THE ELSEVIER FOUNDATION

Annual Report 2017





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Dr. Dawn Fox, Lecturer at the University of Guyana, is one of the five winners of the OWSD-Elsevier Foundation Award for Women Scientists in the Developing World. She was recognized for her work in environmental science. "My research is centered on using sustainable materials and technologies to solve environmental problems. What I love about it is that it ultimately affects people," she said. "Everybody deserves clean drinking water, and I'm going to make people's lives better."



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Ylann Schemm (Elsevier Foundation and Elaine Driver (Berkeley Foundation) speak with Kate Mulcahy (Makerspace Coordinator) at the Invention Rooms and Makers Challenge opening in London, November 2017.



C Cynthia Clark

Dr. Lucinda Manda-Taylor, (left)
Editor- in-Chief of the Malawi
Medical Journal (MMJ) and Cynthia
Clark (right) Director of Digital
Journals at Elsevier, a Researchers
Without Borders volunteer. Cynthia
spent a month collaborating with
the MMJ team and considered it,
"one of the most professionally
rewarding opportunities of my life."

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Elsevier Foundation Board members at the 2017 Board meeting in Amsterdam. From left to right (back) Nikunj Jinsi, Hannfried von Hindenburg, John Danaher, Emilie Marcus (front) YS Chi, Geri Richmond, Beverly Malone, Suzanne BeDell, Ron Mobed.

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Foreword

On the occasion of the April 2018 Elsevier Foundation Board Meeting

On behalf of the Elsevier Foundation, please accept our thanks for your continued support, oversight and expertise as we strive to make the Foundation even more relevant and effective in advancing our mission. You provided invaluable input at our 2017 board meeting in September, feedback that we have used to guide our efforts since then. You approved our proposals for a new strategic direction for the Foundation, in particular:

- Embedding technology solutions as the key focus of our Foundation grants, with a target of doubling the number of technology-oriented programs across all of our thematic areas over the next 3 years: health and innovation, research in developing countries, and diversity.
- Giving strategic priority to increasing access to science, health education and opportunities for underserved youth and women.
- Strengthening research capacity in developing countries to address critical development challenges.

The Board also offered advice to guide the execution of our strategic plans going forward. We were asked to:

- Use evidence-based analyses of the UN Strategic Development Goals to identify and focus our funding on the most critical gaps, with some additional focus on technologyenabled global health initiatives.
- Tap technology as a key enabler—but not an end in itself—to address those critical needs when making funding decisions.
- Draw on RELX and Elsevier company expertise in technology, and in particular the company's talents in information analytics, to support future projects using skills-based employee volunteering as an asset, but not a prerequisite, for project funding decisions.

- Expand the use of long-term, multidimensional partnerships with both established and emerging organizations in each of our program areas, increasingly embed Elsevier Foundation branding in those programs, and integrate more employee skills volunteering and company in-kind contributions as appropriate.
- Develop parameters for the use of limited tenders or "requests for proposals", primarily in cases where we believe there is a particular opportunity to learn from innovators in new and emerging fields of activity relevant to our three priority funding areas.

Since our 2017 meeting we have taken a number of steps to integrate the Board's guidance into the execution of our program and funding strategy, including proposals that we will present for discussion in further detail at our meeting on April 26th. In short, we are:

- Evaluating each of our program areas to identify where we need to further align our funding to the focus on technology-enabled solutions.
- Reviewing with the Board some possible recommendations on individual programs to continue, enhance or discontinue.
- Recommending an increase in the field of technology for development through our partnership with DataKind, which supports the deployment of advanced data analytics to address key development goals.
- Creating a new limited tender RFP to encourage other universities to create "Makers' Spaces" which bring together underserved youth, technology and the university community. We will be reaching out to universities based near Elsevier's US tech hub to enable volunteering opportunities.
- Extending our existing partnership with Research4Life to expand support for research capacity building from in-person

trainings to include an online distance learning training for developing country researchers.

• Developing a gender and innovation awards partnership as a new element of our STEM diversity initiatives, which will help raise visibility for the importance of embedding sex and gender to get the most robust research outcomes.

We very much look forward to your input on these and other topics at our 2018 Board meeting. Thank you again for joining us and sharing your deep experience and expertise in these areas.

Youngsuk "YS" Chi President The Elsevier Foundation





Ylann Schemm and Victoria Sekitoleko, Chairperson and Founding Member of the Uganda Agribusiness Alliance, during the Gender Summit Africa in Kigali, Rwanda, in March 2018.

© POLLITZER Ben/Portia



© BONNET Séverine/Epicentre-MSF

Epicentre's Niger Research Center at the Maradi Hospital, where Médecins Sans Frontiers doctors conduct a Phase III rotavirus vaccine trial, receiving an annual capacity building grant of \$100,000 from the Elsevier Foundation.

Who we are

"Over the past few years, we have sought to reengineer our programs, working directly with key partners to reinforce the growth of research ecosystems, diversity in science and global health. Looking ahead, our goal is to harness the power of technology to expand these opportunities to underserved communities."

YLANN SCHEMM
Director
The Elsevier Foundation

What we do

The Elsevier Foundation is a corporate not-for-profit 501(c)(3), funded by Elsevier, a global information analytics business that helps institutions and professionals progress science, advance healthcare and improve performance for the benefit of humanity. The Elsevier Foundation provides over \$1 million USD a year in grants to knowledge centered institutions around the world, which are addressing the UN Sustainable Development Goals through innovations in health information, diversity in science and health, research in developing countries and technology for development. The

Elsevier Foundation also provides a total of \$200,000 in matching funds to charitable organizations supported by employees to encourage community involvement.

How we work

The Elsevier Foundation is governed by its Board which is comprised of 5 external and 6 internal or ex officio members representing Elsevier, the company and funding partner. Members serve 3 year renewable terms. Our Elsevier Foundation Board members hold a broad range of expertise and interest in corporate philanthropy across issues such as development, climate change, diversity and inclusion, education, research capacity building, global health and how to tap technology for development.

The Elsevier Foundation Board meets annually to provide a strategic guidance of the Foundation's programming and governance.

Our Board

The Elsevier Foundation is governed by our Board which is comprised of 5 external and 5-6 Ex Officio or internal members representing Elsevier. Members serve 3 year renewable terms. Our Board members have a broad range of expertise and interest in the UN Sustainable Development Goals including development, climate change, diversity and inclusion, education, research capacity building and global health. Our Board meets annually to provide strategic guidance on the Foundation's program priorities, new partnerships, emerging issues and best practices. *Full biographies available in the Appendix*.



Nikunj Jinsi Global Head International Finance Corporation Venture Capital group



Beverly Malone CEO National League for Nursing



Emilie Marcus
Executive Strategy Officer
David Geffen School of Medicine
UCLA



Cosmas Ochieng
Associate Professor of the Practice
of Global Development Policy
Pardee School of Global Studies
Boston University



Geraldine Richmond
Presidential Chair in Science
University of Oregon

Ex Officio

The Ex Officio or internal members of our Board are leaders within Elsevier and deeply supportive of our mission as we align our unique contributions as a corporate philanthropic institution with the needs of our communities. The President of the Elsevier Foundation Board, Youngsuk "YS" Chi, presides over the annual meeting to ensure that the Elsevier Foundation employs sound ethical and legal governance and financial management policies. *Full biographies available in the Appendix*.



Suzanne BeDell
Managing Director
Education, Reference and
Continuity
Elsevier



Márcia Balisciano
Director
Corporate Responsibility
RELX



Youngsuk "YS" Chi
Chairman
Elsevier
Director of Corporate Affairs
RELX
President
The Elsevier Foundation



John Danhaer President Clinical Solutions Elsevier



Hannfried von Hindenburg SVP Global Communications Elsevier



Ron Mobed CEO Elsevier

Our Team

On a day to day basis, the Elsevier Foundation is run by a small core team consisting of the director, program officer, and a specially appointed treasurer and legal counsel. In addition to supporting our annual programmatic funding, Elsevier offers in kind support through office space, design and media outreach as well as additional volunteer support as needed from throughout the company. Full biographies available in the Appendix.



Ylann Schemm
Director
The Elsevier Foundation
Elsevier



Domiziana Francescon
Program Officer
The Elsevier Foundation
Elsevier



Chris Capot
Nurse Faculty Program
Elsevier



Maria Markova Treasurer Elsevier



Kenneth R. Thomson II Legal Council RELX

Our Partnerships

In 2015, after a decade of grant-making, the Elsevier Foundation staff conducted a review of the Foundation's priorities with our Board, company leaders, past partners and longstanding advisors. Our aim was to more effectively align our programs to the key challenges of science, health and technology challenges, as outlined in the 2015 UN Sustainable Development Goals. The Elsevier Foundation Board requested that we evolve from a grant-making approach driven by an annual "call for proposals" to co-developing impactful program ideas directly with a select group of partner organizations. The shift to a partnership model has enabled us to learn from leaders in the field to develop our knowledge and expertise, facilitating closer and more sustained involvement in the work of those organizations. It has also enabled us to assess the impact of our efforts over a longer period of time. In 2016, we established a new series of partnership-driven programs in four areas: Health & Innovation, Research in Developing Countries, Diversity in Science & Health, and Technology for Development.



Health & Innovation

Information technology can significantly advance the delivery of healthcare in developing countries. Health & Innovation directly supports organizations working to improve health outcomes in developing countries.



Diversity in STM

The future of science requires a robust and diverse workforce drawn from all corners of society. Diversity in STM focuses on advancing women in science and help under-served youth receive greater exposure to science education.



Research in Developing Countries

For many low-income countries, the scientific gap limits their involvement in vital research. Research in Developing Countries seeks to redress the balance with partnerships designed to widen access to academic knowledge.



Technology for Development

Technological solutions play a key role in helping the world solve some of the greatest challenges. Technology for Development harnesses the power of technology and big data for good, tackling some of the toughest global issues.



Our Partnerships

REPORTS

Progress reports from partnerships in 2016-2018



Jibu, Swahili for "answer" is a mobile continuing education app for nurses designed by Amref Health Africa to address the geographic, financial and infrastructural barriers that nurses and midwives in Kenya and beyond. © Amref Health Africa





"We want to support MSF/Doctors without Borders' mission to provide high-quality medical care to the most vulnerable populations. This work resonates well with the Elsevier Foundation's focus on supporting the United Nations Sustainable Development Goals."

YOUNGSUK "YS" CHI President The Elsevier Foundation

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Health & Innovation

Information technology can significantly advance the delivery of healthcare in developing countries, addressing problems such as the high risk of maternal death across Africa and HIV/AIDS prevention and treatment. "Health & Innovation" directly supports organizations working to improve health outcomes in both the North and South through the innovative use of health information. We work in close partnership with the organizations which each address this in their own way.



Doctors without Borders

Doctors Without Borders/Médecins Sans Frontières (MSF) is a leading international organization delivering emergency medical aid to people affected by conflict, epidemics, disasters, or exclusion from health care. The Elsevier Foundation is collaborating with Epicentre, MSF's research and training partner, to support their Niger Research Center with in kind help and a \$300,000 grant over a period of 3 years, with a goal of building field-based research capacity to deliver better medical care worldwide.



JIBU program

AMREF Health Africa is the largest African driven NGO committed to improving health and health care in Africa. AMREF Health Africa's JIBU program will use an \$80,000 a year over 3-year grant to scale their mobile nursing education pilot into a comprehensive program to provide targeted mLearning or mobile nursing education in Eastern Africa.



Nurse Faculty Leadership Academy

Since 2008, the Sigma Theta Tau Nursing Honor Society (STTI), has created a rigorous leadership development curriculum enabling junior nurse faculty to develop the necessary skills to become successful leaders in nursing education. The Elsevier Foundation provides an annual grant of \$100,000 to support the NFLA contribution to reducing the global nursing shortage.



MSF/Doctors without Borders

The Epicentre partnership

"Elsevier's support of our work goes beyond financial support. It will allow our medical teams to have access to scientific, technical and medical information that is essential to improve the quality of humanitarian healthcare MSF provides to the most vulnerable populations in the world."

JÉRôME OBERREIT Secretary General Médecins Sans Frontières

Funding

\$100,000 per year 3 years, 2016-2018

In kind resources

- Courtesy access and training for core Elsevier products: ScienceDirect, Scopus, ClinicalKey, SciVal, Embase and Mendeley
- Identifying opportunities for Niger staff to attend Elsevier conferences such as Vaccine, Epidemics, etc
- Panel showcasing MSF/Epicentre at the African Health Agenda International Conference in Nairobi, March 2017 supported by the Elsevier Foundation on African-driven health care solutions.
- Presentations by Elsevier experts at MSF/Epicentre Open Access seminar; Epicentre Niger Day.

Description

In Niger, infectious diseases and child malnutrition are the principle causes of mortality. In 2009, Epicentre, Doctors without Borders' research and training arm, established one of its three research centers in Niger to develop a strong African driven research center. Today, Epicentre's Research Center in Maradi has a broad research portfolio and the ability to investigate epidemics; implement alert and monitoring systems; conduct clinical trials and prevalence surveys; and measure the impact of medical programs.

Global changes in security have also led to a need for local African staff able to provide high-quality, consistent and continuous medical care in insecure environments. From a medical standpoint, this also improves the ability of MSF to empower local populations to bring about change in their home countries.

Capacity building is an integral component for developing a research center that contributes to the medical and research infrastructure of Niger. Positions within Epicentre Niger require advanced training in technical areas at both an individual and institutional level. By having a expert permanent staff from Niger, the diversity and quality of Epicentre's studies can be sustainably maintained and improved. Another critical element is a robust communication strategy that includes an understanding of the political, medical and cultural environment. Epicentre Niger builds on relations with national authorities and the wider global health community to promote the policy uptake of results and contribute to the sustainability of the Center.

