

IAEA expands capacity building to combat childhood cancer

A new partnership will enable the IAEA to better help low and middle-income countries provide increased access to early detection and treatment of paediatric cancer. Under the cooperation agreement with Childhood Cancer International (CCI), signed in early June 2018, CCI and the IAEA will work together to provide specialized training for professionals working in paediatrics, increase awareness and mobilize resources to benefit children with cancer in IAEA Member States.

CCI brings together 188 organizations in 93 countries representing parents and young cancer survivors and works to promote best practices, develop effective, innovative approaches and deliver cost-effective solutions to reduce deaths from childhood cancer. It implements projects in several countries, including Ethiopia, Ghana and Myanmar, to address the healthcare needs of children under treatment, to train fellows in paediatric oncology, to build sustainably run facilities and to establish parent support groups.

Over 300 000 cases of cancer are diagnosed annually in children under the age of 14, and the number of cases is on the rise. A 2015 CONCORD-2 Lancet reportⁱ estimated that child survival in less developed parts of the world can be as low as 30%, compared with above 80% in high-income countries.

Increasing access to treatment

“This arrangement establishes a collaboration in the fight against paediatric cancer that will increase access to radiotherapy services for children with cancer in developing countries,” said Dazhu Yang, IAEA Deputy Director General and Head of the Department of Technical Cooperation. “This partnership will further support our Member States as they respond to the increasing demands for cancer services and specialized skills.”

The IAEA has been working closely with Member States to devise and implement programmes which include radiation medicine as part of a

multidisciplinary approach to fighting cancer, from prevention and early detection to treatment. In addition to training health professionals, the Agency contributes to quality control measures and to the procurement of equipment for treating paediatric cancers through the transfer of advanced technologies such as proton therapy. It develops guidelines for the safety and protection of patients, including children, who receive radiation.

Thanks to the IAEA’s involvement in cancer diagnosis and treatment globally, CCI expects the partnership to bring benefits to young patients and their families worldwide, said Ruth Hoffman, President of CCI. “Our goal is for all children and adolescents with cancer to receive the best possible level of care and have access to diagnostic services,” she said. “We can achieve this goal with the help of the IAEA.”

— By James Howlett

Online game application wins IAEA student competition



The Malaysian student team presenting their winning entry at the IAEA student competition on innovative approaches to popularizing nuclear science and technology, 31 May 2018, Gyeongju, South Korea.

(Photo: IAEA)

With a computer game application to promote nuclear science, a secondary school team from Malaysia won the international student competition whose winners were announced at the IAEA’s Third International Conference on Human Resource Development for Nuclear Power Programmes in Gyeongju, South Korea, in May 2018.

The team from SMK Kuala Besut secondary school named their app “100 Things about Nuclear Science and Life”. After launching the educational tool in early 2018, the students found that participating locals and tourists had drastically changed their views about the nuclear industry.

“Before the project, 93% of participants expressed a negative attitude towards

nuclear science and technology,” said Safyyah binti Muhammad Nasir, one of the three Malaysian students on the winning team. “But after familiarizing themselves with basic elements of nuclear applications, 96% of respondents had a positive perception of both nuclear energy and science.”

The student competition, held in conjunction with the four-day conference, was aimed at fostering interest in nuclear science and technology among secondary school students and was open to participants worldwide. Students aged 14-18 were assigned the task of promoting discussion and awareness of the current and future impact of nuclear science and technology.

Five finalist teams, one each from Hungary, Japan, Malaysia, South Korea and the United States of America, designed and implemented the most innovative projects and won a trip to Gyeongju to present them at the IAEA conference.

Wan Mod Shatar, the teacher overseeing the team at SMK Kuala Besut secondary school, emphasized:

“It is important to note that our students are from a fishing village in Malaysia, where knowledge about nuclear science is limited. Through this competition, they not only had to interact with the community, but have also started exploring a new scientific field.”

Criteria for initial selection included accuracy, innovativeness, potential impact and gender balance.

“When we first learned about the IAEA International Student Competition, we knew that this was a great opportunity to learn more about the nuclear industry and underline our passion for a world with safe nuclear energy,” said Andrew King, Vice-Principal of Alliance Dr. Olga Mohan High School, USA, which sent one of the finalist teams. The students from the high school found that the image of nuclear energy among students was clouded by fear over nuclear weapons and that greater industry outreach was needed to inform students of careers in the nuclear sector.

With the closing of the conference, Yves Bréchet, High Commissioner

of the Alternative Energies and Atomic Energy Commission, France, underlined that, from primary school to doctoral programmes, all levels of education are crucial for the future of nuclear energy. In fact, all contemporary issues faced by the nuclear industry have their place in education and training:

- increasing public acceptance of nuclear power requires education of the general public and raises the importance of a scientific education for everybody;
- the need to increase efficiency and safety must mobilize a new generation of engineers more familiar with computer simulation and data analysis; and
- developing innovation will require engineering science, long-term projects and academics from various fields.

The conference attracted over 520 participants and observers from 51 countries and five organizations.

— *By Shant Krikorian*

IAEA launches Nuclear Energy Capacity Building Hub

The IAEA has launched a new digital platform focusing on workforce planning, leadership, training, stakeholder involvement and human performance to support countries operating nuclear power plants and those considering or developing new nuclear power programmes. The Nuclear Energy Capacity Building Hub allows registered users to join proactive communities of practice for information sharing, capacity building and networking.

Experts can join communities of practice for each topic, provide feedback on IAEA draft publications, explore IAEA e-learning tools, connect to other relevant webpages, browse IAEA publications and access documents from past meetings.

“The Hub offers a unique interactive online space for specialists working in the nuclear field,” said Lotta Halt, a training specialist for nuclear power at the IAEA. “It will serve as the IAEA’s one-stop-shop for information and discussion on topics related to human resource development and stakeholder involvement for nuclear power programmes.”

The Hub was introduced at the Third International Conference on Human Resource Development for Nuclear Power Programmes, which took place in Gyeongju, South Korea, on 28–31 May 2018.

The development of the Hub follows requests from Member States for modernization of the way nuclear

professionals communicate. Its goal is to enable faster and more collaborative forums.

To register and participate, please contact HRD.Contact-Point@iaea.org.

— *By Lisa Berthelot*