute to retention of Black ECRs in the UK.

Goals

- Establish a strong consortium of like-minded, Black-led organizations.
- Improve representation, experiences, progression and retention for Black Scientists working in STEM disciplines seeking to pursue careers in science research in the U.K.

Activities and milestones

- April-June 2023: Further consultation on project scope, meeting with the Advisory Board
- July-September 2023: Project redefined, new proposal developed, stakeholder engagement activated.
- October-December 2023: First consortium workshop meeting held, facilitated by Dr. Lenna Cumberbatch, Director of Diversity & Inclusion Strategic Change at Inclusive Perspective. Discussions centred around legal structure, business models and an opportunity to provide a voice to organisations with experience in this field.
- January-March 2024 Development of a viable business plan with sustainable funding to establish a consortium for Black researcher organizations.

Challenges

- The project underwent rescoping in 2023 due to Advisory Board feedback. The original concept to convene Black researchers, grant recipients, and stakeholders to listen, identify priorities, experiment, and share best practice on successful initiatives continues to be integral. However, during the initial investigative phase of the project, the Advisory Board recommended that the original concept be reconfigured to create a black early career researcher consortium geared towards convening key stakeholders and improving the experiences and retention of Black researchers given the number of viable, existing organizations. The project's reprioritization provides an opportunity to establish a space for Black scientists to network with peers who have shared experiences of the research environment.
- Dr. Lenna Cumberbatch engaged with each organization individually and collectively, ensuring their involvement in reviewing the process of developing a consortium for Black research organizations at each stage. Maintaining the trust of these organizations has required more time than anticipated but has improved the impact and credibility of the project.

Sustainability and future plans

Establishing the legal structure and business model for the Black ECR consortium will be essential in 2024 to ensure the long-term sustainability and impact of the consortium. The business plan will be reviewed in March 2024 by participating organizations, Vitae and the Elsevier Foundation to determine next steps for core startup funding and partners.





COACh

Water First!













Location: Worldwide.

Target group: African women researchers and policymakers specialized in water science.

Budget: \$70,000 per year (2019, 2023, 2024).



Goals

 Foster a network of women researchers in the US and Africa who have common interests in increasing international water research and collaborative activities.

"Without education, and without

world may not get the change it so

women actively involved in water, this

requires." — PLACIDIA VAVIRAI, workshop participant

- Leverage the Water First! network and the expertise of its participants to develop innovative and cross-disciplinary strategies for advancing the research and educational activities of women researchers and their students in these countries.
- Maintain and grow this network and extend its outreach it to other scientists, communities and institutions.

Activities and milestones

- The 2023 workshops took place at the annual SIWI Conference in Stockholm, Swedenm August 18-19 (group photo on the right). It convened 12 talented women from 12 different African countries, providing them with an opportunity to attend both the 2-day workshop and the SIWI World Water Week Conference.
- The workshop included presentations by COACh and Elsevier partners on topics incl. academic publishing, negotiation, leadership and science communication. Facilitators included COACh Board members Pushpa Murthy (Michigan Tech); Sherry Yennello (Texas A&M University), Elsevier publisher Deirdre Dunne; Cell Press Editor Ninad Bondre, and; Maha Rhannam (Program Officer of the Elsevier Foundation).
- To showcase the participants' journeys and address the need for a gendered approach to water issues and solutions, a talk show session was organized during World Water Week. It highlighted the stories of Angela Kapembwa (Zambia), Lulama Ngobeni (South Africa), and Agnes Luhanga (Malawi),

emphasizing the importance of incorporating gender perspectives in addressing water challenges (*left photo*).

 Feedback from participants was overwhelmingly positive, noting how the workshop is proving instrumental in advancing their careers. The participants also emphasized the importance of networking opportunities, which allowed them to establish multiple contacts within their fields.

Challenges

- The 2023 workshop was the first after several years of Covid-induced virtual events. While these were beneficial, they could not provide the same degree of networking and collaboration as the in-depth multiday workshop and conference experience at the Stockholm World Water Week.
- While visa difficulties for participants were minimal, the process still prevented 2 of the 14 participants from joining the 2023 workshop.

Sustainability and future plans

- Maintain and foster engagement among the 2023 Water First! workshop participants, who are currently working on a join book proposal.
- Track progress of networking efforts via follow-up surveys.
- The 2024 workshop will be held in June 2024 to coincide with International Water Week in Singapore, and will include OWSD-Elsevier Foundation Award winners, to further strengthen connections and collaboration.

"Creating these environments where communication is deliberate, especially for the women, is very hard. Coming up with innovative ways for women's voices to be heard helps to ensure success." —

ANGELA KABEMBWA, workshop participant

Primary outcome

Capacity building and leadership workshops to convene and support networks of African women working in water research and policy.

Overview

In sub-Saharan Africa, a significant 45% of the population still depend on collecting water. Within this region, women are four times as likely as men to bear the responsibility of water collection. Women are involved in water-related activities such as water conservation and storage, domestic cleaning, crop production and food preparation. Despite this, they have restricted access to the resources needed to secure and manage scarce water such as land, agricultural inputs, finance and credit. African women are particularly at the forefront of the daily struggle for water security, but few are in key leadership positions in the water resources area. Lack of representation in decision-making roles removes women's vital contribution to water resource policymaking and management, and further exacerbates the existing disconnection between policy and implementation.

Water First! is one of the international programs directed by <u>University of Oregon's COACh</u> organization, working to increase the number and success of women in science and engineering careers. Water First! delivers workshops to women scientists to build capacity, create networks and provide professional skills development. Three initial Water First! conferences (Morocco in 2015, Namibia in 2016, and Rwanda in 2017) were funded by the U.S. State Department and served as a model for those supported by the Elsevier Foundation. Workshop materials were developed largely with funding from the U.S. Department of Energy.





The World Academy of Sciences

Climate Women

Location: Low- and middleincome countries.

Target group: Women researchers; communities where the projects take

Budget: \$100,000 (2021-2023).













Primary outcome

Provide research grants for projects led by women scientists that address concrete problems in climate change through collaboration and interdisciplinary research.

Knowledge deriving from scientific research often suffers from not being applicable to real-life scenarios, especially in the global South - slowing down tangible improvements. Greater improvement in the livelihoods can be achieved when research is done in cooperation with local populations, and when scientific know-how is effectively shared by those living in the same communities. UN Women reports that globally, one fourth of all economically active women are engaged in agriculture, where they regularly contend with climate consequences such as crop failure and experience an unequal burden of care for collecting increasingly scarce water and fuel.

Launched in 2021, the partnership with The World Academy of Sciences focuses on women researchers working in climate action and builds off of an earlier 4-year partnership supporting the UN SDGs, the TWAS North South Collaboration in Sustainability (2015-2019) which encompassed PhD travel grants, visiting professors, case study competitions and a sustainability symposium at the TWAS General conference. The Climate Women grants aims to empower women to lead concrete projects in climate action that take them outside the lab, deepening their scientific and soft skills such as project management and leadership. The project grants are awarded to teams of between 2-5 women for scientific projects with the potential to produce tangible strategies for addressing climate change. It is designed to be flexible and modular, with a total value of USD 25,000 over the course of 3 years.

Goals

- Promote gender equality by creating opportunities for women in climate action projects.
- Respond to and tackle communities' needs in line with the principles of sustainable development and focusing on the brunt of climatic changes.
- Effectively transfer knowledge from scientific research to real-life scenarios for practical and tangible change under the umbrella of SDG 13: Climate Action.

Activities and milestones

- TWAS hosted a skill-building inception workshop for the 2022 teams with high-level trainers, including the 2007 IPCC Nobel Peace Prize winner Prof. Lučka Bogataj and Dr. Anna Pirani, head of the Technical Support Unit for Working Group I of the IPCC. The workshop received extremely positive feedback from both participants, speakers and trainers.
- In 2022, the recently launched program had received a significant number of applications, among which 20-30 highly recommended proposals could not be funded in the first iteration of the selection. For the 2023 cohort, TWAS subsequently conducted a "re-selection" from the 2022 cohort, from which 6 winning proposals were identified.
- Additional funding was made available by Elsevier's Energy and Economics journal, which enabled TWAS to fund a 7 grant aimed at investigating women in leadership, genderresponsive climate change adaptation, and food security in Zimbabwe.
- The proposals were reviewed by a panel of expert scientists from the Intergovernmental Panel on Climate Change including Prof. Joyashree Roy a member of Elsevier's Climate
- The winning teams were announced at a special event in the UNESCO Pavillon at COP28 the 2023 United Nations Climate Change Conference, on December 4, 2023.