Goals

The main goal of the partnership is the capacity building of Epicentre's core African team at all stages of the research process including the training of medical and scientific staff, holding an annual Epicentre Science Day to raise visibility with policymakers, researchers, journalists and funders and improving the dissemination of research results to promote relevant health policies in the region.

Milestones

- In January 2018, Epicentre held its first ever Scientific Day in Niamey, Niger, sharing critical work on the prevention of malaria, the new rotavirus vaccine and antibiotic resistance trends.
- In 2017 and 2018, Key Epicentre staff participated in scientific meetings and trainings and received support for PhD applications, scholarships and speaking opportunities.
- Two staff members enrolled in Masters of Public Health in France and another completed a clinical research assistant training.
- Dr. Yap Boum presented at Amref's Africa Health Agenda International Conference in Nairobi, in 2017 and the 2018 he joined the Next Einstein Forum to provide authorship skills training.
- Mentoring was set up between Epicentre staff and post-docs at the Harvard School of Public Health and the University of Florida.

Future plans

Additional training for key staff members at Epicentre Niger will further enhance communication and management skills as well as technical knowledge on clinical trial data management. We also aim to bring Francophone Elsevier volunteers to provide authorship training workshops around the 2019 Epicentre Scientific Day.



Left: mother and child at Epicentre's Niger Research Center. Since May 2014, Epicentre has conducted clinical trials for a new heat stable vaccine against Rotavirus, a devastating but highly preventable and treatable diarrheal disease. If proven safe and effective, this new vaccine could be a lifesaving game changer for children in Sub Saharan countries.

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Media Coverage

- Local research in Africa: a glimpse at possibilities in Niger (The Lancet Global Health, March 2018)
- Antibiotics resistance in Africa need urgent attention (SciDev. net, March 2018)



Ylann Schemm, Elsevier Foundation Director, with Anne Roca, Senior Editor at the Lancet Global Health, during the Epicentre's Scientific Day Niger, January 2018.

In September 2017, Anne spent a week in Amsterdam with the DRC and Mali journal teams (Annales Africaines de Medecine and Mali Medical) for an intensive training session with other 5 Francophone volunteers. In January 2018, she joined the MSF/Epicentre Niger Scientific Day moderating a round table on "Moving from Research to Policy".



Amref Health Africa

Jibu

"We believe that better health starts with a well-educated and informed workforce. In order to decrease the number of unnecessary deaths of mothers and children in Africa, it is vital to invest in human resources for health."

GITHINJI GITAHI Group CEO Amref Health Africa

Funding

\$80,000 per year 3 years, 2016-2018

In kind resources

- Panel showcasing Jibu at the African Health Agenda International Conference (AHAIC) in Nairobi, March 2017 supported by the Elsevier Foundation on African-driven health care solutions
- Author workshops at AHAIC jointly delivered with AMREF by a Lancet Editor; Additional workshops planned at Amref HQ in Nairobi in Oct 2017.

Description

Common challenges faced by nurses in Africa include acute shortages, skillsmix imbalances, retention, motivation, and limited access to education and training. To tackle these issues, Amref, an African-led NGO based in Kenya, is using innovative approaches to build the capacity of health workers through radio, eLearning and m-learning.

In 2013, Amref, in partnership with the Kenyan Ministry of Health, Rutgers, the Nurses Council of Kenya, and several training institutions for nurses, implemented Jibu, a mobile learning solution to support the professional development of nurses and midwives. Jibu is Swahili for "answer" and the mLearning application, primarily aimed at capacity building, offers a cost-effective way to make continuous education and collaboration widely available to nurses and midwives through their mobile phones.

With support from the Elsevier Foundation, Jibu was able to ramp up from pilot to full scale project. During phase 1 in 2016, over 10,000 nurses and midwives in 3 countries enrolled onto the application, signaling a strong desire among health workers to access credible, up-to-date learning materials. In 2017, Phase 2 focusing on improving the app, content development, the Continuous Professional Development (CPD) framework, learner enrolment and support, monitoring and evaluation; and international knowledge sharing and visibility.

Goals

- Increase access to information and learning materials.
- Support the adaptation of the CDP

framework for mLearning.

• Measure the effect of using mLearning on training and practices of nurses and midwives in Kenya.

Milestones

- A successful app design workshop was held to increase usability, accessibility and user friendliness through in-depth interviews with nurses. The team also observed the usage and interaction patterns of end-users in their own context.
- Local developers worked closely with the Jibu team to finalize the app and a marketing website to boost visibility; new modules were created including onboarding, online or downloadable courses, a collaborative chat functionality and a gradebook.
- Jibu received accreditation of CPD courses. The Nurses Council of Kenya has ensured that nurses are rewarded with points when they enroll in Jibu.
- New learning content was added: Basic Emergency Obstetrics, Neonatal Care and Family Planning, and Neonatal Healthcare

Challenges

From May – November 2017, a Kenyan nurses' strike for better remuneration and working conditions made it difficult for the Jibu team to find nurses to test Jibu. Fortunately, following intensive negotiations with the government, Kenyan nurses have now resumed work.

Future plans

- Develop additional learning content
- Launch of the Jibu app is targeted for late June 2018
- Roll out of Jibu with a full scale social media campaign followed by roadshows to create face-to-face awareness.



eLearning students during the face to face session in Mengo School of Nursing and Midwifery. "There are very few opportunities for continuing medical education," said Mercy, a Health Worker from the Kakululo Dispensary, in Kenya. "Sometimes the only ones are organized by the county health management team, which could even be once per year and take about 10 minutes only."

Media Coverage

- Jibu was highlighted in an Elsevier Foundation panel discussion during the Amref Health Agenda International Conference in Nairobi, March 2017.
- Africa in the era of sustainable development (Elsevier Connect, April
- "Jibu Increasing Access to Health Information for Nurses in Kenya", Diana Mukami's presentation from the STTI Conference in Capetown, 22 July 2016
- M-learning gives Kenyan nurses scalable continuing education (Elsevier Connect, February 2016)



(C) Amref Health Africa



Nurse Faculty Leadership Academy

"The NFLA truly shaped the course of my career. It helped me develop my own transformational leadership identity and provided me the tools to make a significant difference in the lives of my students and fellow faculty. My growth as a leader continues today through the tremendous relationships I formed during the Academy with fellow scholars, mentors, and advisers."

Clinical assistant professor New York University's Rory Meyers College of Nursing

Description

Surprisingly, the global nursing shortage is less about a lack of motivated students than qualified teachers. The Nurse Faculty Leadership Academy (NFLA) aims to ease the transition for the next generation of nurse faculty from practice to teaching. The program, which has been supported by Elsevier since 2009, was designed for aspiring leaders in nursing education and provides an intensive 20-month leadership development curriculum constructed on intellectual and experiential learning opportunities facilitated by distinguished faculty. Emerging leaders at schools of nursing who have served 2 to 7 years as full time faculty are eligible to apply to become a Scholar. Each Scholar works with a recognized Leadership Mentor and Faculty Advisor throughout the academy and completes three distinct curriculum domains: Individual Leadership Development; Advancing Nursing Education Through the Leadership of a Team Project; and Expanding the Scope of Influence Within the Scholar's Organization, Community, and Profession. Since launch, the Elsevier Foundation has supported a pilot and 3 NFLA cohorts with 18 scholars who have successfully completed the Academy. All Scholars reported taking on at least 1 new leadership position within their organization, community, or the nursing profession during their participation in the NFLA.

Goals

- Facilitate leadership development of the Scholars.
- Promote nurse faculty retention and satisfaction.
- Foster academic success of the Scholars
- Cultivate high-performing and supportive environments in academe.

Milestones

- Jan-Oct: Scholars participated in Facultyled monthly forums via video conference on: work/life balance, inter professional teams, dissemination of outcomes, and dealing with recognition and rejection, and more.
- March: Workshop II, Indianapolis, Indiana. The topics included the future of nursing education leadership, personal branding, innovation, and technology. Each Scholar also presented a mid-academy progress report on the status of their project and leadership journey.
- April: Exhibited at ATI National Nurse Educator Summit in Orlando, Florida.
- Jul 2017: At Sigma's 28th International Nursing Research Congress in Dublin we held a special session, exhibited, and conducted meet and greets with 13 deans.
- Sept-Oct: Second series of site visits occurred, providing opportunity for Scholars to demonstrate progress in the final stages of their leadership development experience in the NFLA. This included meetings with strategic stakeholders for the sustainability of the Scholars' future leadership development.
- Oct: At Sigma's 44th Biennial Convention in Indianapolis we exhibited, conducted a special session and held meet and greets. All abstracts and posters submitted will be featured on the Virginia Henderson Global Nursing e-Repository, a research database for nurses all over the world.

Future plans

To enhance the NFLA, a rigorous evaluation and planning period has begun with a strong focus on boosting the Academy's global presence and international participation . Additionally, the revised curriculum will integrate a strong theme of technology in relation to leadership of nursing education in the future. Longitudinal data from academy participants will guide the planning to move the NFLA to the forefront of leadership development in nursing education throughout the world.



Sigma Staff, Kay Clevenger and Karen Beranek, exhibiting at the National League for Nursing (NLN) Summit in San Diego, California, September 14-17, 2017. At the summit, NLFA obtained 130 serious inquiries for its programs.



The Nurse Faculty Leadership Academy is an international leadership development experience designed to facilitate personal leadership development, foster academic career success, promote nurse faculty retention and satisfaction, and cultivate high performing, supportive work environments in academe.

BY THE NUMBERS



NFLA Scholars experienced a 17% INCREASE in their overall Leadership Practices Inventory (LPI) scores from the beginning to the end of the academy.



85% OF SCHOLARS stated an increase in their personal commitment to nursing education as a result of their NFLA experience.



All Scholars reported taking on at least 1 NEW LEADERSHIP POSITION within their

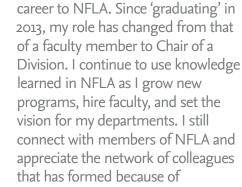
organization, community, or the nursing profession during their participation in the NFLA.





The data listed above highlights the outcomes from the 2014-2015 cohort of NFLA.

© NFLA



"I can honestly say that I owe my

CAROLYN HART

Associate Professor and Chair, Wilson College

participation. NFLA is life-changing!"

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of leading a team

project in simulation

to advance nursing education, one

Scholar reported

175% GROWTH in amount of

simulations across

six clinical courses

within one semester.

Sigma Theta Tau International Honor Society of Nursing



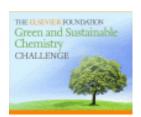
TWAS fellow Thomas Egwang working with a colleague at Med-Biotech Laboratories, Kampala, Uganda. The Elsevier Foundation sustainability partnership funds travel grants for TWAS fellows, visiting experts and case study competitions.

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© TWAS

Research in Developing Countries

Only 2% of sustainability science research output is produced by developing countries, despite the fact that they are often the hardest-hit by climate change, food, energy and other scarcities. For many low-income countries, this so-called 'science poverty' limits the effectiveness and potential for science and innovation to be relevant to their needs. The Research in Developing Countries program seeks to redress the balance with four key partnerships designed to widen access to academic knowledge and deepen the involvement of scientists in developing countries in SDG-driven research relevant to the issues they face on a daily basis.



The Elsevier Foundation Green and Sustainable Chemistry Challenge

Chemistry is an inextricable part of the world we live in—97 percent of our manufactured goods are made through processed chemicals. The Challenge encourages scientists to use green and sustainable chemistry solutions to tackle some of some of the developing world's greatest challenges whether in water, sanitation or energy.



Research without Borders

Local research is essential for local challenges. Research without Borders partners up Elsevier volunteers with the African Journal Partnership Program, an NIH supported research capacity building initiative for African health journals. Through in depth training and mentoring, we aim to boost the impact, effectiveness and visibility of African research for the African health context.



The World Academy of Sciences

Global institutions and meetings are vital for knowledge exchange, strategy, policy and talent development. The TWAS North South Collaboration in Sustainability aims to boost the participation of researchers in developing countries in sustainability science through annual conferences, travel fellowships, case study competitions and visiting experts in sustainability.



Librarians without Borders

Making research available in developing countries is not sufficient to bridge the digital divide. Since 2007, Librarians without Borders has worked to fill that gap providing information literacy training which forms the backbone of Research4Life, a UN-publisher partnership providing more than 77,000 peer reviewed resources for free or low cost to researchers in developing countries. By creating a new cadre of dedicated Research4Life trainers, Librarians without Borders is working to scale up countries' ability to strengthen their health sciences information capacity with qualified librarians, technological infrastructure, and access to quality information.



The Elsevier Foundation Green and Sustainable Chemistry Challenge

"The success was overwhelming; it made it a real challenge to come up with the top five proposals. It demonstrates both the need for and the availability of new ideas to tackle well-known challenges in the developing countries. It also underlines the huge potential chemistry has to contribute to United Nation Sustainable Development Goals – if it's done in a sustainable manner."

KLAUS KÜMMERER

Director, institute for Sustainable and Environmental Chemistry, Leuphana University Lüneburg

Chair, Elsevier Foundation Green and Sustainable Chemistry Challenge Jury Panel

Funding

\$27,660 in 2017 \$55,320 in 2018

In kind resources

• Travel grants and free registrations to Elsevier's Green and Sustainable Chemistry Conference for the 6 member judging panel; additional free registrations for key student reviewers of the Challenge to attend the conference.

Description

Across every society, chemistry is part of the fabric of every aspect of our lives. The Elsevier Foundation Green & Sustainable Chemistry Challenge taps the major role that chemists play in developing medicines, fertilizers, and other chemicals needed to resolve critical environmental and climate issues in developing countries. Jointly run with Elsevier's chemistry journals team, the contest aims to raise awareness around how chemistry can help us to make incremental, crucial progress towards the SDGs.

