



On 22 December 2015, the General Assembly of the United Nations (UNGA) adopted a resolution to establish International Day of Women and Girls in Science as an annual conduit to recognize the important role women and girls play in science communities and their contributions towards achieving the 17 Sustainable Development Goals (SDGs). Annually, the Day is observed on 11 February.

Graduate Women International (GWI) takes part in promoting the advancement of women and girls in science through advocacy work at the international, national and local levels, through our special consultative status with the United Nations (UN), and at the grassroot level through the work of our National Federations and Associations (NFAs).

To mark the 4th International Day of Women and Girls in Science, GWI is highlighting some of the many projects conducted around the world by our NFA to increase the participation of women and girls in science.

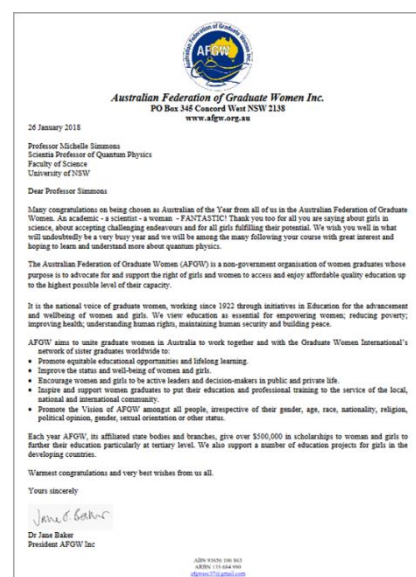
Australia: The Australian Federation of Graduate Women (AFGW)



Each year AFGW awards more than \$500,000 Australian dollars in scholarships to woman and girls, particularly at the tertiary levels. Through its scholarships AFGW provides a means for women to follow in the footsteps of notable members such as [Hilda Jamieson](#), graduate women in science and long serving member of the Executive Board of the New South Wales Association of Graduate Women (AFWGNSW) and [Alison Harcourt](#), a longtime member of Graduate Women Victoria, who has been called the groundbreaking grandmother of Australian mathematics.

AFGW advocacy aims to influence educational policies and to support the right of girls and women to access affordable, quality education up to the highest possible level of their capacity, including science. In doing so, AFGW often submits letters to State and Federal government officials and heads of organisations that address critical educational issues and barriers faced by women and girls, generally, as well as in STEM studies.

- [Letter](#) to a female professor of Quantum Physics extending AFGW's congratulations on being chosen as Australian of the year.
- [Letter](#) to the CEO of Stile Education, regarding the development of digital resources for teachers focused on STEM.





- [Letters](#) to four female Australian scientists congratulating them on their inclusion in the top five scientists under the age of 40.
- [Letter](#) to the Australian Minister for Education and Training regarding the role of women and girls in STEM.
- [Letter](#) to the Minister for Women regarding STEM funding.

Canada: The Canadian Federation of University Women (CFUW)



In, 2016 CFUW announced its partnership with the University of Waterloo's Women in Engineering Committee, Ontario Network for Women in Engineering (ONWIE) and the Laurier Centre for Women in Science (WinS) to create a National Mentorship Programme aimed to elevate STEM education to a national priority. With these partners, CFUW provides mentors for women across the country in the STEM fields. An additional role of the mentorship programme is to gather data as inform for federal and provincial policymakers on the critical role that science, technology, engineering, and mathematics education plays in the career goals of women.

Annually, CFUW awards nearly \$1 million Canadian dollars in scholarships to women to help them pursue post-secondary studies. Among those is the Dr. A. Vibert Douglas Fellowship, established in 1947 to honour Dr. Douglas, first female president of the Royal Astronomical Society of Canada, former GWI president and internationally known astrophysicist. In 2019, the scholarship will be awarded to commemorate the organisation's 100th anniversary. For more information about the CFUW click [here](#).



Dr. A Vibert Douglas

Fiji – Graduate Women Fiji (GWF)



GWF supports young women studying in non-traditional fields. In particular, GWF supports girl from disadvantaged socio-economic backgrounds who are studying in non-traditional disciplines at the Fiji National University and other institutions.

Since its inception in 2004, the GWF Scholarship Fund has supported 11 young women who studied in the fields of automotive and electrical engineering, plumbing, sheet metal, civil engineering, aeronautics and tertiary teaching in agricultural science. A recipient of the GWF Scholarship is second-year University of the South Pacific, student, Latu Bloomfield who is pursuing a Bachelor of Engineering in Electronics. "I am very grateful to all that have contributed and donated in order for this scholarship to be successful", says Ms. Bloomfield. "I have chosen STEM because I want to be a successful female electronic engineer. This is one of my main priorities and aspirations...one of my main motivators is my Dad who has taught me



Ms. Latu Bloomfield, recipient of the GWF Scholarship and second-year student at the School of Engineering and Physics of the University of the South Pacific.



to overcome challenges and difficulties to be successful in life”, she adds. To see Mrs Bloomfield’s video comments and to learn more about her research projects, click [here](#).