Sustainability and future plans

- The 2023 and 2024 cohorts will convene in September 2024 in a special workshop in Beijing hosted by the Chinese Academy of Sciences-TWAS Centre of Excellence for Water and the Environment, International Centre for Climate and Environmental Studies (ICCES) and the TWAS East and South-East Asia and the Pacific Regional Partner (TWAS-SAPREP).
- The workshop will include presentations from senior climate and water researchers, science communication experts, monitoring and evaluation experts and policymakers.

Spotlight on the 2024 grants recipients

- Mozambican environmental scientist Albertina Alage will lead a community-based reforestation project focused on mangrove and other coastal and river-based vegetation to reduce the impact of climate change.
- Zimbabwean industrial engineer Zviemurwi Johnny Chihambakwe (right photo) will build climate resilience through knowledge sharing and sustainable-energy systems for women transitioning between urban and rural areas.
- Beninese agricultural scientist Gisele Koupamba Sinasson Sanni will lead an environmental restoration project to create livelihoods through tree planting.
- Zimbabwean social scientist Emelder M. Tagutanazvo will guide women on driving permaculture to integrate land management and natural ecosystems in urban areas.
- Ghanaian chemist Trinity Tagbor will lead a project using biomass pellets as an alternative fuel source for the conservation and restoration of mangroves in Ghana.
- Bolivian ecologist Vania Wendy Torrez Flores will use participatory land-use planning and climate change adaptation training as a strategy to empower women in the Bolivian highlands.
- Zimbabwean disaster risk management specialist Chipo Mudavanhu (left photo) will lead a project on women in leadership and gender-responsive climate change adaptation and food security in Zimbabwe (supported by the Elsevier Energy Economics journal).

Advancing climate action with a gendered lens, one workshop at a time

Climate change is not just an environmental issue, it is very much a social and gendered one too.

Women and girls are more vulnerable to the effects of climate change than men, and yet they are often left out of decision-making processes on climate policies. This not only perpetuates gender inequality, but also undermines efforts to tackle the climate crisis. In May 2023, the Elsevier Foundation team had pleasure of joining our partners, The World Academy of Sciences (TWAS), in their headquarters in Trieste, Italy, for an inspiring workshop with our recently awarded gender equity and climate action grant winners.

Announced at COP27, the UN Climate Change Conference last November, the grants were awarded to teams of women researchers in the global South for projects that have the potential to produce tangible change in their communities. The eight winning projects ranged from establishing sustainable home-gardens in Guatemala, to advancing climate literacy among women in Western Nepal and empowering women to improve local livelihoods through agroforestry in the Republic of Congo and more. Though diverse and addressing local needs, they address 3 common themes: to strengthen gender equity; to address the climate-related needs of local communities; and transfer knowledge from scientific research to real-life scenarios.

Knowledge from scientific research often suffers from not being immediately actionable, especially in the global South – and this delays both implementation and tangible progress. Greater progress can be achieved when research is done in cooperation with local populations, and when scientific know-how is effectively shared with those living in the same communities. But at the same time, UN Women reports that globally, one fourth of all economically active women are engaged in agriculture, where they regularly contend with climate consequences such as crop failure and experience an unequal burden of care for collecting increasingly scarce water and fuel.

For these reasons, the collaboration with TWAS aims to empower women to lead concrete projects in climate action that take them outside the lab, deepening both scientific and soft skills such as project management and leadership.

At the recent workshop organized by TWAS, the team was able to meet five of these amazing researchers in-person: by bringing together women leaders from different countries and backgrounds, the workshop provided a unique opportunity for cross-cultural collaboration and sharing of ideas.

One of the key takeaways as summed up by Ylann Schemm, Executive Director of the Elsevier Foundations was "the importance of involving women in all stages of the climate action process." She explains how "women are often disproportionately affected by climate change, but they are also powerful agents of change. It is essential to ensure that women's voices are heard, their perspectives considered and integrated to both the research design and implementation phase, for us to develop more effective and equitable solutions to the climate crisis."



The workshop featured a line-up of impressive speakers who shared their insights and expertise on key topics related to the climate crisis, science-policy dialogue and climate justice. It also focused on practical and concrete skills such as communication, teamwork dynamics, and how to monitor and document the impact of their work.

Prof. Kajfež Bogataj (right photo), a Nobel Peace Prize winner and professor at the University of Ljubljana in Slovenia, kicked off the workshop with a keynote lecture, emphasizing the importance of scientific research and data in understanding the impacts of climate change and developing effective adaptation strategies.



The TWAS and Elsevier Foundation team together with five of the eight grant recepients who joined in person for the inception workshop.

She also stressed the critical role of education in preparing future generations to face challenges of a changing climate, a point also highlighted by many team representatives who have embedded elements of climate literacy and education in their projects.

ever focused on them." — ESTHER GATHONI

KANDUMA, 2023 Grant recipient.

Dr. Anna Pirani, Head of the Intergovernmental Panel on Climate Change (IPCC) Working Group Technical Support Unit, moderated a discussion on gender as a component of the response to climate change, together with her colleagues at the IPCC, including Elsevier Climate Advisory Board member, Dr. Joyashree Roy. This discussion highlighted how gender issues are central to the climate crisis and that gender-responsive policies and strategies are essential for effective climate action, including the importance of engaging women and girls in climate-related decision-making processes, given their unique experiences and perspectives

Esther Gathoni Kanduma (right photo), a grant recipient who works on climate-resilient pastoralism, noted: "Women are normally left out when capacity building empowerment activities take place. They are ignored", she said "People look at women like they should not be empowered, like they don't need to know. And yet in my country, Kenya, we have a proverb that says: if you want to educate a nation, educate a woman. Women are progressive, they share the knowledge. They are the most vulnerable and mostly affected by climate change, and they need to understand where this problem is coming from and that solutions can come from them."

She explained that "in Kenya, pastoral women are responsible for household food security. This is why, in the face of climate change, they need really to adapt by identifying new food generating activities that they can be involved in, as well as other income generating

activities, for them to be able to survive and persevere throughout this crisis."

"In Sub-Saharan Africa, a lot of arid and semi-arid lands are the ones that are mostly affected by climate change," she continued. "As a woman, I have an opportunity to empower other women, especially the most vulnerable. And I'm able to tap into their energy, into the indigenous knowledge, for us to identify and come together with a solution that can be applicable in their own local settings."



The workshop was a powerful reminder of the critical role of women's leadership in addressing global challenges, underscoring the importance of collaboration and cross-sectoral partnerships in advancing gender equity and climate action.

This article originally appeared on the Elsevier Foundation website: Advancing climate action with a gendered lens, one workshop at a time, Maha Rhannam, 3 May, 2023.





Research4Life

Country Connectors













Location: Bhutan, Ghana, Kenya, Liberia, Sierra Leone, Tanzania and Eswatini.

Target group: Cohort of Research₄Life Country Connector trainers, and Research₄Life users.

Budget: \$70,000 (2022-2024).

"Access to knowledge & information is a powerful weapon to fight poverty and promote sustainable development for global citizens particularly for LMICs."

— SONAM WANGDI, Country Connector, Chief Librarian at the Centre for Bhutan and Gross National Happiness (GNH) Studies.

Goals

- Understand factors influencing rate of usage of Research4Life & deliver local interventions to heighten awareness and usage.
- Strengthen capacity of information use and management.
- Support user communities by building local networks and partnerships, as wells as and regional mentorship.
- Increase publications among user/ institutions compared to previous two years
- · Expand engagement with local publishers.