Launched with the Elsevier Foundation this year, the Challenge invites applicants from around the world to submit ideas for chemistry solutions, addressing sustainability challenges in low income countries – energy, water, waste reduction, recyclability, chemistry, agriculture, medicine and more. The first prize challenge winner receives a €50,000 award, and the second prize winner receives a €25,000 award.

Goals

The Challenge aims to:

- Highlight innovative chemistry projects that address issues in developing countries.
- Invite the top 5 finalists to present at the annual Elsevier Green and Sustainable Chemistry Conference in Berlin, creating critical visibility for an emerging community in the chemistry world.
- Encourage sustainability science in developing countries.

Milestones

The 2017 winners demonstrate how green and sustainable chemistry offers tangible ways to support the UN Sustainable Development Goals. Dr. Denis

de Lima from Brazil, won the \$50,000 first prize, "Biosurfactants to Combat Mosquito-Borne Diseases", which creates an environmentally friendly and inexpensive larvicide from cashew nut waste to combat diseases such as dengue fever, Chikungunya and the Zika virus. Dr. Chioma Chikere, a Nigerian woman scientist, received the second prize for her project, "Crude oil-polluted site ecorestoration in the Niger Delta", which aims to develop a cost-effective, ecologically-safe and sustainable bioremediation system to clean up land devastated by oil pollution. In all, the Challenge met several milestones

- Receiving 680 proposals, a 36% increase from the 2016 Challenge held by the Elsevier chemistry journal team.
- Welcoming participants from 89 different countries of which, 25 were technologically lagging countries (as defined by TWAS, The World Academy of Sciences).

Future plans

- The 2018 winners will be announced at the Elsevier Green and Sustainable Chemistry Conference in Berlin, 14-16 May 2018.
- In 2018, the Challenge will partner with the newly launched, German-based intergovernmental Organization, ISC3 (the International Sustainable Chemistry Collaborative Centre) to expand its reach and build a community across sectors.



Daalen, Raudhah Talib, Dr. Suzana Yusup, Noor Hafizah Ramli and Abu Bakar Ahmad. The teams' project "Biopesticides for improved paddy yield" won the 2016 Green & Sustainable Chemistry Challenge, showing how biopesticides can be used to increase the yield of rice crops without the dangerous health effects associated with chemical

pesticides.

Field trial visit to the Center of Excellence for Rice in Malaysia, left to right: Shahrizal Abdul, Rob van

© Rob van Daalen

Media Coverage

- Winners selected for Elsevier Foundation Green and Sustainable Chemistry Challenge (Domiziana Francescon, May 2017)
- Winners announced for the 2017 Elsevier Foundation Green and Sustainable Chemistry Challenge (Press release, May 2017)
- Winning proposal for Green and Sustainable Chemistry Challenge improves Malaysian rice paddy yield (Rob van Daalen, May 2017)
- Cashews to combat mosquitoes? Top 5 proposal for the Green and Sustainable Chemistry Challenge (Domiziana Francescon, March 2017)
- Call for proposals for Green and Sustainable Chemistry Challenge (Domiziana Francescon, June 2016)
- The Elsevier Foundation Launches the Next Green and Sustainable Chemistry Challenge (Press release, June 2016)



© Dario Spoto

The winners of the 2017 Elsevier Foundation Green and Sustainable Chemistry Challenge are first-prize winner (right) Dênis Pires de Lima, professor at Federal University of Mato Grosso do Sul, Brazil, and runner-up Chioma Blaise Chikere, lecturer at the University of Port Harcourt, Nigeria.



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Ylann Schemm (front), Elsevier's Senior Publisher Rob van Daalen (right), and the Challenge judges (L to R): Sam Adu-Kumi, Borhane Mahjoub, Helmut Krist, Klaus Kümmerer and Joel Tickner.



Research without Borders

The African Journal Partnership Program

"The progress of the AJPP journals has been substantial, with the journals all having raised their visibility online for readers and authors in Africa and worldwide and the editors taking leadership positions in international organizations."

ANNETTE FLANAGIN Co-director African Journal Partnership Program

Funding

\$60,000 per year 3 years, 2016-2018 In kind resources

- The Elsevier Foundation covers Elsevier volunteers travel costs. As of August 2017, 12 Elsevier volunteers have provided 9 months of training to the AJPP journals. Through January 2018, another 11 volunteers will each donate between 1-4 weeks of Elsevier time.
- Host 6 members of the Mali and DRC journals in Amsterdam for a week to boost the impact of their journals; Elsevier will provide space, onsite meals and additional training beyond the 5 planned volunteers.
- Provide AJPP editors with access to ScienceDirect and Scopus.

Description

Invaluable research being carried out in African countries is often not effectively disseminated either to African researchers or to a wider international audience. To boost the impact and discoverability of African health research, the Elsevier Foundation created "Research without Borders", a skills-based volunteering partnership with the African Journal Partnership Program (AJPP) tapping Elsevier expertise in publishing, marketing, operations and technology. AJPP is a high profile mentoring program supported by the US National Library of Medicine and NIH's Fogarty International Center and coordinated by the Council of Science Editors. AJPP pairs 10 African health journals in Ghana, Malawi, Ethiopia, Sierra Leone, DRC, Uganda, Mali, Kenya, Rwanda and Zambia with leading US and UK health journals including, The Lancet, The Annals of Internal Medicine, BMJ, and The New England Journal of Medicine. With a grant of \$204,000 over the course of 3 years, Elsevier volunteers provide supplementary training to the African journals for a period of 1-4 weeks in country. The journals include: African Health Sciences, Annals of African Surgery, Ethiopian Journal of Health Sciences, Ghana Medical Journal, Malawi Medical Journal, Rwanda Journal of Health Sciences, Annales Africaines de Medecine, Mali Medical and, most recently, The Health Press Zambia.

Goals

Elsevier volunteers work with the journals and mentors to provide strategic, editorial communication and operational guidance:

- Strengthen the impact of African Journals by improving quality and discoverability through targeted mentoring teams.
- Improve visibility of African research by working to submit applications to Scopus, MEDLINE and other scholarly indexes.

- Facilitate collaboration and knowledge exchange between African editors and their counterparts.
- Support the training of authors, reviewers and journalists in Africa
- Build journal websites, evolve editorial board practices and improve the pool of authors and reviewers.
- Work to develop a strategic business plan, usually with a sustainable open access business model.

Milestones

- In 2017, 20 Elsevier volunteers contributed a total of 48 weeks of time to share expertise in publishing, marketing, operations and technology with journals across 9 African countries.
- In September 2017, we hosted 2
 Francophone journal teams from the DRC and Mali (Annales Africaines de Medecine and Mali Medical) for a week-long intensive training session in Amsterdam with 5 volunteers from the Amsterdam, Paris and London offices. The decision was made due to travel security issues.
- Volunteer Anne Roca (*The Lancet Global Health*) joined the MSF/Epicentre Niger Scientific Day (Jan 2018), moderating the round table *Moving from Research to Policy*. The volunteers have learned at least as much as they have taught, bringing back unique perspectives on the African research culture, their own strengths and abilities to collaborate effectively.

Future plans

15 Elsevier colleagues are scheduled to volunteer in 2018. RwB volunteers EJ van Lanen (Rwanda, 2017) and Louise Curtis (Ethiopia 2017) will attend the AJPP Annual Meeting in Ethiopia, June 2018.

An additional Francophone training will be organized in the Paris office during the Fall of 2018 for the Mali and DRC journals.



Elsevier volunteer Daniel
Staemmler at the University of
Rwanda's 2nd International Nursing
Conference, where he delivered
a highly interactive 2-hour author
workshop, setup as keynote
and attended by more than 150
participants.

Media Coverage

• Firsts in African health research: spotlight on Dr. Lucinda Manda Taylor (Elsevier Connect, 2017)

• Research without Borders: sharing expertise in Africa (Eslevier Connect, 2017)



C Louise Phillips

During their assignment in Kenya, Elsevier volunteers Fiona Macnab and Louise Phillips (third and seventh from left) gave feedback to the Innovate for Life entrepreneurs at the Amref headquarters in Nairobi.



C Laura Casares

Elsevier volunteers Louise Curtis and Laura Casares with Ethiopia J. Health Sciences' Editor-in-Chief Abraham Haileamlak and journal intern Yibeltal Siraneh Belete.



The Word Academy of Sciences

North South Collaboration in Sustainability

"The research being done by these young African scientists is extremely promising. They are addressing specific human challenges with sustainable solutions. That creates an immediate value, but it also reinforces the rising awareness of sustainable science in the developing world. This is a very positive benefit of our partnership with the Elsevier Foundation."

ROMAIN MURENZI Executive Director The World Academy of Sciences

Description

The collaboration between TWAS and the Elsevier Foundation was spurred by a number of key launches: the UN 2030 Agenda, the UN Sustainable Development Goals and the 2015 Sustainability Science in the Global Research Landscape report from Elsevier and SciDev.net. We know that sustainability science is growing very rapidly, but so is the North-South research divide in these fields. The TWAS North-South Sustainability Collaboration aims to boost the 2% of sustainability research currently contributed in lowincome countries by engaging scientists in solutions that work best for their societies. The Partnership aims to strengthen TWAS' activities in climate change, renewable and clean energy, quality education, sustainable agriculture, food security, green chemistry, environmental degradation and pollution, biodiversity loss, and gender equality.

Goals

- Sustainability Visiting Experts grants supports professionals to spend up to a month in a host institution sharing their knowledge in sustainability fields.
- Travel grants for TWAS' South-South Doctoral and Post-Doctoral Fellowships in sustainability in centers of excellence in emerging economies; travel grants are given to researchers whose PhD or postdoc falls under the umbrella of sustainability science.
- A Sustainability Case Studies Competition was held among OWSD and TWAS postgraduate students to select the best case studies that address major global challenges.
- Sustainability Symposium has been embedded in the TWAS General Meeting which brings together distinguished and early career scientists from developing and emerging countries.

Milestones

- Travel grants for South-South Doctoral and Post-Doctoral Fellowships: In 2017 the number of students supported was significantly higher (30) than in 2016 (10). Among them 27% were women and 37% from Africa. There was a significant increase in the number of projects in areas related to sustainability science.
- The 5 Sustainability Case Studies Competition winners joined the first meeting of the TWAS Young Affiliates Network in Brazil in August. They gave presentations during a session especially dedicated to sustainability and the SDGs, followed by a focused address by Elsevier publisher Juliana Trajano.
- Sustainability Visiting Experts: Given the successful uptake, the number of annual \$4000 knowledge exchange grants have increased: 4 in 2016, 6 in 2017, 8 in 2018.
- TWAS supported the attendance of TWAS awardee Dr. Sahar Shamseldden Mohammed Abdalla at the 2017 Elsevier Green & Sustainable Chemistry Conference in Berlin. She was undertaking a TWAS research collaboration with the German Research Foundation.

Challenges

- Travel grants for South-South Doctoral and Post-Doctoral Fellowships: a better gender balance needs to be achieved.
- Outreach for the for the Sustainability Case Studies Competition was very effective, yielding many entries which proved challenging for the small TWAS team to manage.

Future plans

- Sustainability Visiting Experts: the 2018 awards will be scaled up to 8, given the success and impact of previous awards.
- If a TWAS General Meeting is held in 2018, a sustainability workshop will be organized for early career scientists.

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Funding

\$80,000 per year 3 years, 2016-2018

In kind resources

- Free registration for TWAS fellow to Elsevier's Green & Sustainable Chemistry Conference
- Author workshop for TWAS Young Affiliates Conference in Brazil August 2017 by Elsevier publisher.



Dr. Mirabbos Hojamberdiev (left) works with a colleague at the University of Dar es Salaam in Tanzania on research on clean water accessibility. One unique aspect of his experience is its focus on South-South cooperation connecting Uzbekistan to Tanzania. The Tanzanian students "were so surprised that I never had an education in Europe or the United States," he said. "They underestimated themselves as African-educated scientists."

Media Coverage

- TWAS-Elsevier award honours sustainability research (TWAS, October 2017)
- Contest aims to boost innovation in sustainability research (Elsevier Connect, June 2017)
- Sustainability experts receive travel grants to provide training in developing countries (Elsevier Connect, December 2016)
- A grant to power sustainability science (TWAS, January 2016)
- Bridging the North-South divide in sustainability (Elsevier Connect, January 2016)





solar dryer while trialling the new technology in Lake Turkana, Kenya. Oscar Donde, a hydrobiologist from the region, developed a new technology that helps dry more fish while also losing fewer to the harsh environmental conditions and climate change.

A fisherman arranges fish on a

Dr. Yahkat Barshep teaching a field class in biodiversity conservation to university students in Liberia as part of her Sustainability Visiting Expert assignment.



Librarians without Borders

The MLA partnership

"The HINARI/Research4Life Training Award has impacted health sciences research, training and clinical care around the world. It has given a venue for information professionals from diverse cultures to collaborate, increase health care equity, and build ongoing international relationships. Health sciences librarians are being inspired as leaders and agents of change to truly make a difference through the power of information."

GURPREET RANA Chair MLA Librarians without Borders Committee

Funding

\$45,000 per year 3 years, 2016-2018

In kind resources

- Ylann Schemm, Director of the Elsevier Foundation, has chaired the Research4Life Communications team over the past 4 years, ensuring the development and communication of a training portal on the R4L website ensuring the visibility of LWB resources developed through the grant.
- The Elsevier Publishing Campus highlights the work of LWB to early career researchers in developing countries.
- Elsevier prints a substantial amount of LWB materials for dissemination across workshops and the annual MLA meeting.

