

## **Hanns-Langendorff Medal 2023**

### **Laudation for Dr. Zhanat Carr**

Dr. Carr was borne in Khazakstan as Zhanat Abylkassimova. She has two adult children, a son aged 37 and a daughter aged 30. Her country of residence is France where she lives close to Geneva.

Dr. Carr's education started in 1989 in the Department of Medical Radiology and Radiation Oncology of Semipalatinsk State Medical School, Khazakstan where she received her degree as M.D.. Subsequently, she changed to famous Medical Radiation Research Centre of the Russian Academy of Medical Sciences, Obninsk where she made her Ph.D. in Radiation Oncology.

From 1993 to 1999, Dr. Carr participated in a European Master of Science Programme in Radiation Biology at St. Bartholomew's College of the London Royal School of Medicine and Dentistry, UK. Her mentor there was Prof. Klaus-Rüdiger Trott.

In 1999, during a three months fellowship of German Academic Exchange Service DAAD at Bundesamt für Strahlenschutz in Munich, Germany she finalized with support of Dr. Bernd Grosche her important work on a *“Fallout from Nuclear Tests: Health Effects in Kazakhstan”*.

From 2000 to 2002 Dr. Carr worked with a Postdoctoral Fellow Award of NIH at the Division of Cancer Epidemiology and Genetics of the National Cancer Institute in Rockville, Maryland USA. Her supervisor was Dr. Martha Linet, Head of Radiation Epidemiology.

In July 2002, Zhanat Carr joined World Health Organizations Headquarter in Geneva working as Medical Officer in the Radiation and Health Unit of the Department of Environment, Climate Change and Health, at the World Health Organization Headquarters in Geneva, Switzerland.

Two of her main very successful activities there relate to coordination and maintenance of WHO global expert networks.

1. Since her start in 2002, Dr. Carr coordinates the Radiation Emergency Medical Preparedness and Assistance Network (REMPAN) of WHO, which expanded continuously from 10 to 40+ member institutions under Dr Carr's leadership. Due to her networking skills, she organized 7 global meetings of the WHO REMPAN network member institutions. The last one in Seoul, Korea 2023 finished just three days ago.
2. In 2007/2008, Dr. Carr developed a concept and launched a new worldwide BioDoseNet network of 60 cytogenetic biodosimetry laboratories. She coordinated three global surveys of the biodosimetry capacities world-wide.

Besides of her network and capacity building activities, Dr.Carr was involved in a number of important international activities:

1. In 2006, Dr. Carr coordinated the development of the mile-stone WHO Report "*Health Effects of the Chernobyl accident*".  
From 2009 to 2013, she was responsible for WHO's implementation of United Nations Action Plan for Chernobyl and the interagency project "*International Chernobyl Research and Information Network*".

2. in 2009, she organized an expert consultation for global consensus on management of acute radiation syndrome (ARS), that served as a basis for developing a globally consented ARS management protocol.
3. Dr. Carr is a WHO representative to ICRP Committee 1 and a member of the Task Group 120 of Committee 4. In the past, she contributed to ICRP Report 111 published in 2009 on “*Protection of People Living in Long-term Contaminated Areas after a Nuclear Accident or Radiation Emergency*”.
4. After the Fukushima Nuclear Accident, Dr. Carr served from 2011 to 2013 as the Organization’s technical lead for response and risk assessment activities and a focal point for interagency coordination. She represented WHO on the international oversight committee established by the Fukushima Medical University (FMU).
5. From 2014 to 2017, Dr. Carr led the work to update the WHO Guidelines on “*Iodine Thyroid Blocking in Case of Radiological and Nuclear Emergencies*” published in 2017 – a project that was implemented by the guidelines development group of international experts chaired by myself. I appreciated very much the close cooperation with Zhanat. The guidance has become a benchmark and is adapted by many countries around the world.
6. With support and guidance of late Prof. Wolfgang Weiss, Dr. Carr lead the development of WHO “*Framework for Mental Health and Psychosocial Support in Case of Nuclear Emergencies*” published in 2020. This topic became very prominent during response and the decade since Fukushima.

Other recent activities of Dr. Carr since 2020 comprise:

- Coordination of the work on WHO *“Policy Advice on Development of National Stockpiles for Radiation Emergencies”* and of the *“Checklist for Hospital Preparedness for Radiation Emergencies”*.
- Since Feb 2022, she is involved in providing technical leadership and *coordination of WHO’s response to the Ukrainian war* in the area of strengthening national health system’s preparedness for a nuclear emergency.

As it has been shown, Zhanat Carr is a very active, energetic and goal oriented person.

So it is not surprising that she is as well author or coauthor of 220 scientific publications in international journals, of published lectures or of WHO reports.

Hanns-Langendorff Stiftung, Freiburg awards its Goldmedal to outstanding scientists and practitioners in the field of Radiation Biology and Radiation Protection since 1992; since 2019 together with Fachverband für Strahlenschutz. Among the 24 awardees were up to now only two women.

The scientific advisory board of Hanns-Langendorff Stiftung, Freiburg and the board of Fachverband für Strahlenschutz are very proud to award the Hanns-Langendorff Goldmedal to Dr. Zhanat Carr.

Dear Zhanat, as chairman of the Stiftung, I like to congratulate warmly!

The President of Fachverband für Strahlenschutz Prof. Hansruedi Völkle will read and hand out the certificate now.