Activities and milestones

Program implementation in 11 countries, attracting additional funders from the publishing community. With an additional country underway at end of 2023, this represents 5 additional countries compared to the previous year.

Countries that started implementation in 2022 achieved a majority of their KPIs. Countries that joined later in 2023 successfully achieved 3. Bhutan and Liberia experienced a slight decrease of usage, due to elections and technical disturbances in Internet provision. Implementation goals include:

- Coordinate knowledge sharing and creating a community of Country Connectors, developing Country workplans.
- Master Training of Country Connectors and local Ambassadors, as well as train Country Connectors on usage of Directory of Open Access Journals (DOAJ).
- Profile of countries and Institutions, and outreach to low-,

Right photo: Research4Life Open Distance Learning Workshop, Earnest Bai Koroma University Sierra Leone. Left photo: Research4Life training workshop at the Consortium of Tanzania University and Research Libraries.

non-using and unregistered ones; and identification and training of local publishers.

- Coordinate with Help Desk to address user queries, translate information to local languages and customize communication.
- Engaging Research4Life teams for strategy implementation.
- Actively present & train, communicate with local stakeholders, and partner with UN Regional and Country offices.

Challenges

The implementation of work in Libya was disrupted by the floods during Q3 and Q4 of 2023. As a mitigation measure, Kyrgyzstan was activated early, having initially been on the list for implementation in 2024. Engagement included profiling and negotiations with the identified partner institution in Kyrgyzstan. Libya is currently on the list for implementation in 2024.

Sustainability and future plans

- Funding is required to scale to more Research4Life countries, allowing them to mature to higher levels of information use, network support, research quality and quantity.
- Participating countries will require funding for an additional 3-year cycle to reach a good level of sustainability, particularly those launched in the second and third year of the grant cycle.
- There is currently support for one additional country by a new publisher partner (Taylor & Francis), and more efforts are being made to raise funds both within and beyond the publisher community.
- Country Connectors' overall target is for 80 countries: 50% active and supported, and 50% with an Emeritus status (when a country has matured to a level where it can do well without a Country Connector) or Associate status (countries currently doing well, despite not having direct financial support from the Country Connectors program). This is measured using the targets in the Monitoring and Evaluation Framework.
- Friends of Research4Life, Research4Life's fundraising arm, was able to engage the first Associate Status country, Ukraine, providing proof of concept for the future sustainability model.

Primary outcome

Deliver local interventions at national and regional levels to strengthen the capacity of information use and management, enhance access and improve awareness of Research₄Life resources – ultimately improving research quality and output in low- and middle-income countries.

Overview

To solve the complex challenges outlined by the UN SDGs, it is critical that researchers from around the world, especially lower-income countries, can fully contribute their ideas and solutions. Research4Life was launched over two decades ago to enhance the scholarship, teaching, research and policymaking of researchers, faculty, scientists, and medical specialists in lower income countries. Since 2022, the Research4Life Country Connectors partnership has supported national user communities by building local networks and partnerships, addressing gaps in access to research, training and research output in lower-income countries. At the same time, it provides an optimal framework for understanding factors influencing the usage of Research4Life resources.

Through this work, the Elsevier Foundation is providing critical, proof of concept support to launch training across 8 countries: Bhutan, Ghana, Kenya, Liberia, Sierra Leone, Tanzania, Democratic Republic of Congo, and Moldova. The Research4Life Country Connectors partnership equips national representatives "Country Connectors" or embedded trainers, often librarians, to deliver a targeted program to strengthen the capacity of Research4Life information use and management, building robust local communities of evidence.

Elsevier's unique contributions to Research4Life

Over the past two decades, Research4Life has worked to bridge the digital divide, providing free or low-cost access to research for publicly funded institutions in the world's least resourced countries. As a unique public-private partnership between UN agencies, universities, and publishers, it aims to reduce the knowledge gap, stimulating productive and effective research, and promoting international collaborative research.

Research₄Life is central to Elsevier's goal of achieving universal access to research information. As a founding and driving partner, Elsevier contributes 15% of the peer reviewed resources in Research₄Life, encompassing databases such as Science Direct, Scopus, Clinical Key, Mendeley and Embase. In addition, Elsevier provides in kind support through strategic, communications, research analytics and technical expertise.

In 2022, Research4LIfe launched its new strategic plan, <u>Our vision to 2030</u>, contributing to the UN Decade of Action for accelerating the SDGs by increasing research participation from the Global South. The Plan was created through intensive engagement with both partners and users, building off of a <u>series of strategic reviews</u> which explored the rapidly evolving scholarly communications landscape and the need to scale up awareness, reach, understanding, effective usage and impact to address Research4Life users' needs. By 2030, the goal is to significantly increase the participation of researchers as both consumers and producers of research, providing the necessary capacity building through local networks and partnerships.

203,000+ total resources

42,000+ journals

174,000+ books

155+ other information resources

11,500+ registered institutions

125+ countries

200+ publishers partners

5 UN Agenciesips.

After two years as Chair of the Research4Life Executive Council 2020-2022, Ylann Schemm, Executive Director of the Elsevier Foundation, continues to serve on the Executive Council. Domiziana Francescon, Elsevier Foundation Partnerships Director, served as Co-Chair of the Communications & Marketing team 2018-2022, and as Co-Chair of the Eligibility team from 2024. In addition, colleagues throughout Elsevier are involved in a range of Research4Life taskforces including fundraising, technology, metrics and training.

To respond to Research4Life's unmet resource needs and scale up capacity building, Friends of Research4Life was established as a US-based 501(c)(3) charitable organization with an independent governance structure and Board of Directors. Its mission is to serve as fundraising vehicle and accelerate Research4Life's goals to:

- · Provide much-needed access to peer-reviewed research
- Expand training initiatives that help level the playing field for researchers in lower- and middle-income countries
- Significantly increase awareness and usage of the resources offered by the Research4Life publishing partners
- · Facilitate the research communication process.

"Research₄Life is an incredible community: so many likeminded partners and dedicated trainers committed to ensuring that resources reach the users who need them — advancing common goals around research equity."

— YLANN SCHEMM, Executive Director, The Elsevier Foundation. Read the full interview.



Photo above: The Elsevier Foundation team and Research4Life colleagues meet with Country Connectors during the 2023 General Partners Meeting at the National Academy of Sciences in Washington D.C.

"Research4Life has been with me through my entire career"



For fifteen years, Research₄Life has supported urology research and practice in Senegal and beyond.

In 2009, <u>Dr. Mohamed Jalloh</u> was one of the 35 urologists active in Senegal. At the time, Senegal had more urologists than amost any other African country, one for every 215,000 men. But to put this in an international perspective, in the same year Denmark had one urologist for every 9,000 men – nearly 24 times as many as in Senegal. In 2021, the number of urologists in Senegal almost doubled, and the country now has about one for every 120,000 men: in Denmark, there is one for every 7,300 men. Like doctors throughout the world, to produce the best results Dr. Jalloh needs to consult the highest quality, most up-to-date scientific information. But while doctors in high-income countries can access most of the scientific resources they need, practitioners in Senegal don't have the same opportunities.

Dr. Jalloh, you're one of the about 70 urologists practicing in Senegal. Can you tell us about your career?

I started as Consultant Urologist at The Hôpital Général de Grand Yoff in Dakar. Since then, I received a Post Doctoral Scholoarship at the University of California San Francisco. I became the Coordinator of the Department of Medical Information at the Hôpital Général de Grand Yoff – and I'm also Assistant Professor in Urology at University Cheikh Anta Diop de Dakar. And I'm responsible for training in research methodology, for which I make extensive use of Research4Life, in many Universities in Sengal.

How are you using Research4Life and Hinari to support your work?

I never stopped using Hinari (Research4Life collection of health resources managed by the World Health Organization) since 2005, because information is key. Access has played a key role in my achievements: for example, I needed to produce 8 papers to be promoted to senior lecturer, and now I have published more than 100 peer reviewed articles in my field, which is unique for my academic degree. Hinari provides me all the options, ranging from updated knowledge to evidence-based medicine.