Description

Before the digital revolution, practicing evidence based health care, policymaking or education in developing countries was virtual impossible. In 2001, that slowly began to change, first with Hinari, WHO's biomedical free and low cost access to research program and later with open access and Research4life (R4L) which now comprises 5 programs including Hinari, 80,000 peer reviewed resources, 8,000 registered institutions and 200 publishing partners. Despite these gains in access however, many researchers, doctors, librarians and policymakers in developing countries still suffer from for a lack of information literacy. How do you make use of critical resources if you lack the skills to find them? The Librarians without Borders "E-library Training Initiative" (LwB) was founded in 2007 by the Medical Library Association (MLA) and supported by the Elsevier Foundation. It is based on the principle that the key to improving global health is the ability of each nation to build and strengthen their health sciences information capacity with adequate technological infrastructure and access to quality information. Our longstanding partnership supports a corps of librarian trainers through annual training grants and face-to-face train the trainer activities for the Research4Life programs.

Goals

- Increase the number of trainers based at R₄L registered institutions, including health information professionals, researchers, lecturers, and post-graduate and medical students whose activities will result in a cascading effect on users from their institution.
- Increase the pool of trainers within MLA and create a community of global health informationists who can support R4L training activities, particularly through the

LWB/EF Research4Life awards.

• Reinforce the Research₄Life repository of learning and training with timely and relevant materials.

Milestones

- 7 workshops were conducted abroad (Ghana, Papua New Guinea, Guyana and Malawi - includes 3 at WHO country offices) and 2 within the USA (Texas Christian University and Johns Hopkins University) that trained approximately 190 individuals.
- 40 participants completed a Users' Distance Learning course.
- 8 train-the-trainer awards were given to librarians from both the North and South in 2016-2017 and included training activities in Ghana, Tanzania, Honduras, Ethiopia and South Africa.
- R4L installed a new authentication system and the majority of LwB modules were updated.
- Materials are used at R4L workshops, distance learning courses and through various training materials portals and need current authentication protocols.

Challenges

Supporting development of evaluation tools that measure impact of access. Following workshops, LwB measures training with post-workshop surveys and a six-month 'outcomes' questionnaire, but these are insufficient for measuring longterm impact.

Future plans

Scaling up projects and increasing the number and types of training workshops and trainers receiving awards. (In 2018, MLA received 20 proposals of which 4 will be funded); creating and maintaining a robust learning repository and toolkits; developing and supporting an engaged online community.



"The Hinari/Research4Life Training Award opened a door to new international collaboration, increased training for students, faculty and staff and a higher usage of Hinari."

MEGAN VON ISENBURG Associate Dean for Library Services and Archives, School of Medicine, **Duke University** 2016 R4L Award winner

Media Coverage

• Elsevier Foundation's new programs support STEM diversity and developing country partnerships (Elsevier Connect, February 2016)



coordinator Lenny Rhine with participants of the 2 Train the Trainer workshops in Bhutan, which was joined by about 90 attendants and included both theoretical and hands-on activities.

Librarians without Borders®



© RODRIGUEZ Natalia/R4L

Lenny Rhine, librarian emeritus from the University of Florida and coordinator and founder of Librarians without Borders®, trains librarians and researchers in Ghana.



"The opportunity to become a scientist or technology expert should not depend on a young person's economic status or cultural background. Together with colleagues at Imperial, we're looking forward to having some of our own Elsevier technology staff serve as coaches to help guide the students and to let them see how accessible and rewarding such careers can be."

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RON MOBED CEO Elsevier

3. Diversity in STM

The future of science requires a robust and diverse workforce drawn from all corners of society. Encouraging STM careers among young people with severely limited educational resources and few professional role models is a particular challenge. To address this, we have expanded our focus on advancing women in science to include new partnerships helping underserved youth receive greater exposure to science and health education.



IMC Weekend School

The IMC Weekend School offers a science and health enrichment program to underserved 11–13 year olds in Amsterdam. Our partnership fosters inspiring exposure to science and health education for children of largely immigrant backgrounds, encouraging STM careers but also promoting positive professional role models.

Imperial College London

Imperial College London

Imperial College London (ICL) has developed the White City Maker's Challenge program offering 14–18 year olds from White City, one of London's most disadvantaged communities the opportunity to engage with cutting-edge science, 3D printers, engineering and design workshops, afterschool clubs, mentoring and project teams.



The New York Academy of Sciences

The New York Academy of Science's highly successful After-School STEM Mentoring Program is designed to reach the city's most underserved middle school children in remote schools across the 5 boroughs by training New York's early career STEM graduate students to serve as mentors



The Organization for Women in Science for the Developing World

Since 2010, the OWSD-Elsevier Foundation Awards for Early-Career Women Scientists in the Developing World recognizes the achievements of researchers who have made significant contributions to the advancement of scientific knowledge. The program represents a longstanding partnership with the Organization for Women in Science for the Developing World (OWSD).



Portia

Building on past New Scholars grants, Portia, the architect of the Gender Summits, and The Elsevier Foundation have developed a strategic partnership to promote the understanding and adoption of gender-sensitive approaches, and advance sex and gender sensitive research, innovation and development.



GenderInSITE

GenderInSITE promotes the role of women in science, innovation, technology and engineering, and demonstrates how applying gender lens can provide deeper insights, more effective programs and more sustainable outcomes in development for both men and women.



IMC Weekend School

"If you don't experience positive input for how to build your future at home or at school — I always say 'vitamins for your mind' [...] — it's really hard to stay positive. So I thought we can change that by building an inspiring environment for children where they meet with people who are doing interesting work in society."

HELEEN TERWIJN
Founder
IMC Weekend School

Funding

\$25,000 per year 3 years, 2016-2018

In kind resources

- Over the course of 2016—2017 school year 20 Elsevier colleagues have volunteered a total of ca. 100 hours of time and expertise to coach children during the Sunday modules.
- Elsevier has hosted regular volunteer outreach sessions at the Amsterdam office raising awareness about the IMC Weekend School and recruiting volunteers.
- In December 2016, Elsevier's Global Communications team featured the IMC weekend school program in an Elsevier Connect article and a short video, covering the costs of professionally filming and producing the video.

Description

Encouraging careers among young people from communities that have severely limited educational resources and few professional role models is crucial. The IMC Weekend School offers an enrichment program for children in underprivileged neighborhoods across the 10 largest cities in the Netherlands, which helps children to acquire self-confidence, develop non-cognitive life skills, connect more fully to society and ultimately improve their prospects. Through a 3-year program, professionals, volunteer teachers and coaches introduce students. ages 11-13 to a wide range of disciplines including science and health. They receive communication skills training, conflict resolution and all-round character development. The Elsevier Foundation grant supports the science and health programs for the Amsterdam West-based Weekend Schools.

Research supervised by methodological sociologist dr. H. G. van de Werfhorst of the University of Amsterdam over a period of 2 and half years demonstrates that students who followed the 3-year IMC Weekendschool program have been able to develop more self-confidence, a broader view on future career prospects and are more aware of their social capabilities and specific qualities than their classmates in primary school who served as the control group.

Goals

• Introduce students to a wide range of disciplines (15 on average) through classes taught by volunteer professionals; provide additional soft skill training in presentation, cooperation, research, debate and conflict resolution and an allround character education over the course of IMC's three year program.

- Encourage careers among young people from communities that have severely limited educational resources and few professional role models.
- Improve the outlook, self-confidence and prospects of underprivileged children, helping them to develop noncognitive skills and acquire a sense of belonging to society.
- Promote positive interaction between students, teachers and volunteer coaches, overcoming cultural and class boundaries.

Milestones

- In 2017, the IMC Weekend School Amsterdam West had an average of 110 students, coming from underserved neighborhoods, from at least 14 primary schools. The percentage of female students lies around 60%.
- Each year, 7 Sunday classes with a focus on science or health have been supported through the Elsevier Foundation grant.
- Annually more than 80 students have benefited directly from the Elsevier Foundation Science and Health modules. This year, 38 students attended the Science classes and an additional 46 students attended the Health program.
- In all 25 volunteer guest teachers were involved in the Science and Health program, and 34 volunteers in a coaching capacity. Elsevier volunteers participated 20 times in one of the Sunday classes.

Future plans

- Explore the possibility of matching IMC Weekend School alumni with internship positions at Elsevier.
- Continue to recruit Elsevier volunteers to participate annually in the IMC's science and health modules.
- Build joint PR and communications campaigns to be shared internally and
- Small documentary about volunteering.



IMC Weekend School alumna Maryam Lyousoufi (23) teaches current students (10-14) about the field of medicine. Every year, students have the chance to discover and learn about different healthcare professions as part of their 3-year long curriculum, across more than 15 subject areas. A growing number of alumni are now providing guest lectures about their own field of study or work, becoming important role models for the next generation of budding doctors, nurses, pharmacists and technicians.

Media Coverage

- Children peering into their futures this is rocket science (Elsevier Connect, December 2016)
- Immersing children in the world of science and medicine (Elsevier Connect, September 2016)
- Empowering Unexplored Knowledge (Youtube)



© FABER Eva/IMC Weekend Schoo

IMC Weekend School student Buse during one of the Health module lessons. Through a robot system, she received a prescription for a box of Skittles, completed with instructions on how to "use" the candies.

Imperial College London

Imperial College London

White City Maker Challenge

"We need to listen to their needs, tap into their talents, and — crucially — open our doors. The Invention Rooms will be a beacon for community-driven innovation, channelling the energy and ambition of our neighbors and bringing local people together with Imperial staff and students to share in the excitement of science, discovery and making. The impact of this will be transformative, boosting opportunity, aspiration and innovation in White City and beyond for decades to come."

MAGGIE DALLMAN
Associate Provost of Academic
Partnerships
Imperial College London

Funding

\$100,000 per year 3 years, 2016-2018

In kind resources

Once the Maker's Challenge launches in 2017, London based Elsevier colleagues will be recruited to donate their time to coaching teenagers in the different program offerings.

Description

Imperial College London has pioneered a new form of outreach at White City, aimed at inspiring teenagers from disadvantaged, urban backgrounds to experience and interact with science through their own creativity. Over three years, the Maker Challenge Program will offer young people aged 14-18, from one of London's most disadvantaged urban communities, the opportunity to enhance their soft and practical skills, engaging in a creative, innovative and entrepreneurial program designed to take an idea to working prototype, and potentially beyond.

The Makerspace builds on decades of Imperial's more traditional STEM outreach, aimed at inspiring students regardless of background to consider STEM subjects at university. The program is based in White City, where ICL is building their new biomedical campus, and is situated in the larger "Invention Rooms" center which also houses ICL's advanced hackspace and a community engagement space.

Milestones

- The Maker Challenge Program's first cohort took place over 11 weeks Sept-Dec 2017. Starting with 2 days of ideation and team building, students worked alongside the Makerspace team and Imperial undergraduate mentors, with workshops on computer aided design, 3D printing and electronics. Awarded student projects included a design for speakers built into sneakers, a clay plant pot with built-in water sensor, a water turbine energy generator, and an amphibious cart design.
- The first cohort included 20 participants from eight different schools, 35% of whom were female.
- The youth robotics program piloted in Jun 2017 was attended by more than 20 11 to 17 year-olds, building drones from

scratch and holding drone races.

- The first cohort also took part in an enterprise day, with a talk from an ICL Business school postgrad, entrepreneur and White City local. Hearing the experiences of someone starting their own successful business first hand was inspirational for the participants.
- After the tragic fire at nearby Grenfell Tower in June 2017, ICL collected donated supplies in the newly completed Invention Rooms and provided laptops that allowed the student inhabitants from Grenfell to continue their studies.

Challenges

- The launch of the Maker Challenge Programme was delayed to Sep 2017 to finish renovations and ensure the development of stronger links with the schools and community groups.
- Targets for participant numbers are being met and there is great interest from the community but applications from targeted groups are lower than anticipated. Word of mouth and engaged teachers in the area are currently helping to meet this goal.
- Increased efforts are also needed to work directly with teachers, and ICL will run targeted teacher workshops in 2018 to better understand the barriers teachers encounter when recommending students and promoting the Makerspace.

Future plans

- Connect participants with onward opportunities: apprenticeship routes, summer schools, masterclasses, etc.
- Design an alumni program and seek philanthropic support to launch it.
- Expand the Makerspace to 11 to 14 year-olds and launch programs to support STEM learning in primary schools in response to requests from local parents and community leaders.



An Imperial College London mentor with a Makerspace participant in the "Invention Rooms": the zone blends an advanced university hackspace with a community engagement area and a unique "Reach Out Makerspace" for local young people.

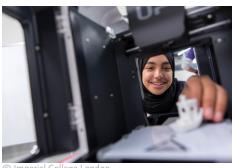
🔿 Imperial College Londor

Media Coverage

- Makerspace creates tech opportunities for young people (Elsevier Connect, Dec 2017)
- Young inventors get hands-on experience in Imperial's Maker Challenge (ICL News, Nov 2017)
- · Maker Kate Mulcahy on running Imperial's most exciting new community programme (ICL News, Nov 2017)
- Pioneering innovation space opens in White City (LBHF, Oct 2017)
- Researchers take part in community event at White City (RBHT, Now 2017)
- Imperial College ILondon adds to advanced hackerspace network (Businesscloud, Feb 2017)
- Imperial College London designs an invention space for disadvantaged teens (Elsevier Connect, February 2017)
- New Imperial College rooms will encourage spirit of invention (LBHF, Jan
- The Inventions Room Open Day 2017 (YouTube)



Gabby Appleton (Managing Director, Mendeley) speaking with one of the Invention Room fellows during the opening ceremony in November 2017.



An afterschool workshop on 3D printing was held over the 11-week long Maker Challenge in the Fall of 2017. During Challenge's finale, 5 students were awarded Mini 3D printers and robot kits as prizes for their winning projects.



New York Academy of Sciences

After-School STEM Mentoring Program

"The beauty of this program is that not only do kids learn critical STEM skills, which are increasingly important for many types of jobs, but they also learn that STEM professionals can look just like them. They meet, often for the very first time, real live scientists and engineers who are young, passionate, and come from diverse backgrounds. Suddenly, they start to see that not only is STEM interesting, but it's something that they can do, too."