Ghana: Ghana Association of University Women (GAUW)



Established in 2016, GAUW actively contributes to the promotion of women’s and girls’ access to science education and careers through advocacy and grassroots development projects. In 2018, as part of the GWI Bina Roy Partners in Development (BRPID) Programme, generously funded by VGIF (www.vgif.com), GAUW established the [Girls’ Science Clinic](#) project that introduces girls to STEM disciplines and encourages them to pursue science related programmes.

The project takes place at the University of Cape Coast and is run by members of GAUW in partnership with authorized university entities as the Centre of Gender Rights and Advocacy of the University of Cape Coast and the Ghana Education Service of Cape Coast.

This project provides junior high school girls the opportunity to participate in STEM workshops as guidance to choosing science related career paths. During these workshops, the girls participate in the following activities:

- Engage with female role models who enhance self-confidence to pursue science.
- Conduct science projects in peer groups of five.
- Present their projects to the group and to their community, during open-day presentations.
- Participate in a science lab field trip to gain hands-on practical lab experience.
- Complete a pre and post- workshop questionnaire to evaluate the impact of the workshop and assess their likelihood of choosing a science-based career.

“On 19 September 2018, the first ever science clinic was organized”, says Mildred Asmah, Convenor of the GAUW Science Clinic Project. “The programme was in two parts, the first was made up of motivational talks by accomplished female scientists at the University of Cape Coast in the areas of biology, physics, chemistry, math and agriculture. The second part was made up of basic math and science practical experiments. These experiments examined biology, chemistry and physics and included experiments on biodiversity, osmosis and diffusion, photosynthesis, acid and base, separation methods of mixtures, magnetism, reflection, refraction and diffraction of light, transformation of matter and determination of surface area”, she adds.

Great Britain: British Federation of Women Graduates (BFWG)



As contributors to equal access to STEM education, BFWG joins the ranks of organizations who are providing valuable resources, guidance and advocacy for girls and women in science by offering a broad range of scholarships to support women in higher education in the UK.

The positive impact of BFWG’s actions led to BFWG’s recognition by *Girls Who STEM* as one of 40 of the “Best STEM Organisations for Girls and Women”. *Girls Who STEM* is a free resource for parents, providing everything from in-depth product reviews to expert STEM for girl’s advice. This

39. British Federation of Women Graduates

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nomination comes as a well-deserved recognition of BFWG's continued commitment to improve women's and girls' educational space in all spheres and areas of studies.

Netherlands: Graduate Women International Netherlands (GWI-NL)



As part of its mission, GWI-NL advocates towards the breaking down of systemic and societal barriers preventing women and girls from achieving their full potential in STEM studies and careers. GWI-NL is concerned that, despite increasing STEM employment opportunities, stereotypes, discrimination and career guidance continue to deprive women and girls of the chance to enter or excel.

In October 2018, GWI-NL organized a seminar titled, [Future of Technology – Future of Women: why don't European girls like science or technology?](#) As pointed out in the seminar's abstract, "Girls/women have equal rights as boys/men to develop their STEM talents, and society would benefit from fully exploiting all available talent. Increasing opportunities for women in these fields is an important step towards realizing greater economic success and equality for women across the board". During this seminar, participants discussed the challenges and means to improve the working conditions of women and girls in STEM studies and professions. To learn more about GWI-NL click [here](#).

Russia: Federation of University Women Russia (FUWR)



FUWR is the only organization in Russia to bring together women with higher education and the opportunity to join a graduate women organisation. FUWR membership includes many women in science: of the 148 FUWR members, 23 are PhDs in a scientific field, 42 are doctoral candidates in a scientific field and 28 are leaders in education. Since its inception 28 years ago, FUWR has implemented 97 projects in the education, science and social sectors.

Providing women and girls with role models and encouragement to pursue scientific education and careers is at the heart of FUWR's activities. The STEM twinning project initiated by FUWR more than five years ago, has made significant progress, including the creation of an Interregional Network of STEM Clubs for Girls in Russia and the creation of Summer STEM Camp for Girls sub-project to be launched in 2020. In support of this project and through the sponsoring of the Open World Foundation, 10 FUWR members have travelled to the USA to learn about best support practices for women and STEM education and careers. The group visited STEM schools and universities in Hawaii, Kansas, Florida and Colorado. More information on FUWR's activities promoting STEM education and career is available [here](#).



Zoya Apevalova, FUWR Convenor of International Relations (CIR) during a FUWR seminar in St Petersburg, Russia.

Senegal – Senegalese Association of University Women (ASFDU)



ASFDU is taking an innovated approach towards increasing girls' access and interest in science by progressively decentralizing its activities in order to meet, support and advocate for more women and girls. Members recently travelled to rural areas to gather information on the challenges faced by rural women. This data is collected and analyzed for trends and action plan development. ASFDU members provide rural women



and girls with knowledge of their rights as women and opportunities for financing women's activities including scholarships and school grants for girls; they encouraged girls to integrate into scientific channels by taking steps to support girls from underprivileged backgrounds who have the potential to continue their secondary education. Notably, ASFDU has started providing financial aid to the rural area in the north of the country.