Within my practice, sometimes we have to perform surgical operations that are uncommon for us – and we can use Hinari resources to continue our medical education, and incorporate new techniques. And at the clinics, our methods are always patient-centererd, we need to stay updated, whether in theory or in practice. It often happen that we refer documents to our patients for their information, especially with cancer patients: these include Plain Language Summaries of Systematic Review, or medical videos. Any evaluation of the impact of Hinari will be underestimated. The best analogy of the impact would be to restore the vision to someone who lost it.

What does a typical workday for your look like?

Very busy! I perform surgeries, receive patients and coach younger doctors. On some days, I do the morning rounds followed by lectures, on others I run my clinics, and on some others I do surgical operations in the operating room. Within all these activities, I also embed training medical students and residents. I'm also conducting ongoing research on prostate cancer, funded by the US National Cancer Institute, within the framework of Men of African Descent Carcinoma of the Prostate (MADCaP) Consortium – which includes Sub-Saharan African Countries and partner researchers in the US. So far, we have started showing differences in the determinants of prostate cancer in our populations compared to other parts of the world, explaining the higher incidence and aggressiveness of prostate cancer in Black men. I'm also an Investigator in a National Cancer Institute-funded program to train Investigator and Project managers across Africa, with a focus on cancer research. Hinari is central to training for medical students, nurses and residents. And I take advantage of any occasion to train my peers both formally and informally, because with high-quality information you can build solid knowledge, practice and research.

How do you engage with the larger community in Senegal?

My engagement with the community includes serving as Secretary General of the Pan African Urological Surgeon's Association, and Secretary General of the Senegalese Association of Urologists. I have also been involved in operating on women suffering from obstetric fistula. I made many trips in remote areas in Senegal, and Chad and Burundi. We are fortunate to have the opportunity to alleviate the suffering of women who are largely marginalized: in most cases, fistula developed as a correlation of their poverty, and then this condition makes them poorer and isolated. It's so rewarding to see their smile and relief after a successful operation. I'm proud of my constant career progression: it has been made possible by my dedication to always learn new tools, share my knowledge and network, and being involved in projects that are impactful and highly needed. And Hinari was with me in all the steps of my career.

Story originally appeared on Research4Life: "Research4Life has been with me through my entire career", Domiziana Francescon, 23 February, 2023.





Girls Inc. of New York City

Pre-G3: The Elsevier Foundation Data Analytics Preparatory Program

Location: New York City, United States of America.

Target group: Middle school girls (6-8th grade) from underrepresented groups.

Budget: \$100,000 a year (2019-2021), \$75,000 a year (2022-2023).





Skills:

Goals

- o Work in a diverse team to achieve a common goal
- Listen and communicate effectively

contributions to their communities.

o Adapt to change and demonstrate passion and perseverance for short-and long-term goals

leadership and community action curriculum to prepare them

to become the creators of the world's next great products and

companies. Through this unique blend of data analytics and

social justice, the program has helped to shape a generation

of empowered young women ready to make meaningful

- o Think creatively and take positive risks to develop new ideas
- o Develop a deeper understanding of data analytics and how data works in the real world
- o Think critically and use data to analyze problems and develop innovative solutions
- Education:
- o More than 50% of girls who complete Pre-G3 will participate in the G₃ program.
- o Increase the percentage of students who demonstrate readiness for high school-level study in STEM fields.
- o Increase the number of students who graduate from a post-secondary institution with a degree in a STEM field.

Activities and milestones

- The GINYC Pre-G₃ program served over 300 girls across five school sites and has an 85% participants retention rate.
- Development and delivery of the Pre-G₃ Data Analytics curriculum year-long and summer intensive model curricula, embedded in the Girl Boss program., Training Girls Inc. of NYC facilitators in delivering the Pre-G₃ Curriculum.
- The program's impact extends beyond the classroom, fostering an environment where young women are empowered with data skills and a strong sense of social responsibility. Participants not only develop

technical proficiency but also gain a deep understanding of the ethical considerations and societal impact of data usage.

 During the program, participants showcased remarkable creativity and entrepreneurial spirit, resulting in the creation of 10 innovative business ideas. These ideas not only provide practical solutions, but also promote inclusivity and accessibility in product design.

Sustainability and future plans

- Ensuring the sustainability of the Pre-G₃ program involves forging strategic partnerships with colleges and universities focused on entrepreneurship and data analytics.
- Community engagement plays a pivotal role by fostering relationships with local businesses, STEM professionals, and educational institutions, creating a network of advocates who can contribute to the program's sustainability through mentorship, sponsorships and resource-sharing.
- Incorporating self-sufficiency elements within the program, such as alumni involvement and mentorship opportunities, ensures a cyclical model of support.
- Strategic resource planning, including diversified funding sources and the creation of an Advisory Board, enhances financial stability and provides ongoing guidance.
- In 2024, the Elsevier Foundation decided to conclude their funding of the Pre-G₃ program (2019-2023 for a total of \$450,000) p to further align with the new strategy, focusing on Under-represented and underserved communities of researchers, librarians and health professionals.
- Girls Inc of NYC will continue to seek and receive funding for the data analytics curriculum from individuals, foundations and corporate giving including the Weinberg Foundation, Con Edison and BNY Mellon.

Left photo: Joanni Rodriguez, a senior at Central Park East High School in Harlem, says Girls Inc. of NYC gives her the opportunity to be around women who empower each other. She plans to go into business and hopes to study economics and entrepreneurship at Cornell or Syracuse University. (Photo by Alison Bert)

Right photo: Shenequa Merchant, Central Park East High School Program Director for Girls Inc. of New York City, teaches the principles of entrepreneurship in the Girl Boss seminar. (Photo by Alison Bert)



Address gender & ethnicity inequities in data science-related jobs through an introductory, social justice-oriented course – creating strong data skills pipeline for talented young women from underserved communities.

GINYC's Pre-G₃ program is an innovative introductory data analytics course that not only imparts essential data skills, but also instills a sense of responsibility - encouraging young women to utilize data for positive and equitable societal impact. Infused with a social justice lens, the program aims to create a diverse and skilled pipeline of young women equipped to bridge the gender gap in the data science workforce.

In 2023 Girls Inc of NYC continued to leverage key aspects of the Pre-G₃ Data Analytics Preparatory Program, funded in 2019-2021 by the Elsevier Foundation, to deliver the program through their new Girl Boss curriculum. By embedding many of the same critical data skills in a more accessible program, they have been able to equip young women more effectively and sustainably with the 21st century skills they need. Girl Boss is an experiential entrepreneurship program designed for middle and high school girls. Through the process of planning and designing their own business, girls use important aspects of the data analytics, financial literacy, media literacy,





IMC Weekendshool

Amsterdam STEM outreach













Location: Amsterdam, The Netherlands.

Target group: 10-14 years olds from underserved communities.

Budget: \$25,000 a year (2016-2023).

Goals

working together as a team, awareness of self and others, and exercising influence. • Work with the students to generate enthusiasm, stimulate

imagination and creativity, and develop critical thinking.

• Stimulate identification with the lecturers, enabling students

task that simulates a professional assignment.

to experience what it is to be a professional and undertake a

Deepen students' understanding about each field of study

or work and how it can hold viable career opportunities for

Develop students' essential life skills such as presenting,

Milestones

- The Elsevier Foundation supported 3 modules in 2023 for a total of 12 weekend classes focused on Technology, Science
- In 2023, 36 first-year students attended both the Science and Health program and 23 second-year students attended the Technology one. 23 voluntary guest teachers were involved across the 3 modules.
- Health module: focus on the professions of doctor, nurse, neuroscientist, and pharmacist, as well as exercises to understand the functions of different organs, and practical first aid interventions. The students were able to visit a
- Technology module: focus on computational thinking, binary language, artificial intelligence, coding, internet security, game design, VR-simulation and robotics.
- Science module: focus on stimulating curiosity, creativity and logical reasoning by conducting tests and experiments.
- A new theme was introduced in 2020-2021 for third year students: Gender, Sexuality and Consent. This is however not a part of the health module, but a separate theme. They wanted to continue with this theme but needed to search first for a new organisation to further develop the contents of this theme.