MEGHAN GROOME
Senior VP Education
New York Academy of Sciences

Funding

\$100,000 per year 3 years, 2016-2018

In kind resources

- The Elsevier Foundation funds cover the outreach programs for children, while the "Elsevier Professional Development Series" for NYAS' Science Alliance program has been developed as an additional in kind service providing educational panel discussions and webinars for NY's early career researchers twice a year.
- A small number of New York-based Elsevier employees have donated time to work with children during afterschool programs during 2016–2017. During the 2017–2018 school year, we will work to boost that number to a more sustained volunteer presence.

Description

To thrive in our technology and information driven economy, our next generation of students need viable STEM skills. The New York Academy of Sciences, one of the oldest and most distinguished US organizations of scientists and researchers, offers the After-School STEM Mentoring Program (ASMP) to New York's most underserved children, ensuring that they are exposed to the inspiring world of STEM. The Elsevier Foundation partnership supports the NYAS' engagement with funds, volunteers and additional support for the early career scientist mentors.

Goals

- Build capacity within the ASMP by expanding our reach to isolated and underserved areas of NYC by creating a cohort of "Elsevier Scholars" who received a stipend to mentor in these areas.
- Host 2 STEM Bonanzas and expand our Family Science Nights to all of New York City's 5 boroughs.
- Expand professional development opportunities to Science Alliance members through the "Elsevier Professional Development Series."

Milestones

Major programs offering vital STEM programs to middle school students throughout New York City's 5 boroughs:

• The Afterschool Science Mentoring Program trains and places young, dynamic scientists and engineers in existing community-based afterschool programs to teach and mentor kids. In 2016-17, the program was in 106 sites and had 162 mentors engaged across NYC. Of these sites, half were in previously unserved schools.

• The Scientist-in-Residence Program pairs young scientists with classrooms

that to conduct authentic research. In 2016 and 2017, we had 44 scientists in 22 schools working with teachers on a range of projects.

- Family Science Nights offer an opportunity for students to get excited about science, technology, engineering, and mathematics while spending quality time with their family. In 2016 and 2017, we held 5 Family Science Nights in each of the 5 Boroughs of NYC. On average 100 people joined each of the 2 hour sessions.
- The Family STEM Bonanza is an annual student STEM learning exposition. We host 15-20 middle student groups from afterschool programs around NYC demonstrating their learning on engineering, mathematics, DNA Barcoding, app building, nutrition, etc. They also participate in a mini-networking challenge with scientist and engineer volunteers. About 100 kids attended the STEM Bonanza in April 2017.

Science Alliance: In addition, the Science Alliance program is the professional arm of NYAS, offering support to early career scientists with a focus on career exploration, professional development, and field-specific training. It currently serves approximately 7,000 young scientists in STEM fields. In 2017, Elsevier speakers were part of workshops and panels during the "Elsevier Professional Development Series" events:

- 1) You, too, can Peer Review! A guide for contributing to the peer review process (90 attendees). Sessions on the fundamentals of peer-review and advice about becoming a reviewer, with an interactive review session.
- 2) Academia Challenges for Women in STEM: Training, Discrimination, and Policy (80 attendees). The event discussed Elsevier's 2017 Gender in the Global Research Landscape report.



A young participant during a Family Science Night. The program goals are to inspire curiosity and excitement about STEM topics among middle school students through hands-on STEM activities, and to connect inquisitive students with professional role models in STEM through meaningful, in-person interactions.

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Media Coverage

• Elsevier Foundation's new programs support STEM diversity and developing country partnership (Elsevier Connect, February 2016)



The New York Academy of Sciences

Students practicing their skills through hands-on activities alongside scientists from some of New York City's leading institutions. They tested the laws of physics as they tried to keep a styrofoam ball afloat using their breath.



© The New York Academy of Sciences

Students immersed in their coding projects during "Hack Your Health" lessons, together with inspiring young scientists and engineers. This program used an innovative approach to help students learn about their health and engaging youth in STEM.



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

"These scientists are living proof that, if given the opportunities and support, women all over the developing world can become leaders in their field. They serve as role models for all young girls and women aspiring to achieve success."

JENNIFER THOMSON
President
Organization for Women in
Science in the Developing World

Funding

\$60,000 per year 3 years, 2016-2018

In kind resources

- The award winners are provided with access to Elsevier products, ScienceDirect and Scopus.
- Resources at Elsevier offices are made available wherever possible during the preparation of the winner's to publicly accept their awards; Elsevier colleagues also provide additional communications trainings.
- Elsevier's Global Communication team donates substantial time from their PR agencies dedicated to pitching the winner's and their accomplishments to major news outlets.

Description

Women scientists in developing countries often experience isolation, lack of role models and visibility. For the past seven years, the Organization for Women in Science (OWSD) has collaborated with the Elsevier Foundation addressing these issues through a unique awards program for outstanding early career women scientists from Latin America and the Caribbean, the Arab region, Sub-Saharan Africa, Asia and the Pacific. The prizes rotate each year between three areas: Biological Sciences: (Agriculture, Biology and Medicine); Engineering Sciences (Engineering, Innovation and Technology) and in 2018 Physical Sciences (Chemistry, Math and Physics). In addition to the \$5,000 cash prize, travel and accommodation expenses are provided to attend the American Association for the Advancement of Science (AAAS) annual conference, where the winners can take full advantage of the networking opportunities and benefit from a special awards ceremony in front of a distinguished audience of international scientists.

Goals

The Awards aim to increase the number and influence of women doing high-level science in the developing world. The premise is simple: the more diverse the pool of scientists, the more robust the science. Women scientists often make life-changing contributions on local, national and international levels, identifying problems and finding solutions that others have not considered.

Awardees in turn become influential role models for other young women who struggle with a research environment that is often hostile to their needs and experiences.

Milestones

The Awards have provided value-added career development and visibility opportunities. Winners' recognition at the AAAS has resulted in:

- Increased scientific excellence: invitations to present on international and regional panels, to collaborate on publications and visit laboratories.
- Additional funds: a supplementary cash award of \$2,500 per awardee has been made by private donors (former President of the AAAS, Dr. Gil Ommen) since 2014.
- Improved networking: awardees often have personal meetings with influential players on the world stage, including national ambassadors, ministers, the AAAS president and vice president, and heads of department of U.S. universities.
- Enhanced visibility: interviews with national and international newspapers, radio stations and television channels. The impact of the award in the awardees' home countries is notable: Etheldreda Nakimuli-Mpungu, 2016 winner from Uganda, received a medal of honor from the Ugandan President.

Future plans

2018 is the final year of the current program cycle. Both OWSD and the Elsevier Foundation have expressed a strong interest in developing the next cycle of awards for early career women scientists. In addition, midcareer women scientists in emerging countries also have a strong need for leadership and negotiation skills to smooth the transition into senior research positions. Within 2019 – 2021 program cycle, OWSD and the Elsevier Foundation propose to add additional alumni mentorship, development and OWSD community building elements as well as a new midcareer leadership training opportunity.



Dr. Silvia González Pérez, Dr. Germaine Djudije Kenmoe, Dr. Hasibun Naher and Dr. Dawn Fox during the 2018 Award Ceremony at the American Association for the Advancement of Science (AAAS) in Austin, TX, February 17, 2018. The fifth winner Dr. Witri Wahyu Lestari could not travel to AAAS as she was 37 weeks pregnant at the time. "The award is a driving force for me to be more productive, conduct research, and educate and inspire my students," she said.

Media Coverage

- As one of 25 children, she set her sights on science (Elsevier Conenct, April 2018)
- This scientist has made a career of confronting failures (Elsevier Connect, 2018)
- Prize awarded to women scientists from developing world (SciDev, 2018)
- Q&R: Concilier ses obligations de femme de sciences et de femme au foyer (SciDev, 2018)

She May Be The Most Unstoppable Scientist In The World (NPR, 2017)

- · What it means to be a woman in science in the developing world (Elsevier Connect, 2017)
- Women engineers to receive awards for innovative research in developing countries (Elsevier Connect, 2017)
- 2018 OWSD-Elsevier Foundation Awards for Early-Career Women Scientists in the Developing World (YouTube)
- 2017 OWSD-Elsevier Foundation Awards for Early-Career Women Scientists in the Developing World (YouTube)



) BERT Alison/Elsevier



"Receiving the OWSD-Elsevier Foundation Award means that my research has an impact in the international scientific community, said Dr. Djuidje Kenmoe. "It will also help me to boost younger girls to take up a career in physics."

Dr. Naher, Associate Professor of Mathematics in the Department of Mathematics and Natural Sciences at BRAC University, Bangladesh. Her research at the interface of mathematics and science has many potential applications, including the simulation of tsunamis to make better predictions of tsunami behavior.



Portia Ltd

The Gender Summits

"The Gender Summits help improve policy efforts around the world to tackle gender problems in society by advancing scientific understanding of gender issues and creating consensus on how women and men can best, and equally, benefit from research and innovation."

ELIZABETH POLLITZER

Executive Director
Portia Ltd and "architect" of the
Gender Summits

Funding

\$30,000 per year 2 years, 2016-2017

In kind resources

- While the Elsevier Foundation grant focuses on the high level, future policy development of the Gender Summit, Elsevier has provided a substantial number of speakers (covering travel costs) at all of the Summits since 2011 as well as sponsorships to help defray the Summits' operational costs averaging between \$10,000-\$15,000 per Summit.
- Elsevier's conference department is working with Portia's Director to explore the possibility of hosting the planned 2018 UK gender summit at cost.
- 500 copies of the 100 page report, "Gender in the Global Research Landscape", were provided at no cost to all attendees at the Asian Gender Summit in Tokyo 2017.

Description

The Gender Summit is not a conference but a platform for dialogue and action to improve the quality of research and the relevance of science to society, wherever biological and socio-cultural differences between females and males influence outcomes. Scientists, gender scholars, policy makers and other stakeholders are deeply involved in the process, examining new evidence and establishing consensus wherever improvements are needed. To help support and steer this critical process globally, the Elsevier Foundation has partnered with Portia Ltd on the development of the Gender Summits (GS). Since the GS was first established in 2011, 5 regional platforms are now active in Europe, North America, Africa, Asia Pacific, Latin America. The dialogue has grown to include not only research but also the Sustainable Development Goals and inclusive innovation.

Goals

Our aim has been to raise awareness and promote the scientific understanding of how attention to sex/gender issues in knowledge production, application and communication can improve implementation and outcomes of research as well as policies for socio-economic development and environmental sustainability.

Milestones

- Raising awareness of the role of gender in the 17 SDGs, and how gender is a necessary component of the 4th Industrial Revolution promoted by the World Economic Forum as well as the Africa 2063 Agenda.
- Gender Summit 14 Africa: Kigali, Rwanda, 19-20 March 2018, led by African Institute for Mathematical Sciences as a "Climate Change through the Gender

Lens – Focus on Africa" side event of the Next Einstein Forum (NEF). NEF and AUC are the lead partners in future African GSs. The EF Director spoke on a panel on gender and climate change education.

- Creating opportunities for multistakeholder engagement to promote coalition-based connections between the research and development communities: World Science Forum, UN Global Compact, W20, IDRC.
- Gender Summit 13 Arab Summit: a side event to WSF on 10 November 2017 hosted by Jordan and HRH Princess Sumaya bint el Hassan.
- Gender Summit 12 Latin America: 6-7 December 2017 in Santiago, Chile.
- Gender Summit 11 North America: Montréal, 6-8 November 2017, hosted by the Natural Sciences and Engineering Research Council of Canada with over 675 advocates to discuss "Embracing pluralism and thriving through diversity – shaping science and innovation".
- Identifying new trends, topics and collaborative opportunities to showcase the benefits of applying a gender lens to improve the quality and impact of research, innovation and development agendas. Collaborations with *The Lancet Countdown* and TENDER ICON Institute.

Future plans

- Gender Summit 15 Europe: London, 18-19 June 2018, "United in science and through science". Ron Mobed invited to speak on an industry panel on changing attitudes and cultures in organizations.
- Planning for 2019 Summits are currently underway with partners in Latin America, Singapore, New York and Jordan. 2020 will mark the 10th anniversary of the Gender Summits, the 5th anniversary of the SDG and the launch of EU Horizon 2020, all of which lend themselves for a landmark Gender Summit event.



Celebrating a new look at the Gender Summit Africa in March 2018 in Kigali, Rwanda, supported by the Next Einstein Forum (NEF). The panel wears t-shirts from W.I.S.E.R, Women Friendly, inclusive. Sustainable. Effective. Responsible.

Media Coverage

- Asia-Pacific Gender Summit aims to boost innovation in research through diversity (Elsevier Connect, June 2017)
- Gender Summit Europe: 'Stand up and take action' (Elsevier Connect, January 2016)
- Gender Summit Europe: Using gender to shape the societal impact of science (Elsevier Connect, October 2016)



Elizabeth Pollitzer, architect of the Gender Summit, and Thierry Zomahoun, President and CEO of the African Institute for Mathematical Sciences. During the closing section at the 2018 Next Einstein Forum, he announced a new partnership between NEF and Gender Summit Africa.



© POLLITZER Ben/Portia

HRH Princess Sumaya bint el Hassan opening the Gender Summit 13 - Arab World, hosted as part of the World Science Forum in Jordan, 10 November 2017.

GenderInSITE

GenderInSITE

"GenderInSITE is enormously pleased to be working with the Elsevier Foundation to promote the visibility of women's roles in science and innovation for sustainable development. Through two strategic workshops on gender in higher STEM education and gender in innovation, GIS strives to advance the understanding of policy and decision makers about the transformations needed to create a more gender-equitable path to meeting the SDG targets."

ALICE ABREU
Director
GenderInSITE

Funding

\$20,000 per year 2 years, 2016-2017

In kind resources

While funding from the Elsevier Foundation has been provided for two GenderInSITE workshops in 2016 - 2017, Elsevier has provided support through travel and expertise to GenderInSITE since it was launched in 2012.