Singapore – University Women's Association Singapore (UWAS)



The promotion of STEM knowledge for all is at the core of UWAS who organizes a variety of STEM-oriented projects for its members, nonmembers, seniors and inmates. In 2018, UWAS started a Smart Workshops Series to provide education to its members. The first of these workshops taught participants how to make a simple step tracker and digital game with an accelerometer using micro bits.



UWAS members during the 2018 UWAS Smart Workshop



UWAS members and local school children during their participation to the Singapore Science Centre "Scientist for a Day" workshop

To encourage girls' interest in science, UWAS developed a Student Enrichment Platform (SEP) that leverages smart technologies for disadvantaged children from seven to 12 years of age to improve their knowledge in math and English. The pilot project was deployed at three primary schools in Singapore. UWAS also organized participation in the "Scientist for a Day" workshop held at the Singapore Science Centre where students learn about scientific methods through experiments such as static electricity and the Van de Graaff generator, convection demonstrator, optics demonstrator, Crooke's radiometer and microscopes.

Concerned that elder women are often excluded from learning opportunities, UWAS created the first public Basic Computer Skills and Knowledge Course for seniors in the community. During this 4-part course, seniors are paired with a volunteer who teaches computer skills on a one-to-one basis. Due to popular demand, three additional rounds of basic computer skills class quickly followed the pilot round. A new Basic Facebook Skills Course has been created for participants who already possess basic computer skills.



UWAS public Computer Skills and Knowledge course for Seniors



Convenors and volunteers of the UWAS Basic Computer Literacy Programme for soon to be released inmates

Noting that basic computer skills are key to daily life, UWAS developed a Basic Computer Literacy Programme for soon to-be-released inmates that equips them with the necessary computer skills to integrate in the society upon release. Each module consists of two sessions, with average attendance of 15 to 20 inmates who receive individual attention.

Switzerland – Swiss Association of University Women (SVA)

SVA	Schweizerischer Verband der Akademikerinnen
ASFDU	Association Suisse des Femmes Diplômées des Universités
ASL	Associazione Svizzera delle Laureate
ASA	Associazioni Svizra da las Academicras

SVA provides its members with the opportunity to participate in an annual, training workshop focused on a theme related to the empowerment of all women and girls through safe and equal access to education. In 2017, the workshop’s theme was “Women and STEM”.



Members of the Swiss Association of University Women (SVA) during the 2017 “Women in STEM” training.

The impetus came from a 2015 study conducted in Germany, Austria and Switzerland by Dr. Sarah Hofer from the Swiss Federal Institute of Technology in Zurich (SFITZ), titled, “Girls’ discrimination in Physics Grading”, which exemplified that for the same response, a girl is rated lower than a boy. Dr. Hofer presented the results of her study

and Dr. Simone Creux, SFITZ, gave a presentation on the topic of women in STEM, with a focus on female engineers and ways to promote female participation in STEM careers. Finally, Swiss lawyer and politician, Mrs. Elisabeth Schneider-Schneiter, addressed the way public policy promotes women’s and girls’ participation in STEM. This training provided a timely and multidisciplinary platform for discussion on the crucial need for greater gender equal representation in STEM studies and careers. A detailed report of the session is available in German [here](#) and in French [here](#).

Uganda: Uganda Association of University Women (UAUW)



UAUW, formed in 1956, promotes national development with an emphasis on enhancing equal opportunities in education and development to ensure gender equity and equality.

In 2016, through the GWI BRPID programme, UAUW carried out a project for the gender sensitization of school



Convenor, volunteers and beneficiaries of the UAUW Gender Sensitisation of School Laboratory Technicians Project



laboratory technicians. The project trained laboratory technicians to exercise gender responsive methodologies to increase the likelihood of equal participation of girls and boys in laboratory activities. The project was initiated to sensitize a wider group of laboratory technicians at local and national levels, to boost girls' interest in laboratory practical work and to address the poor performance of girls in science related projects. The participants' experiences and findings of the projects were documented and shared with education stakeholders and other schools.



GWI Teachers for Rural Futures students.

Through its Teachers for Rural Futures programme, GWI supports the higher education of rural girls from in Uganda. Currently, the Teachers for Rural Futures program supports girls from the rural district of Beyunde to attend Makerere University in Kampala. We are proud of the accomplishments of the five wonderful young women who currently take part in the programme, one of whom will graduate this year with a Bachelor of Science in Teaching degree! [Donate today!](#)

About GWI

Graduate Women International (GWI) is a membership-based international NGO based in Geneva, Switzerland, with presence in some 60 countries with our NFAs and Independent Members. Founded in 1919, GWI is the leading girls' and women's global organisation advocating for women's rights, equality, and empowerment through access to quality education and training up to the highest levels. GWI is in special consultative status with ECOSOC since 1947 and in an NGO maintaining official relations with UNESCO and ILO.

GWI operates with a small yet dedicated staff consisting of Executive Director, Stacy Dry Lara, Junior Office Administrator, Clémence Mathiaud a host of committed interns. Additionally, our work is possible with the support of our tireless Board of Directors. Learn about GWI at graduatewomen.org