Collaboration with volunteers, families and alumni continued with the new training for volunteers, parent/caretaker council to better connect with families, and an alumni council to organize events for graduates. The IMCoach project enables young people aged 14 to 27 to volunteer and receive an EU-recognized social service certificate.

Challenges

The team experienced staff turnover, which impeded the continuity of the relationships between with some groups of students and their parents/caretakers.

Sustainability and future plans

- Upgrade the content for all modules to ensure high standard in terms of pedagogy, didactics and organization.
- Integrate topics such as ethical values, mental health as well as connections to local neighbourhoods and world citizenship into the curriculum.
- Development of quantitative and qualitative targets for volunteering, finance, funding, public relations, alumni management, human resources and pedagogical
- Moving the organization's headquarters from Amsterdam West to Amsterdam Nieuw-West to be closer to students' location.

"I have learned that there are more ways to walk an educational path [...] I can get to study for the profession I really wish

for." — RAYHANA, third year student

Photos: IMC Weekendschool students taking part in the health module, focusing on the professions of doctor, nurse, neuroscientist and pharmacist, as well as exercises to understand the functions of different organs, and practical first aid interventions.

Primary outcome

Inspire students about career perspectives and help them to develop a specific set of competencies in the fields of science, the arts and professional trade, including self-confidence and a professional network to achieve their goals in the future.

Overview

Encouraging careers among young people from communities with limited educational resources and few professional role models is crucial. For the past 21 years, the IMC Weekendschool (IMC) has offered an enrichment program for children in underprivileged neighbourhoods across 10 of the Netherlands' largest cities. Over the course of the 3-year IMC curriculum, teachers, professionals, and volunteer coaches introduce 10-14 years old students to a wide range of disciplines while helping them to connect more fully to society, develop communication and conflict resolution skills and all-around character development to improve their career prospects.

Since 2015, the Elsevier Foundation has supported the Science and Health programs for the Amsterdam West-based Weekend School. The proximity of the Amsterdam West School to the Elsevier office has enabled colleagues to volunteer over the years. From 2019-2021, we also provided additional funding for the development and rollout of a new IMC Weekend School Technology program. With an average annual cost of €170,000 for the Amsterdam West location of the IMC Weekendschool, the Elsevier Foundation grant contributes to ca 11% of the annual budget.

II. Our 2023 partnerships

Inclusive health



Concern Worldwide Health Systems Strengthening in Somalia

Capacity building to provide a timely, effective response to surges in cases of children with acute malnutrition.

"There are many things that drew me to work with the Elsevier Foundation, their commitment to gender equity in science and research as well as addressing social determinants to support health equity, were high on my list. Historically, both have been lacking in public health interventions."

— DR. EDWIGE THOMAS, Member of the Elsevier Foundation Board



Aidsfonds Tanya Marlo

Accessible HIV-related information, counselling and lifesaving care for youth and minority groups in Indonesia.

"The Elsevier Foundation is a relatively small Foundation with a big heart—from partnership co-creation to supporting concrete health equity projects that really make a difference in local communities, in both the global South and North, building trust through tangible action."

— DR. MICHAEL MAKANGA, Member of the Elsevier Foundation Board



BBRI Implementation Science Program

Build research capacity and increase the rapid adoption of evidence-based interventions to address health disparities.



Historically Black Colleges and Universities — Schools of Nursing Scholarship Fund

Address the pervasive health disparities in U.S health care by promoting a racially diverse nursing workforce.





Concern Worldwide

Health Systems Strengthening Somalia











Location: Banadir region, Somalia.

Beneficiaries: Regiona health management teams, information officers and healthcare workers in 10 health facilities across 4 districts of the Banadir region in Somalia.

Budget: \$50,000/year (2023), \$100,000 (2024).

Capacity building to provide a timely, effective response to surges in cases of children with acute malnutrition in Somalia.

Overview

Primary outcome

Seven million Somalis, close to 50% of the population, face crisis-level food insecurity driven by conflict and a prolonged drought, further exacerbated by climate change. As the drought intensifies, the number of children suffering from malnutrition continues to rise. Healthcare facilities are facing surges driven by many complex and overlapping factors, such as the pre-harvest hunger gap, increased incidence of malaria and diarrhea during the rainy season, women's workload patterns, movements associated with grazing livestock, and more. It is during these caseload surges that the potential to save lives is greatest, yet government health systems are often not able to provide a timely, effective response. Concern Worldwide works together with the Somalian Ministry of Health to improve capturing quality data – which in turn helps health care workers track and target cases, and respond to fluctuations without compromising the quality of services.

Based at the Banadir Hospital Stabilization Centre, the project supports data improvement and management through the implementation of CMAM Surge Approach (Community Management of Acute Malnutrition), facilitating timely and accurate information sharing and coordination between communities, health facilities and District Health Management teams in 10 facilities across 4 districts of the Banadir region in Somalia.

Goals

- Improve data management and utilization through capacity building of health managers
- Support the Banadir Hospital Stabilization Centre in Early Warning Early Action through the CMAM Surge Approach, the strategic reallocation of staff and supplies during a surge response and the facilitation of monthly meetings between key district and regional level staff.

Milestones

- Equipped District Health Management Teams with digital tablets to collect and archive data.
- Successfully rolled out the CMAM surge approach in the targeted hospital setting, training 25 health workers.
- Provided training on Health Management approaches to 12 District Health Management Team members in health facilities that were previously unable to analyze, predict and respond to a surge in malnutrition cases in a timely manner.
 8 of the 12 facilities are now effectively reporting.
- Established coordination mechanisms between health authorities across districts to accelerate effective response.
- Facilitated quarterly coordination meetings and supervision by the District Health Management Team/Regional Health Management Team.n key district and regional level staff.

Challenges

- Availability of trained staff and volunteers at the projects start of the project.
- Consolidation and coordination of data collection tools and analysis procedures across various levels. The Concern team was able to overcome these difficulties by accelerating the staff training.

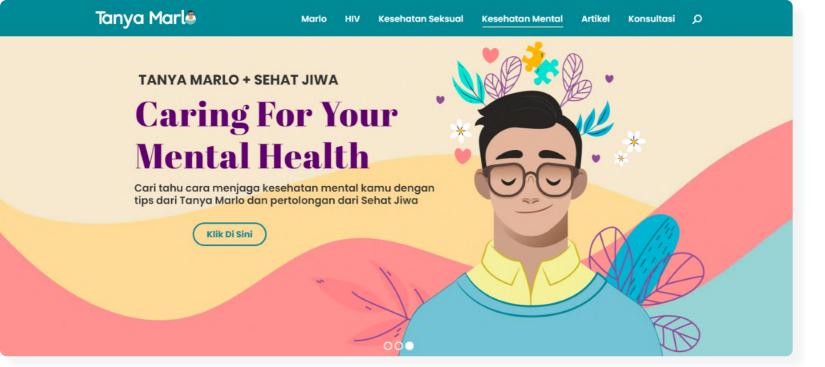
Main photo: Hamda Hussein (19) pregnant with her first child speaks to a Health worker at the Weydow Health centre. Hamda Hussein lives in an IDP site near Mogadishu where she moved to with her family 2 years ago, after they had to leave their farm due to conflict in the area. Below: Medical worker checking medical supplies at the Weydow Health Centre, Mogadishu. Both photos © Mustafa Saeed/Concern Worldwide.

Sustainability and future plans:

- The project builds on the successful 2023 pilot, conducted in 4 health facilities. With the support of the Elsevier Foundation, Concern will be able to scale up this intervention to cover 12 more facilities in 2024, reaching an estimated 15 regional health management teams, 10 trainers of trainees and 30 heath workers in community health facilities and equipping them with the necessary skills for effective data collection and management to tackle malnutrition surges.
- By involving Somalian health authorities, communities and partners in the planning, implementation and evaluation of our project, Concern will ensure the sustainability of the project beyond the funding period. Concern will also advocate for the integration of this Health System Strengthening approach and CMAM surge model into the national health policies and strategies of Somalia, helping to save lives in communities across the country.