Description

The global development challenges we face are well known: poverty, lack of institutional capacity, environmental degradation, climate change and increasingly natural disasters, infectious disease, malnutrition, and gender inequality. Policy and other decision makers need to weigh difficult trade-offs at every step, and innovation is critical to countries' ability to adapt to changing circumstances and contribute to the global knowledge bank.

Yet, in many countries only half of the best ideas are heard — or even voiced. Worldwide, women are poorly represented at decision-making and management levels in the Science, Innovation, Technology and Energy (SITE) sector. Studies over the last 20 years show that women and men are affected differently when SITE is applied to development. Applying a gender lens takes into account the vision, concerns and abilities of both women and men — and makes them more effective, often yield longer term solutions.

GenderInSITE is an international initiative which applies a gender lens to science, innovation, technology and engineering for development. It promotes the role of women in SITE and increases the number of policies and programs globally that take gender into account.

Goals

- Enable policy makers to meet with scientists, researchers and other stakeholders to share ideas for applying a gender and science lens to specific SDGs in a local and regional context.
- Develop and disseminate recommendations on the workshop findings to target key stakeholders.

Milestones

- In 2017, the Elsevier Foundation supported two thematic GenderInSITE workshops: in April 2017 in Buenos Aires focused on higher STEM education and September 2017 in South Africa organized by the Academy of Science in South Africa focused on innovation. In both workshops, academic experts, government representatives as well as development and funding agencies developed a number of recommendations to policy- and decision-makers.
- Facilitated 14 distinguished researchers from Latin America, Europe and North America to share findings from existing initiatives to mainstream gender equality in academic institutions.
- Proposed recommendations: incorporate gender equality in the ranking of universities carrying academic esteem and influence in external funding; critical need for greater scrutiny of the theoretical conceptions and analysis of gender itself.

Future plans

GenderInSITE has received renewed support from the Swedish Development Agency, covering two years of programmatic funding in 2018 and 2019. Support from the Elsevier Foundation for the thematic workshops has greatly influenced GenderInSITE's future activities, helping to map the way to an effective work agenda and bring a gender and science lens to STEM education and innovation.

In 2019, the Elsevier Foundation is proposing to support an annual Gender InSITE award as part of the Gendered Innovations award program and support the creation of a number of case studies illustrating the work of Gendered InSITE.



© Sebastian Marcote

The GenderInSITE-Elsevier
Foundation workshop "Integration of gender perspectives in science and technology in higher education: Contributions to the advancement of the SDGs" was held in Buenos Aires in April 2017. Organized by Gloria Bonder, the GenderInSITE regional focal point for Latin America and the Caribbean, the workshop invited participants to share their expertise and lessons learned from existing efforts to incorporate gender in STEM curricula and institutional practices.

Media Coverage

• In higher ed, it's not enough to "fix the numbers" of women in STEM (Elsevier Connect, June 2017)



@ GenderInSITE



© GenderInSITE

GenderInSITE Director Alice Abreu with participants of the breakout session on gendered innovation for sustainable development at the GenderInSITE-Elsevier Foundation workshop "Gender and Innovation: Implications for Sustainable Development" in Pretoria, September 2017.

L to R: Louise Morley (University of Sussex), Liisa Husu (former Elsevier Foundation advisor, Örebro University) and Annalisa Murgia (University of Trento) at the GenderInSITE-Elsevier Foundation workshop in Buenos Aires.



"With the Innovate for Life Fund we want to tap into the innovative solutions and business drive of creative African entrepreneurs and help them to bring their health solutions to scale."

GITHINJI GITAHI Group CEO Amref Health Africa

© VAN LOON Jeroen/Amref Health Africa

4. Technology for Development

We recognize that technological solutions are increasingly playing a role in helping the world solve some of the world's greatest challenges. The Elsevier Foundation is working to develop a new program area which will harness the power of technology and big data for good. Our goal is to support projects enabling data scientists to contribute their skills to tackle some of the toughest issues outlined by the UN Sustainable Development Goals.



Datakind

Nonprofits don't always realize the power of the data they have and how it can be tapped to deliver powerful insights into the goals they are trying to reach. Datakind is an organization which works with both data scientists and social sector experts to address some of the world's biggest challenges. The Elsevier Foundation is supporting two Datakind initiatives with \$75,000: one high-impact DataCorps Disaster Relief project and a London DataDive matching scientists with 4 nonprofits in a marathon weekend of innovative data crunching.



Amref

Supporting African entrepreneurs to develop home-grown innovations for health: this is the goal of Innovate for Life, an initiative launched by Amref Flying Doctors. With a grant of \$50,000, The Elsevier Foundation is proud to support Amref's goal to help early-stage entrepreneurs developing novel technological solutions. The Fund aims to bridge the gap between African entrepreneurs and international investors by offering deep subject matter knowledge, strong networks and access to funding.



DataKind

DataCorps

"We're thrilled to be partnering with the Elsevier Foundation on both a weekend DataDive to help UK charities gain insight into their data and prototype solutions as well as a long-term DataCorps project helping the World Bank use satellite imagery to protect and promote recovery from natural disasters in underserved rural communities."

JAKE PORWAY
Executive Director
DataKind

Funding

DataCorps: \$50,000 per year 1 year, 2017

Description

Natural disasters are on the rise worldwide, and the consequences are especially devastating for developing countries. From 1995 to 2014, 89% of storm-related fatalities occurred in low-income countries even though these areas experienced just 26% of storms, according to the World Bank, which forecasts that the impact of these disasters will grow "as climate changes increases the frequency and intensity of extreme weather events."

With support from the Elsevier Foundation, DataKind and the World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR) aim to help developing countries build resilience for communities threatened by natural disasters by leveraging data and advanced technology. Using machine learning and satellite imagery, a team of pro bono data scientists will identify where people are at risk in a natural disaster. Current technology can identify where buildings exist, but this project takes a step further by determining building type. When a family rises above the most abject poverty, usually they first invest in secure shelter or tin roof: roof types are a reliable indicator of the vulnerability level. This knowledge can give GFDRR a population estimate, so to effectively distribute resources in the case of a disaster. The information can also help improve resiliency and reduce risks in these areas.

This is one of the first machine learning endeavors for GFDRR, which has been looking for a novel solution to identify vulnerable population. Manual tagging is well established but time-consuming, and machine learning and satellite imagery have the potential to significantly boost efforts and effectively respond to natural disasters.

Goals

- Use machine learning and satellite imagery to identify building location and type in order to understand where people are at risk during a natural disaster.
- Provide GFDRR with a population estimate, which would enable a more effective and timely resources' distribution in the case of a disaster.
- Explore if and how machine learning could be used by developing countries to reduce their vulnerability to natural hazards and improve resiliency in the face of climate change.

Milestones

- Identified key public satellite imagery datasets to be used in the project, and audited the provided World Bank aerial data to ensure that it can support the project objectives (see fig.1).
- Recruited and trained the pro bono data science team
- Prototyping project deliverables and iterate based on feedback from GFDRR
- Integration of the World Bank aerial data: the team will receive aerial/drone imagery from the World Bank that will allow them to determine how much it can augment the currently available tools.

Challenges

Negotiating the data sharing agreements with the World Bank took longer than anticipated, thus delaying the start of the analysis. Nevertheless, the team expects to finalize the project in June 2018.

Future Plans

After the DataCorps team has incorporated the World Bank's aerial image data into their analysis, the results will provide insight into current possibilities, and where future disaster risk and recovery work should focus.



Data scientist volunteers at work during a DataCorps project. To date, DataKind has scoped and completed over 250 projects using data science for social good, and has been recognized for their innovative process and thought leadership on scoping - a key step to ensure the realworld applicability, value, and sustainability of the projects.

© DataKind





© DataKind

Media Coverage

 New in disaster science: using machine learning and maps to see who's vulnerable (Elsevier Connect, March 2018) Fig. 1: the goal of the project is to understand the possibilities and limitations of existing datasets and methodologies to identify buildings. Early results show an algorithm able to identify individual buildings of fairly large size (blue rectangles in left image) as well as smaller constellations of buildings, which are currently classified as one large "building" patch (blue rectangles in right image).



DataKind

DataDive

"Having a company like Elsevier involved helps because it's been through that journey to become much more data driven. Through the work we've done together, we've seen that the challenges that Elsevier has overcome and what it's taken Elsevier to build up their capacity, it's a similar conversation to the one we have with the non-profits."

EMMA PREST
Executive Director
DataKind UK

Funding

DataDive: \$25,000 per year

1 year, 2017

In kind resources

in 2017, 20 Elsevier volunteers have offered their time and skills to participate in the DataDive.

Description

Software, sensors and mobile phones produce a goldmine of data. Today companies are working with data scientists to get the most out of this data to serve their customers better. DataKind is a unique nonprofit that works to harness big data for good—literally to coach nonprofits in how to leverage this new resource in their efforts to move the needle on the SDG's. By working with teams of international scientists, DataKind is able to solve algorithmic puzzles for organizations dedicated to giving back.

A DataDive is a high energy, marathon style 48-hour event where nonprofits work with teams of 50-150 data scientists, developers and designers to use data to solve key problems in those communities. DataDives inspire community events and invite the brightest minds in data science, social change and technology to work in teams. They analyze, visualize and mashup fascinating data sets to give their partner organizations initial insights or prototypes to inform their work and create real world change. Participating in a DataDive serves as a unique opportunity for attendees to learn and test out new skill sets, build cross-industry connections, and utilize their talents to produce actionable, meaningful results for mission-driven organizations.

Goals

- Expand the global community of capable data science professionals.
- Build and refine DataKind solutions to create efficiencies in solving substantial, compelling issues, and produce actionable, meaningful results for mission-driven organizations
- Provide opportunities for Elsevier employees to contribute their unique skills to support humanitarian causes and learn

new techniques from across industries to aid in their ongoing work while underscoring support of UN Sustainable Development Goals.

Milestones

- Over 70 participants attended the UK DataDive in London, November 2017.
- Nearly 20 Elsevier volunteers have contributed their time and expertise.
- Data scientists, developers and enthusiasts worked alongside 3 nonprofits to strategize, visualize and crunch data critical for moving the needle on a diverse array of issues.

 Participating nonprofits were:
- o FareShare: a charity aimed at relieving food poverty and reducing food waste in the UK. The DataDive helped them drive organisational transformation and supported smarter decision-making.
- o One Campaign: working to end extreme poverty in Africa by combating corruption and ensuring that governments are accountable to citizens. Results from the DataDive revealed surprising insights into their data which enabled them to debunk industry claims.
- o Christian Aid: providing urgent, practical assistance in Africa, runs a project in Burkina Faso and Ethiopia to build the resilience of vulnerable communities to climate extremes and disasters. The DataDive showed them how to improve data practices, and fuelled impact evaluation.
- Key moments from the event were broadcasted on Facebook Live, gaining a total of about 5000 views.

Future Plans

DataKind and the Elsevier Foundation are exploring opportunities to continue supporting DataKind with DataDives in the UK and the US.



Participants at the London
DataDive, November 2017. Twenty
Elsevier technologies joined
data scientists, developers and
enthusiasts working alongside
nonprofits to strategize, visualize
and crunch data critical for moving
the needle on issues as diverse
as fighting corruption, arming
African farmers with weather data
to navigate climate change and
ensuring that surplus food in the
UK gets to homeless shelters and
hungry families.

Media Coverage

- #DataDive UK: Follow data scientists and developers in a hackathon for charities (Elsevier Connect, November 2017)
- How data scientists are tackling hunger and social change (Elsevier Connect, December 2017)



WARD Angelina/Elsevier

Fareshare is the UK's largest charity fighting hunger and food waste. For them, the data revolution has the potential to transform the work they do with the nearly 7,000 charities and community groups in their network - from bringing stability to food supply to understanding which resources are needed.



© WARD Angelina/Elsevier

Developers and data scientists, including Elsevier volunteers, working hard in the final hours of the DataDive.



Amref

Innovate for Life

"We want to bring the entrepreneurs to meet the NGO people and create a nucleus of energy at the centre. That actually brings the innovation and creates something that outlives both of them and becomes bigger than the two combined."

GITHINJI GITAHI Group CEO Amref Health Africa

Description

An increasing number of African countries combine young populations with political stability, economic growth and robust internet infrastructure—all of which are ideal conditions for creating new markets and piquing investor interest. But the challenges, including highly regulated healthcare systems, burgeoning populations, investor bias torwards energy and agriculture are not small. So how do talented African health entrepreneurs evolve their ideas in environments with few funders and weak networks? Innovative for Life. Amref Health Africa's new accelerator for East African health entrepreneurs addresses this gap by offering skills building, networks and access to seed funding. In 4 years' time, Innovate for Life aims to evolve from an =accelerator program to a private equity fund worth \$7 million.

The Innovate for Life Fund was launched by Amref in May 2017 in Nairobi, Kenya and focuses on the 'missing middle': entrepreneurs with employees that are too large for microcredit, but (as yet) too small for traditional commercial investors. Amref brings 60 years of African healthcare knowledge and deep local and international networks to the accelerator.

Milestones

- The program received 246 applications.
- A selection was made by panels of African health stakeholders, investors and entrepreneurs.
- The first accelerator cohort consisted of 6 entrepreneurs from Nigeria, Ghana, and Kenya who attended intensive training weeks in Sep and Nov 2017 on health- and business-related topics. They were given networking opportunities with Kenyan entrepreneurs, investors, the Kenyan Minister of Health, Elsevier and Amref.