"As a result of this project, we have seen a significant improvement in our data management. We can also monitor the performance and quality of the services more easily and take appropriate actions. We are more confident and motivated in our work. We are grateful for this project, and we hope it will continue to support us in the future." — ABDI RAHMAN MOHAMED

HUSSEIN, HMIS Officer from Banadir region Health Directorate



Aidsfonds

Tanya Marlo







Target group: Sexually active youth, including the LGBTQI community, who are vulnerable to STI or HIV infection and need comprehensive support in developing healthy choices in sexuality. Note: In Indonesia it is not legal to target minors with SRHR information, so Aidsfonds does not actively target people under the age

Location: Indonesia.

Budget: \$50,000/year (2022), \$70,000 (2023), \$90,000 (2024).

Primary outcome

Ensure that young people and minority groups who are most vulnerable can take control of their health through accessible HIV-related information, counselling and lifesaving care - bridging the difficulties in accessing sexual and reproductive health information and products in Indonesia.

AIDS-related deaths have increased in Indonesia by 60% since 2010, contrary to the global trend of decline - and access to SRHR information and services becomes more and more under pressure due to growing conservatism and restrictive laws. According to UNAIDS, approximately 540,000 adults and children in Indonesia are living with HIV, the majority being men aged 15 and over (61%). Only one out of three people with HIV receive lifesaving treatment. PrEP, a medication that is highly effective at preventing HIV infections, is still in a pilot phase and its availability in Indonesia is extremely limited.

Aidsfonds' Tanya Marlo project targets young people by providing easy access to information and care. These tools, including a webbased platform and chatbot serve as accessible entry points to provide tailored, youth-friendly, quality information using the Stepped Care Model for Sexual Health developed by Aidsfonds.





Replying to @tltaasmara ...





Hubungan Antara Depresi dan Rasa Ngantuk

Depresi dan Rasa Ngantu...

Replying to .



Replying to ..





Ciri-ciri Narsisisme



Users are linked to a hotline service where they can chat with trained counsellors who provide in-formation, support and referral to services in cities throughout Indonesia. The Tanya Marlo website also provides a service directory for test and treatment. To increase reach and impact, the Tanya Marlo team co-creates content together with local partners and young people, linking audiences with the services they need.

Kamu Terinfeksi HIV. Tapi ...

Goals

- · Deliver extensive, updated, non-judgmental and sexpositive HIV- and Sexual and Reproductive Health Resources (SRHR) and services via the Tanya Marlo platforms and raise awareness among youth via social media.
- Provide consultation via a hotline service and empower youth to seek services and treatment in a health facility.
- Increase the reach and impact by building a coalition of (digital) health partners, including links with more youthand LGBTQI+-friendly health facilities.

Activities and milestones

- Development of a shared landing page together with Sehat Jiwa (a social enterprise that provides evidence based mental health education), where visitors are referred to further channels and services. Sehat Jiwa and Tanya Marlo are also jointly conducting offline events to discuss mental health.
- Delivered online training on behavioral change & determinants, and on capacity building in systematic content development.
- Mapping clinics for referral (in progress): 430 HIV and STI test and treatment sites have been mapped, plus mental health services by government and private providers.
- · Visibility has increased thanks to regular social media posts based on the behavioral goals of target group, with a diversity of role models, to increase user identification.
- Development of interviews and personal stories on mental health, PrEP use and sex work.
- Implementation of the series of "Tanya Marlo goes to college" visits to universities with focus groups of young people.

Challenges

> 8453

- Some posts regarding safe sex, alcohol and drug use received a social media ban warning, which limited the effectiveness of health information. Content more at risk of being banned will be posted on more supportive platforms e.g., YouTube. Where possible and in line with the behavioral goals, Tanya Marlo aligns the information they provide with the official Indonesian Government's guide to teenage sex education.
- A new law requires that organizations sharing health information will need to employ licensed medical staff, which could become a financial challenge for YKS.
- The December 2023 capacity building training had to be rescheduled to the 2nd half of 2024 due to unforeseen challenges experienced by the Aidsfonds staff. While the reach on social media is good, it remains a challenge to attract young people to the website, where more wideranging information and services is offered. This is due to social media's push to keep users on their platforms rather than linking to other ones. Tanya Marlo adapted by providing more comprehensive content on social media, and by consistently integrating referrals to the website.

Sustainability and future plans

- Within the current political situation, it will remain a challenge to ensure future funding from local governments.
- Bring together current and potential new partners active in the SRHR field, as well as young people and young LGBTQI+ -activists, and develop a vision and plan for beyond 2024. This plan will be the starting point for new funding requests.
- The Amsterdam Dinner Foundation has indicated interest to fund complementary activities in Indonesia in 2025.

Right photo: Collaboration between Sehat Jiwa and Tanya Marlo, whi are jointly conducting events to discuss mental health. Left photo: Tanya Marlo is reaching millions of users on TikTok, focusing on youth-friendly, quality information, and personal stories on mental health, PrEP use and sex work.



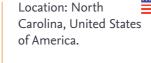




Julius L. Chambers Biomedical & Biotechnology Research Institute NCCU Implementation Science Program







Target group: researchers, local underserved communities.

Budget: \$100,000 a year (2020-2022, no-cost extension in 2023-2025).

providing graduate students with training and mentoring in implementation science (IS), submitting successful IS-focused grants, addressing IS gaps among health disparity researchers, and developing a culture of IS across NCCU at all levels.

Goals

- Increase the number of health disparities researchers conducting implementation science research and dissemination.
- Organize outreach and networking activities within the NCCU
- Develop faculty expertise in implementation science and expand capacity at NCCU.

Activities and milestones

- Implementation Science project funded for the 2023-2024 program year is "Physical Activity Opportunities for African American Women" (PI: Amy Linder PhD, Department of Kinesiology and Karen Webb PhD, Dept of Nursing):
 - o Data collection in progress; presented project at the Active Living Conference in Bethesda, MD, March 2023.
 - o Planning to start phase 2 (intervention) in Spring 2024.
- In-person Seminar "Implementation Science in Action: The Outcomes of Education and Training".
- · Inaugural meeting to develop course materials for Implementation Science modules. The session focused on determining three to four classes to cover topics related to research and practice.
- Submission of abstracts on Implementation Science to scientific conferences and manuscripts to journals.
- A total of 8 staff/faculty have been trained in IS in 2023.
- 4 abstracts and manuscripts submitted to conferences and

Photos I. to r.: 1. Faculty of the Julius L. Chambers Biomedical & Biotechnology Research Institute with Director Dr. Deepak Kumar, at left. 2. BBRI's researcher Amy Linder, Elsevier Foundation Board Member Kevonne Holloway, Elsevier Foundation Director Ylann Schemm, Dr. Deepak Kumar, BBRI's researcher Charity Watkins. 3. Group photo during a visit in July 2023, with BBRI staff and

- Diminished student involvement in research during covid leading to postponed interventions by pilot project leads.
- · North Carolina State University faced a cyber-attack in November 2023. The BBRI IS team has had to actively work on resolving this issue.

Sustainability and future plans

- Host Implementation Science Symposium at NCCU on May
- Develop implementation science modules to incorporate into academic curricula.
- Award two additional pilot project funding, one per funding year (corresponding to years 2022 and 2023).
- Organize IS networking activities within NCCU faculty and students and underserved communities
- Initiate a monthly BRRI-hosted journal club meeting for IS continuing education.
- Host additional IS seminar series, with potential collaboration opportunities with other institutions.
- The insights gained through this partnership have effectively revealed new funding avenues and opportunities. By leveraging the knowledge acquired, the BBRI's IS program can explore these new pathways for securing additional resources. This will enable it to further enhance its impact on the targeted community and strengthen its ability to address emerging

"I believe that Implementation Science allows current researchers to explore or bridge the gap between real-world applications and research findings. It promotes productivity and effectiveness in presenting interventions." — DR. AMY

LINDER, Implementation Science Fellow

Primary outcome

Facilitate the rapid adoption of evidence-based interventions to address health disparities in minority and underserved communities.

According to the National Institutes of Health U.S. Library of Medicine, on average it takes 17 years for new evidence-based information to make its way into the routine practices of most clinicians. Patients with diseases that disproportionately affect minority populations may be even slower to benefit from new findings. This is exacerbated by the low numbers of underrepresented minorities in the scientific community, less than 8%.

The Julius L. Chambers Biomedical Biotechnology Research Institute (BBRI) at North Carolina Central University conducts multidisciplinary and inter-institutional research focused on health issues that disproportionately affect minority and underserved populations. BBRI provides graduate students with research-intensive experience that enhances their access to careers in the biomedical sciences.

The Elsevier Foundation supports the BBRI Implementation Science Education and Training (ISET) program to combat health disparities and address important issues of reducing, and ultimately eliminating, health disparities as well as managing health outcomes in vulnerable communities. The ISET program supports new and early-stage investigations focused on health disparities research by



Historically Black Colleges and Universities

Schools of Nursing Scholarship Fund









Location: Untited States of America (Alabama, North Carolina, Virginia).

Target group: Nursing students in 5 Historically Black Colleges and Universities.

Budget: \$50,000 a year (2020-2023).

The Elsevier Foundation is committed to supporting nursing students through the Schools of Nursing Scholarship Fund—a step in the right direction for ensuring that nursing students experience a more level playing field while pursuing higher education. Springboarding off the National League of Nursing/Elsevier HBCU Excellence in Technology Innovation programs, the Historically Black Colleges and Universities Schools of Nursing Scholarship Fund aims to address the pervasive health disparities in U.S health care by promoting a racially diverse nursing workforce.

According to The Future of Nursing 2020–2030 report from the National Academy of Medicine and the Robert Wood Johnson Foundation, there is an ongoing dialogue about how structural racism continues to influence the various facets of U.S health care. Embedded in policies and institutions that oversee healthcare providers, structural racism fuels disparities in patient care by undermining the wellbeing of patients from racially diverse communities. As frontline workers, nursing practitioners are integral to the medical profession, comprising 4 times the physician workforce and playing a pivotal role in patient treatment. This became especially obvious with COVID-19, which called attention to the shortages in the public health system and the absolute necessity for a racially diverse workforce.

Historically Black Colleges and Universities (HBCUs) are on the front lines of this challenge, laying the groundwork for thriving careers and supporting the health needs of minority communities. With 107 HBCUs across the U.S, these academic institutions allow African American students to experience inclusive learning opportunities that extend beyond the classroom to professional development and community building through a shared mission and sense of belonging. For nursing students, HBCUs also bridge the gap between accessing knowledge and providing equitable patient care to people of color.

However, funding inequities caused by the historical legacy of racism continue to persist creating disparities in adequate nursing education and practice. Since 2020, the Foundation has worked closely with education and nursing institutions to promote equity in learning and practice. The Elsevier Foundation's HBCUs Schools of Nursing Scholarship Fund supports that commitment through an annual contribution to five HBCUs across the U.S. By giving each school \$10,000 to distribute at their discretion, they can create targeted scholarships to alleviate financial burden, reward service participation, and aid students in other ways.

Ms. Evelyn Graham, Vice President for Advancement and External Engagement at Hampton University in Virginia, shared how the scholarship helps students "to tackle the reality of graduating with a financial burden that can take years to pay off." To reach their professional goals, she noted how reducing the financial burden through scholarships allows students to focus on their studies.

A North Carolina A&T University nursing scholarship recipient underscored this further: "This scholarship has provided me with much-needed relief and will undoubtedly alleviate the strain on my financial resources, allowing me to focus more on my studies and future career in healthcare. With this scholarship, I can continue my education at North Carolina A&T State University without constantly worrying about the financial aspect."

"It is not just monetary assistance but also a tremendous motivation to pursue excellence in my academic endeavors and achieve my goals. [...] The impact of this scholarship will extend far beyond my time at NCAT, as it will enable me to contribute meaningfully to society as a compassionate and competent healthcare professional." — Nursing student at North Carolina A&T University, recipient of the Elsevier Foundation scholarship.

By acting as a conduit for change, the Elsevier Foundation scholarship fund supports the diversification and sustainability of future nurses — beginning with a more level playing field.

Scholarships awarded in 2020-2023: a total of \$200,000 for 96

Hampton University School of Nursing

Total beneficiaries: 5 undergraduate students — 4 in 2021 and 1 student in 2022-2023.

North Carolina Central University School of Nursing

Total beneficiaries: 21 undergraduate students — 10 in 2021 and 11 student in 2023.

Tuskegee University School of Nursing and Allied Health

Total beneficiaries: 10 undergraduate students — 4 in 2021, 2 in 2022 and 4 in 2023.

North Carolina A&T University School of Nursing

• Total beneficiaries: 30 undergraduate students — 10 each year in 2020-2023.

Winston-Salem State University Nursing Program

 Total beneficiaries: 30 undergraduate students — 10 each year in 2020-2023.

Both photos: Students at the Hampton University School of Nursing.

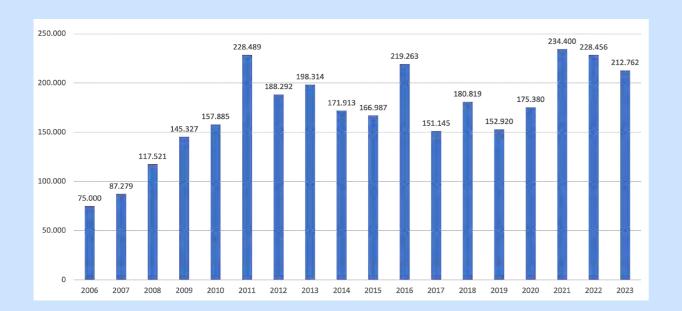
III. The Elsevier Foundation Matching Gift program

To support community engagement, the Elsevier Foundation provides annual matching funds to charitable organizations supported by Elsevier employees. Each year, we earmark \$200,000 to match employee's individual and group donations to eligible non-profit organizations around the world. Our fund is also used to support global disaster relief efforts championed by Elsevier colleagues. By matching employee gifts, both employee and Foundation resources are leveraged for maximum community benefit, ensuring that colleagues feel connected to the world around them.

"We see the Foundation's Matching Gift program as a way to empower Elsevier colleagues. With an annual personal matching budget of \$1000 and unlimited ability to contribute to office fundraisers, the fund equips Elsevierians with the opportunity to contribute to the causes they really care about, whether in their communities and globally." — YLANN SCHEMM, Executive Director,

The Elsevier Foundation

Overview of Matching Gift expenditures 2006 — 2023



The table presents an overview of over a fifteen years of Gift Matching. The spike in 2011 reflects a large scale response to the earthquake and Fukushima disaster relief efforts in Japan; while the spike in 2016 was due to an additional \$20,000 in disaster relief to the Red Cross for the Louisiana flooding. In March 2022, a high volume of donations to relief for the conflict in Ukraine was supported through the new Benevity platform.

Since early 2022, the Elsevier Foundation joined the RELX divisions' Employee Giving Program (Lexis Nexis Legal and Professional, Risk Solutions and Reed Exhibitions) migrating our Matching Gift offering to the Benevity platform for charitable donation-management.

The program has benefited from economies of scale that include direct payroll giving, companywide fundraising campaigns, centralized reporting and most, importantly, a greatly expanded geographic reach across the majority of Elsevier locations.

"Elsevier have had another great year of fundraising for local charities through our cake sales, plant sales, and more. Knowing that every penny raised is matched by the Elsevier Foundation is brilliant and makes such a significant contribution to the small charities we support." — BECK STOCKDALE,

RELX Cares Champion, Elsevier









Left photo: RELX Cares Champion Beck Stockdale (left) and Head of House Mary Collerton (right) host a bake sale at the Elsevier Oxford office in March 2023. Right photo: In July 2023 the Elsevier Pride Amsterdam employee group hosted a Drag Queen Bingo, prior to the Amsterdam Pride celebrations which take place at this time. Over 100 colleagues participated and the event raised over €1,000 for COC Amsterdam, an organization actively committed to a diverse and inclusive society, supporting events for LGBTIQ+ refugees in the Netherlands.