• The 3 best entrepreneurs were selected: Omomi: an online community app for young mothers to monitor and respond to the health challenges of children under five. It now has over 30,000 users. Mahauty Health Solutions: a product line of preservative free, nutritionally balanced foods for children. It also connects over 8.000 mothers via social media and provides regular nutritional advisory sessions using Facebook Live. Usalama: an emergency services app connecting users to seven emergency service providers and 5400 downloads. Since January 2018, the entrepreneurs have been offered ongoing support for business planning, partnership proposals

Challenges

and relationship building.

Most sub-saharan African entrepreneurs have been raised in a hierarchical society which puts them at a disadvantage when pursuing funding from international organizations. The program's challenge is to be both international enough to bring entrepreneurs in contact with international investors and partners, and local enough to allow them to do business in an African way.

Future plans

- Continue to work with entrepreneurs who have the potential to develop full partnerships with Amref.
- Outreach at health-specific events to attract the best talent to help strengthen the African health ecosystem.
- Evaluate set up virtual accelerator programs within Amref International University and its e-campus.
- Develop post accelerator seed investments of up to \$50,000 in 2019 and 2020 to build a track record in the lead up to the 2021 goal of raising a \$7 million investment fund.

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Funding

\$50,000 per year 1 year, 2017

In kind resources

We will be exploring opportunities to donate time and resources from Elsevier employees once Innovate for Life's Skills Lab is launched with 6 entrepreneurs.



"It is always awesome to find yourself in the middle of people who help you to develop and grow." said Mmachukwu Omononde, Founder of Mahauty Health Solutions (second from left). "We are going to take up the world, because we have been equipped to do that." Her company offers a product line of preservative-free, nutritionally balanced foods for children.

© Amref Health Africa

Media Coverage

- The fund was launched during the Next Web conference, in the presence of HRH Prince Constantijn and senior policy makers of the Dutch Ministry of Foreign Affairs.
- A booklet has been distributed with the profiles of the 6 selected entrepreneurs. This has resulted in ongoing discussions with organizations as GlaxoSmithKline, GE Healthcare, Kenya Ministry of Industries, the World Bank, IFC on possible partnerships. The booklet on the outcomes of the first year will be shared soon. The logo of the Elsevier Foundation and a quote from Ylann Schemms is included in both booklets.
- For visibility of the programme in the African entrepreneurial eco-system, the selected entrepreneurs have received branded materials such as sweaters and t-shirts including the logo of the Elsevier Foundation.
- New Investment Fund for African Entrepreneurs in Health care (Amfref Health Africa, June 2017)



Amref Health Africa



Gerard Til Photo/Amref Health Africa

The Innovate for Life entrepreneurs visiting KEMSA, the Kenya Medical Supplies Agency. Meetings with Kenyan businesses were a key part of the intensive acceleration weeks held in Nairobi in September and November 2017 to help the selected entrepreneurs further develop their enterprises.

Dr. Githinji Gitahi, CEO of Amref, and Dutch Prince Constantijn van Oranje celebrating the launch of Innovate for Life Fund in Amsterdam in May 2017, during the The Next Web Conference, Europe's leading tech festival.

The Elsevier Foundation Matching Gift Program

To encourage generosity and community involvement, the Elsevier Foundation provides matching funds to charitable organizations that Elsevier employees personally support. Each year, the Elsevier Foundation Matching Gift Program earmarks \$200,000 to match employee's individual and group donations to eligible non-profit organizations around the world. The Fund is also used to support global disaster relief efforts championed by Elsevier colleagues. In 2016, over 300 charities were supported by employees across 15 countries. By matching employee gifts, both employee and Foundation resources are leveraged for maximum community benefit, ensuring that colleagues feel connected to the Elsevier Foundation.

In 2017, the Matching Gift Fund began working CyberGrants, a new vendor, to create a more streamlined user experience within the Matching portal. The new platform will greatly speed up both the US and international matching process, enabling a monthly pay out, rather than a quarterly one. In the fourth quarter of 2017, the Matching Gift program will also be able to offer US payroll giving matches. In 2018, the Foundation team will investigate the feasibility of payroll donations in other locations and direct credit card giving which will offer instantaneous match options.

This chart shows the total amount of donations reported by employees and matched by the Elsevier Foundation.

Overview of Matching Gift expenditures over the past decade. The spike in 2011 reflects a large scale response to the earthquake and Fukushima disaster relief efforts in Japan.

In 2017, we matched a total of \$194,764, comparable to 2016 levels when we gave an additional \$20,000 in disaster relief to the Red Cross. Office Match amounted to 11% of the expenditures, while the Individual Match at 89%. The US matches also continue to comprise about 89% of all matches.





Elsevier volunteer and Amsterdam RE Cares Champion, Joanne Thomson traveled to Battambang, Cambodia in January 2018 with a team of volunteers from Habitat for Humanity. She and 17 other volunteers worked to build three houses for families in the local community. Joanne was able to tap the Matching Gift Fund to help her raise over €2,600 through a bake sale for Habitat - a global, nonprofit housing organization empowering people in the world's poorest communities to overcome the chronic lack of decent, affordable housing.

"Often new colleagues aren't aware of it until a disaster hits: floods in Chennai, Latin America and New Orleans, the recent earthquake in Italy... We see the Matching Gift as a vital service and employee benefit, making it possible for colleagues to play a positive role in their local and global communities," said Ylann Schemm, Director of the Elsevier Foundation. "Whether colleagues are cycling from London to Amsterdam or holding book sales, bake sales, fashion days, pub quizzes or simply giving quietly, under-the-radar, Elsevier employees' generosity is overwhelming and their fundraising zeal impressive."

Media Outreach



Videos

Since 2008, the Elsevier Foundation has produced over 35 short videos featuring our projects and showcased on our dedicated YouTube channel. Highlights from our 2017–2018 videos include:

- 2018 OWSD-Elsevier Foundation Awards for Early-Career Women Scientists in the Developing World (YouTube)
- 2017 OWSD-Elsevier Foundation Awards for Early-Career Women Scientists in the Developing World (YouTube)
- Empowering Unexplored Knowledge (Youtube)
- Creating an Ethiopian National Repository (YouTube)

External coverage

Media outreach around our Elsevier Foundation partnerships and projects is a key focus area for the Foundation team. Our goal is to raise awareness around the issues we support and connect with our communities as directly as possible. With this in mind, we focus on a variety of outlets: traditional or "earned" media. a steady series of articles in Elsevier Connect, Elsevier's news magazine with a monthly readership of 150-200,000 unique visitors a month. We also tap our social media and website channels and create several short videos each year. In 2016, 2017 and 2018 to date, we wrote 38 articles for Elsevier Connect about our partnerships: 16 in 2016, 14 in 2017, and 4 to date in 2018.

Traditional media remains challenging for a Foundation given our focus on "good news" stories which have a harder time competing for the media's attention. However, every year, our OWSD-Elsevier Foundation Women Scientists in Developing Countries Award program receives major attention from top tier mainstream media. In our continuous efforts to reach journalists, we disseminated 9 press releases over the course of 2016, 2017 and 2018. Highlights include:

- Antibiotics Resistance in Africa Needs Urgent Attention (SciDev, March 2018)
- Prize awarded to women scientists from developing world (SciDev, 2018)
- Q&R: Concilier ses obligations de femme de sciences et de femme au foyer (SciDev, 2018)

Antibiotics resistance in Africa need urgent attention (SciDev, 2018)

• She May Be The Most Unstoppable Scientist In The World (NPR, 2017) National Public Radio's global health and development blog, Goats and Soda, published profiles of our award winners over the past two years. In 2017, they featured Dr. Eqbal Dauqan, a biochemist from Yemen, who saw their stories of struggle, passion and success shared with a global audience

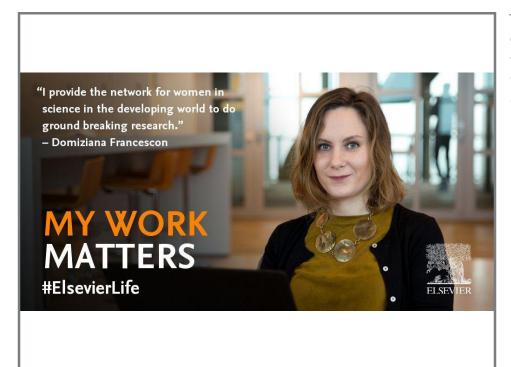
Social Media

Social media brings its own rewards and special challenges. Maintaining diverse channels (Twitter, Facebook) in addition to a dynamic website is labor intensive for a small team and requires careful prioritization. However, the channels which we have developed provide us with a direct connection to our communities. Stats as of March 2018:

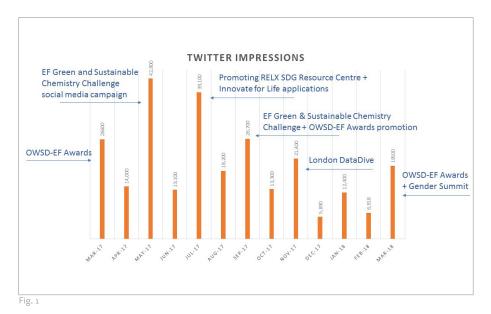
- Twitter @ElsFoundation currently has 2,330 followers, with a growth rate of about 2 followers per day in March.
- 76% of the Elsevier Foundation Twitter audience lists "Tech News" as their interest, and 73% lists "Technology", reflecting our efforts in embedding tech in our programs.

Website

We strive to maintain a dynamic website, posting content on a daily basis. Our website is supported with WordPress, an open source content management system, incurring few costs beyond hosting and occasional wireframe updates. However, in 2016, to ensure ongoing relevance, discoverability and responsive design, we relaunched the Elsevier Foundation website to fully reflect our new programs.



The Elsevier Foundation Program
Officer is proud to talk about her work
with the Foundation, contributing
to My Work Matters, a social media
campaign organized by Elsevier.



This table demonstrates that better results are achieved when we collaborate with colleagues across Elsevier who are also conducting social media campaigns. Examples of this include outreach around the Green & Sustainable Chemistry Challenge with Elsevier's Chemistry Journals team and tapping our Global Communications expertise during the November 2017 DataDive in London. In addition, Twitter impressions and engagement rises when posts are tied to a specific event and highlight partners - further amplifying our reach. Successful examples include: Amref's Innovate for Life Fund, the Elsevier Foundation Green & Sustainable Chemistry Challenge, the Gender Summit, and International Women's Day.

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Financial Overview

2016-2018 Program Allocations

		2016	2017	2018
HEALTH & INNOVATION				
MSF/Doctors without Borders	Epicentre's Niger Research Center	\$100,000	\$100,000	\$100,000
Amref Health Africa	Jibu mLearning program	\$80,000	\$80,000	\$80,000
STTI Nursing Faculty Leadership Academy		\$100,000	\$100,000	\$100,000
Hackathon Int'l Society for Infectious Diseases				\$15,000
RESEARCH IN DEVELOPING COUNTRIES				
The Elsevier Foundation Green and Sustainable Chemistry Challenge			\$27,660	\$55,000
African Journal Partnership Program	Research without Borders	\$60,000	\$60,000	\$60,000
The World Academy of Sciences	North South Collaboration on Sustainability	\$80,000	\$80,000	\$80,000
Medical Library Association	Librarians without Borders/ Research4Life training	\$45,000	\$45,000	\$45,000
DIVERSITY IN STM				
IMC Weekend School	Amsterdam health & science outreach	\$25,000	\$25,000	\$25,000
Imperial College London	White City Maker Challenge	\$100,000	\$100,000	\$100,000
New York Academy of Sciences	Afterschool STEM education program	\$100,000	\$100,000	\$100,000
OWSD	OWSD-EF Awards	\$60,000	\$60,000	\$60,000
Portia	Gender gap in SDGs	\$30,000	\$30,000	\$30,000
GenderInSITE	Gender, science and development program	\$20,000	\$20,000	
TECHNOLOGY FOR DEVELOPMENT				
Datakind	DataCorps and DataDive		\$75,000	\$75,000
Amref	Innovate for Life Fund		\$50,000	\$50,000
MATCHING GIFT		\$219,263	\$194,774	\$200,000
TOTAL		\$1,019,263	\$1,077,224	\$1,108,300

Appendix

Elsevier Foundation Board Biographies



Nikunj Jinsi Global Head International Finance Corporation Venture Capital Group



Beverly Malone
CEO
National League for Nursing

Nikunj Jinsi joined IFC in 2003 and combines over 20 years of experience in various industry sectors, having worked and lived in Europe, Asia, Latin America and the US. Mr. Jinsi blends operational, entrepreneurial, investment banking and over 15 years of emerging market private equity experiences with unique global perspective on several industries. At IFC, Mr. Jinsi has led over 18 investments for which IFC acted as a (co-) lead and involving other leading private equity and strategic players in Asia, and currently sits on the boards of six Asian companies. Mr. Jinsi also is involved with IFC's LP investment program for venture funds in Asia, having evaluated several fund investment opportunities in China, Vietnam, Indonesia, Singapore and India, and sits on the Advisory Board of a leading China venture fund, and has been responsible for several fund investments in India. Prior to joining IFC, Mr. Jinsi was Managing Director and Head of the Singapore office for one of Asia's leading venture funds where he managed the team making investments in South East Asia and India, and was also responsible for managing several Asian LP relations. Prior to this, Mr. Jinsi spent 4 years in the Asian investment banking industry providing M&A and corporate finance services to clients throughout the region. In addition, Mr. Jinsi was the co-owner of South East Asia's largest independent marketing communications agency, which was successfully sold to Omnicom, the largest media marketing group in the world, in 2002. Mr. Jinsi obtained an MBA degree from Stanford University, attended as a Fulbright Scholar and has an MSc. degree in Electrical Engineering from Delft University of Technology, the Netherlands.