IV. Visibility and recognition

Highlighting the Elsevier Foundation and its investment in women early-career researchers from the global South.

In 2023 we partnered with the World Conference of Science Journalists. Elsevier Foundation's Rebecca Clear, Elsevier Corporate Responsibility Communications Director, moderated a panel centered on women in STEM and gender in science communication featuring 2023 OWSD-Elsevier Foundation Women in Science award winners Gabriela Montenegro-Bethancourt and Carla Crespo Melgar, with SciDev journalist Luisa Massarani. As part of our partnership, in 2023 SciDev, a news outlet covering science and technology for global development, published 3 interviews with women changemakers from Latin America — all OWSD-Elsevier Foundation award winners.

Q&A: Local context 'key to nourishing children'



Gabriela Montenegro-Bethancourt, a nutritionist from Guatemala, <u>talked</u> <u>about child malnutrition rates in Latin America</u>, her work on nutrients that can improve the diet of children and adolescents in her country, and how science must be applied to local context to effect change.

Guatemala has 23 indigenous groups, and a great cultural diversity. This has implications for the language, where messages are always different and not tailored to each group's worldview.

Bolivian researcher Carla Crespo Melgar works to <u>strengthen foods such as quinoa bars with probiotics to support vulnerable populations</u> in her country. In the photo Carla (left) and Sonia Bautista, the highest native authority (mama t'alla) of the Soniquera community, ColchaK municipality, Potosí department, sign an

She believes that it's time to work beyond the lab, travel to communities and understand their problems in food production.

agreement for the cultivation of quinoa.

Q&A: 'It's time to work beyond the lab'



Now is the time to promote women – award winner

Researcher Magaly Blas (left) dedicates her work to caring for maternal and neonatal health in rural and remote areas of the Peruvian Amazon. Her project Mamás del Río delivers interventions through Information and Communication Technologies, with the training of special community "agents" and the use of tablets for disseminating and monitoring content on health issues.

She wants her research to have a positive impact on communities and serve as the basis for public policies on health in Peru. Copyright: Magaly Blas/Mamás del Río





On Times Higher Education, OWSD-Elsevier Foundation award winner <u>Tserendorj Munkhjargal talked about growing up in Mongolia</u>, where livestock contributes 16 per cent of the national GDP.

Yet over the decades, the livestock industry has been challenged by a lack of forage due to country's long deep winters, climate change and frequent outbreaks of livestock diseases. Dr. Munkhjargal is working on controlling tick-borne diseases in livestock, a field of research increasingly important for the wellbeing of her community.





1,8K

LinkedIn followe

Since 2020, we have steadily increased our <u>LinkedIn</u> presence more than doubling our results in a year.

5.2K

Twitter followers

<u>Twitter</u>, or X as it's now known, has evolved into an excellent way to share news and partner activities..

Visibility and recognition



In June, Dr. Ramia Albakain, Professor of Chemistry at the University of Jordan and 2019 Elsevier Foundation Chemistry for Climate Action winner, was awarded the prestigious French "Chevalier dans l'Ordre National du Mérite", a high medal of recognition from The President of the French Republic.

Gabriela Montenegro-Bethancourt, 2023 OWSD-Elsevier Foundation Women in Science award winner, has been elected Guatemala Secretary of Science and Technology, a testament to her work and commitment to advancing science: "We need to position science in Guatemala, and we need actions, programs and projects to be based and built on a scientific approach. But we must apply the truths of science to the context: for example, translate information so that scientific and technological issues are understandable to the population," she said.



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OWSD-Elsevier Foundation-OWSD Women in Science Award winners Ashani Ranathunga (from Sri Lanka) ans Gawsia W. Chowdhury (from Banglashed) were named 2 of <u>Asia's top 100 scientists</u> by Asian Scientist magazine. Ashani Ranathunga also featured in <u>top women engineers in Asian Scientist</u> for her work on industrial and agricultural waste into raw materials for economical and greener construction and development projects.

"My work was well known at my university but not so much outside of it. It was a big celebration when I received the OWSD-Elsevier Foundation Award for Early-Career Women Scientists in the Developing World. Now, a lot of people know about my research and support my work. I feel like this win has created a new promise for me to continue my research. "It has also been good to prove what women in science and conservation can achieve. Recognition inspires everyone — not only scientists like me but also my junior colleagues and students. They can see what scientific research can accomplish and how it can lead to global recognition."

— DR. GAWSIA W. CHOWDHURY

Dr Gawsia W Chowdhury, a zoology professort and OWSD-Elsevier Foundation Women in Science Award winner from Bangladesh, was interviews by <u>The Business Standard</u>, discussing her career journey, being a woman in STEM and more.



V. Financial overview

2021-2023 Program allocations

		2021	2022	2023
INCLUSIVE HEALTH				
Concern Worldwide	Health Systems Strenghtening Somalia			\$50,000
Aidsfonds	Tanya Marlo		\$50,000	\$70,000
Cell Press	Rising Black Scientists Awards		\$22,000	\$22,000
HBCU Scholarships	NLN HBCU program cohort	\$50,000	\$50,000	\$50,000
Julius L. Chambers Biomedical Biotechnology Research Institute	Implementation Science Program	\$100,000	\$100,000	No cost extension
MSF/Epicentre	Niger Research Center	\$50,000	\$100,000	
Amref Health Africa	Leap mLearning	\$40,000	\$50,000	
National League for Nursing	NLN/Elsevier HBCU Innovation in Technology Excellence program	\$100,000	\$100,000	
Sansum Diabetes Research Institute	Latino Diabetes Community Scientists	\$100,000	\$100,000	
Black Women's Health Alliance	Millennial Sister Circle	\$25,000		
INCLUSIVE RESEARCH				
OWSD	Awards for Women in Science	\$60,000	\$100,000	\$100,000
The Elsevier Foundation	Chemistry for Climate Action Challenge	\$33,000	\$33,000	\$33,000
Elsevier Materials Sciences	Agents of Change Awards		\$15,000	\$15,000
TWAS	Climate Women	\$100,000	\$100,000	\$100,000
Research4Life	Country Connectors		\$70,000	\$70,000
Falling Walls Foundation	Female Science Talents		\$50,000	\$90,000
Asian Scientist	Summit for Leadership in STEM		\$50,000	\$75,000
RIKEN	Envisioning Futures		\$40,000	No cost extension
VITAE	UK Black reseachers in STEM		\$54,500	No cost extension

		2021	2022	2023
COACh University of Oregon	Water First! workshops	\$70,000		\$70,000
Girls Inc. of New York	Pre-G ₃ Data Analytics program	\$100,000	\$75,000	\$75,000
IMC Weekendschool	Amsterdam health, science and technology outreach	\$25,000	\$25,000	\$25,000
Medical Library Association	Librarians without Borders/ Research4Life training	\$45,000	\$50,000	
Imperial College London	Maker Challenge	\$50,000		
Black Girls CODE	Philadelphia Code Club	No cost extension		
GenderinSITE	Report women representation	\$60,000		
Matching Gift*		\$234,400	\$228,456	\$212,762
TOTAL		\$1,242,400	\$1,458,456	\$1,027,762

2021-2023 Overview of programs

	2021	2022	2023
INCLUSIVE HEALTH	\$465,000	\$572,000	\$162,000
INCLUSIVE RESEARCH	\$543,000	\$658,500	\$653,000
MATCHING GIFT	\$234,400	\$228,456	\$212,762
ADMIN	\$100,000	\$100,000	\$100,000
TOTAL	\$1,342,000	\$1,558,456	\$1,127,762

^{*} Contribution paid directly by Elsevier on behalf of the Elsevier Foundation.





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In the cover picture:

Adenike Adenaya, PhD student at the Institute of Chemistry and Biology of Marine Environments (ICBM) of Carl von Ossietzky University of Oldenburg in Germany. The photo was taken at the Falling Walls Female Science Talents Intensive Track Fall Gathering in November 2023. © Ole Spata.