Beverly Malone's tenure at the NLN has been marked by a retooling of the League's mission to reflect the core values of caring, diversity, integrity and excellence, and a focus on advancing the health of the nation and the global community. She was ranked amongst the 100 Most Influential People in Healthcare by Modern Healthcare magazine in 2010 and 2015; and in 2016 she claimed 39th place amongst leading policy-makers, activists, health care professionals and corporate figures in health care, insurance and pharmaceutical industries. Within the last several years, Dr. Malone was elected to the Institute of Medicine and tapped to join the board of the Kaiser Family Foundation. Dr. Malone served on the Institute of Medicine's Forum on the Future of Nursing Education, contributing to IOM's groundbreaking report, "The Future of Nursing: Leading Change, Advancing Health," and on the Advisory Committee on Minority Health, a federal panel established to advise the secretary of Health and Human Services. Her career has mixed policy, education, administration and clinical practice. Dr. Malone has worked as a surgical staff nurse, clinical nurse specialist, director of nursing and assistant administrator of nursing. In 1996, she was elected to two terms as president of the American Nurses Association. In 2000, she became deputy assistant secretary for health within the US Department of Health and Human Services, following 4 years of service on President Bill Clinton's Advisory Commission on Consumer Protection and Quality in the Healthcare Industry. Prior to joining the NLN, Dr. Malone was general secretary of the Royal College of Nursing, the United Kingdom's largest professional union of nurses, from June 2001 to January 2007. She also served between 2002 and 2006, as a member of the UK delegation to the World Health Assembly; of the Commonwealth Nurses Federation; and of the Higher Education Funding Council for England.



Emilie Marcus
Executive Strategy Officer
David Geffen School of Medicine

Emilie Marcus is the Executive Strategy Officer at the UCLA David Geffen School of Medicine where she is responsible for working with the leadership of the school and hospital system to drive alignment between medical and graduate school education, biomedical research and clinical care for optimized health outcomes. Prior to joining UCLA in 2018, Emilie spent 20 years at Cell Press with the last 7 years as CEO and the last 15 years as Editor-in-Chief of the journal Cell. Under her leadership, Cell Press expanded beyond biomedicine to become an all-science publisher, launching successful journals in chemistry and energy and the new interdisciplinary journal iScience. She also introduced industry-leading innovations in peer-review, methods reporting to support reproducibility and expediting access to early versions of articles that are under consideration for publication. As Editor-in-Chief of Cell, Emilie was responsible for setting the long-term strategy for the journal and assessing cutting-edge high-impact conceptual advances in biomedical research globally. She is often looked to as a thought leader on issues facing scientific publishing including the value and robustness of the peer-review process, handling potential conflicts, scientific ethics and misconduct, supporting rigor and reproducibility, the impact of new information technologies and new publishing business models, and the uses and abuses of the impact factor as a measure of quality. Prior to joining Cell Press, Emilie had a successful research career, first at Yale University, where she received her PhD in Biology/Neuroscience in 1993, and then at the Salk Institute and University of California at San Diego. Emilie was also Editor of Neuron from 2001 to 2003.



Cosmas Ochieng
Associate Professor of the Practice
of Global Development Policy
Pardee School of Global Studies
Boston University

Cosmas Milton Obote Ochieng is an Associate Professor of the Practice of Global Development Policy at the Pardee School of Global Studies, Boston University. His research and teaching interests focus on the theory, policy and practice of development; global climate change and environmental policy; science, technology and innovation policy; and the political economy of African development.

Prior to joining Boston University, Dr. Ochieng served as Executive Director of the African Centre for Technology Studies (ACTS) based in Nairobi, Kenya. He has also served as the Technical Coordinator for the Business, Economics and Biodiversity Program of the International Union for Conservation of Nature (IUCN), Eastern and Southern Africa Regional Office in Pretoria; Climate Change Expert at the UNEP Risoe Centre (Technical University of Denmark); Lecturer in Sustainable Agriculture, Land and Water at Lancaster University in the UK; and Research Fellow, with the International Food Policy Research Institute (IFPRI). He continues to serve on the Board of the Elsevier Foundation and on the Scientific Committee of Future Earth. Dr. Ochieng was the Lead Author of the inaugural Africa Data Revolution Report (2016). His new book Harnessing Nanotechnology for Sustainable Development in Africa (with Hailemichael Demissie and others) explores the potential applications of technology to sustainable development challenges in Africa. He is also the author of a book on Enhancing Effectiveness of Community Based Adaptation to Climate Change (together with Saleemul Huq and others). Dr. Ochieng is a graduate of Oxford and Cambridge universities in the UK, and Kenyatta University in Kenya.



Geraldine Richmond
Presidential Chair in Science
University of Oregon

Prof. Geraldine Richmond is the Presidential Chair in Science and Professor of Chemistry at the University of Oregon. Her research has relevance to current issues in energy production, environmental remediation and atmospheric chemistry. Her teaching activities in the classroom and beyond focus on science literacy, science policy and building a strong and diverse science and engineering workforce in the U.S. and globally. Throughout her career she has been actively involved in efforts to increase the number and success of women in science and engineering. Richmond is a member of the National Academy of Sciences, the American Academy of Arts and Sciences and is a Fellow of the American Chemical Society (ACS), the American Physical Society (APS), the Association for the Advancement of Science (AAAS) and the Association for Women in Science. Richmond recently finished her term as President of AAAS and is currently the Chair of the Board of AAAS. She is also currently serving as a member of the National Science Board (President Obama appointee. She is the founding and current director of COACh, a grass-roots organization formed in 1998 that has helped in the career advancement of thousands of scientists and engineers in the U.S., Asia, Africa and Latin America.

Ex Officio Board Biographies



Márcia Balisciano
Director
Corporate Responsibility
RELX

Márcia Balisciano, MBE, Ph.D., leads global corporate responsibility (CR) for RELX Group. Engaging colleagues throughout the business, she works to ensure RELX Group's non-financial performance is a consistent source of competitive advantage and stakeholder confidence across key markets. She represents RELX Group on the UN Global Compact and serves on the steering group for the United Kingdom. She is a member of the Conference Board's Sustainability Council and Global Business Women Leaders Council.

She recently joined the Child Rescue Alert Development Board, a partnership between the UK National Crime Agency, the charity Missing People and Groupcall. She is founding director of London museum and educational facility, Benjamin Franklin House and was previously Special Advisor to the American Chamber of Commerce. A Fellow of the Royal Society of Arts, she holds an MA in International Relations from the University of Chicago and a PhD in Economic History from the London School of Economics. She was made a Member of the British Empire (MBE) in the Queen's 2007 Birthday Honours List.



Suzanne BeDell
Managing Director
Education, Reference and
Continuity
Elsevier

Suzanne BeDell joined Elsevier as Managing Director in September 2010. She has been a book publishing and information industry leader for almost 30 years focusing on the intersection of print and digital delivery for much of her career. Prior to joining Elsevier, she worked for ProQuest (a library aggregator) for 9 years where she led the development of the largest offering of aggregated books and journals for academic libraries.

Before that, Suzanne was Senior Vice President of Internet Products at Thomson Healthcare and Director of Electronic Product Development for Mosby. She also held a variety of positions in McGraw-Hill's College Division, including publisher of Primis, the first electronic custom publishing system for textbooks.



Youngsuk "YS" Chi
Chairman
Elsevier
Director of Corporate Affairs
RELX
President
The Elsevier Foundation

Youngsuk 'YS' Chi is an international businessman and a leader in the media and technology industry, and currently serves Elsevier and RELX Group in several different capacities. In his primary role as head of Corporate Affairs for RELX Group, he is responsible for government affairs, corporate communications, corporate responsibility, and Asia strategy for Elsevier's parent company. As non-executive Chairman of Elsevier, he works directly with governments, Elsevier customers and in industry associations worldwide. Mr. Chi also serves as President of the International Publishers Association, a global organization that represents the interests of more than 50 publishing industry association members from countries around the world.

Early in his career, as Chief Operating Officer of Ingram Book Group, Mr. Chi founded Lightning Source, the first ever print-on-demand distributor and e-book services provider. After holding several senior executive positions at Ingram Book Group's parent company, he became President and Chief Operating Officer of Random House. Mr. Chi has also earned widespread respect for his ability to work across cultures. As founding Chairman of Random House Asia, he led efforts to make Random House the first foreign trade book publisher with local language publishing in Japan and Korea. Mr. Chi has served on numerous charitable, educational and industry boards, including Princeton University, Korean American Community Foundation and McCarter Theatre. He is also a member of the Executive Committee of the boards. of Association of American Publishers and International Association of Scientific, Technical & Medical Publishers.



John Danhaer President Clinical Solutions Elsevier

John Danaher, Elsevier's President, Clinical Solutions, is a prominent life-long leader and expert in health and the business of health. At Elsevier, he heads the Clinical Solutions business focused on improving patient outcomes through optimizing provider performance and patient engagement. Clinical Solutions is focused on delivering industry leading products focused on improving care at every stage in the patient journey.

Previously he headed Elsevier's Education business and led the transformation from a traditional publisher to an educational digital solutions provider focused on improving student outcomes. Prior to joining Elsevier, John was President of the Schools of Health Sciences and Nursing at Kaplan. He brings a great depth of experience in digital media in health care and education from his time at Kaplan, Discovery Communications, and as executive vice president of WebMD and part of the early management team. John has deep domain expertise and a successful track-record in managing health information businesses. His experience, in both government and the private sector, extends beyond the US and into global markets, including assignments and experience with Japan, Pakistan, the UK and Australia.



Hannfried von Hindenburg
SVP
Global Communications
Elsevier

Hannfried von Hindenburg is a seasoned communications professional with over 20 years of industry expertise spanning work across Asia, the U.S. and Europe. He has held numerous positions in both academia as well as journalism, publishing on international relations issues and appearing as an on-air anchor. Hannfried joined Elsevier in 2015 from the International Finance Corporation, a member of the World Bank Group, based most recently in Hong Kong where he oversaw communications for the Asian region.

During his time in Hong Kong and previously in Washington, D.C., Hannfried led initiatives focused on communications strategy, social media, thought leadership, corporate brand and reputation management. Prior to joining IFC, he spent nine years with Reuters in Germany, where he held positions in e-business development, as an editor and as a print and TV reporter in business, finance and economic policy.



Ron Mobed CEO Elsevier

Ron Mobed was appointed Chief Executive Officer, Elsevier in August 2012. Ron previously headed Elsevier's science and technology businesses. Joining Elsevier in 2011, Ron has had broad range of global experience in electronic information businesses across a number of sectors and regions globally. He was previously President of Cengage Learning's Academic & Professional Group. Earlier, Ron held a series of leadership positions with information services company IHS, including as Co-President & Co-Chief Operating Officer; and with Schlumberger.

Ron is a Fellow of the Institute of Directors and of the Energy Institute. He holds a bachelor's degree in engineering from Trinity College, University of Cambridge and a master's degree in petroleum engineering from Imperial College, University of London.

Team Biographies



Ylann Schemm
Director
The Elsevier Foundation
Elsevier

As the Director, Ylann drives the Foundation's focus on advancing diversity in science, building research capacity, global health and embedding technology across the entire portfolio. Prior to joining the Foundation in 2008, Ylann served in diverse role in communications for Swets Information Services and the European Platform for Dutch Education, and publishing for Time Life Books. Ylann holds an MA in Film & Television Studies from the University of Amsterdam and a BA, magna cum laude in English from Amherst College. She currently also serves as Director of External Partnerships within Elsevier's Global Communications group, developing in depth corporate collaborations focusing on technology and the SDG's...



Domiziana Francescon
Program Officer
The Elsevier Foundation
Elsevier

Domiziana Francescon serves as the Elsevier Foundation's Program Officer and is a strong supporter of the company's Corporate Responsibility program. Domiziana obtained a master's degree in Book and Digital Media Studies at Leiden University in the Netherlands, with a specialization in Publishing Studies.



Chris Capot
Nurse Faculty Program
Elsevier

As Director of Corporate Relations, Christopher Capot heads up public relations for Elsevier's Health Sciences division. He has been a public relations and media relations professional at agencies and corporations for more than 10 years. Prior to that, he was an award-winning newspaper journalist, last working as a business reporter at the New Haven Register in Connecticut. He works in Elsevier's New York office.



Maria Markova Treasurer Elsevier

In her role as Elsevier Foundation treasurer, Maria Markova supports the funding of non-profit organizations around the world. Maria is a Finance Manager in Group Financial Planning and Analysis team at Elsevier, focusing on Health side of business. She previously worked as a Business Controller for Corporate Functions at Elsevier and as a Senior Associate at PwC. Maria acquired her Master of Business Administration (MBA) degree at Oxford University and is a Chartered Management Accountant.



Kenneth R. Thomson II Legal Council RELX

Kenneth R. Thompson II was appointed as RELX Group General Counsel on October 1, 2011. In his role, he has global responsibility for the intellectual property, privacy, governance, compliance and securities law functions for RELX Group. Prior to serving in this capacity, Mr. Thompson served as the Executive Vice President and Global Chief Legal Officer for LexisNexis, an operating division of RELX Group.



Longtime Elsevier employee, Gina Walker crosses the finish line after a 60km walk for breast cancer charity, "A Sister's Hope". Over the past 6 years, Gina has been a staunch advocate tapping the Matching Gift Fund to help her raise over \$18,000 for the charity in vital funding for research in the Netherlands and the US.





R to L: Hannfried Von Hindenburg (SVP Global Communications Elsevier), Jérôme Oberreit (CEO of MSF), Emmanuel Baron (Director of Epicentre), and Ylann Schemm (Elsevier Foundation) sign a memorandum of understanding between Doctors Without Borders/ Médecins Sans Frontières (MSF), Epicentre, Elsevier, and the Elsevier Foundation to share in kind resources.



Elsevier's Director of Communications Chris Capot with members of the Sigma Theta Tau International Honor Society of Nursing. The academy provides an intense, 20-month leadership development curriculum constructed on intellectual and experiential learning opportunities facilitated by an esteemed faculty.

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THE ELSEVIER FOUNDATION

