

ICRP Committee 1 Meeting

6, 11, 12, 13 November 2022– In person and virtual meeting

The meeting was held during ICRP 2021+1, in Vancouver, and was hosted by D Laurier, G Woloschak, E Ainsbury. Almost all C1 members attended (fully/partially). C1 includes 18 members from 10 countries with expertise in biology, genetics, human medicine, mathematics and statistics, physics and dosimetry, epidemiology, and radioecology. L Hafner attended as C1 intern, as did the Technical Secretaries for the Task Groups. Five observers from IAEA, MELODI, UNSCEAR, IARC and WHO were also invited.

Update on Task Groups

TG91 Radiation Risk Inference at Low-dose and Low-dose Rate Exposure for Radiological Protection Purposes: Use of Dose and Dose Rate Effectiveness Factors (Chair W Ruhm). Draft report expected for public consultation ~ Spring 2023 (with an open workshop planned).

TG99 RAPs Monograph (Chair J Garnier-Laplace). Under the new Terms of Reference, work has been focused on development of a reproducible method for data set selection. Draft report for review by critical reviewer expected for 2023.

TG111 Factors Governing the Individual Response of Humans to Ionizing Radiation (Chair S Bouffler). The key areas of interest are identified and the systematic reviews are in progress or complete. Draft for review by critical reviewers expected for 2023.

TG115 Risk and Dose Assessment for Radiological Protection of Astronauts (Chair W Ruhm). The work of the TG, which was temporarily suspended in March 2022, has been resumed since September 2022. Three draft manuscripts have been produced for conference or journal submission.

TG118 Relative Biological Effectiveness (RBE), Quality Factor (Q), and Radiation Weighting Factor (w_R) (Chair G Woloschak). A number of workshops and webinars have been organised. Draft for review by critical reviewers expected for 2024.

TG119 Effects of Ionising Radiation on Diseases of the Circulatory System and their Consideration in the System of Radiological Protection (Co-Chairs T Azizova and D Laurier). Collaboration with UNSCEAR on the CircuDis project, as well as IAEA, continues. Draft for review by critical reviewers expected for 2025.

TG121 Radiation-Induced Effects on Offspring and Future Generations (Co-Chairs R Wakeford and P Hande). A special issue of IJRB with a number of papers on this topic is being prepared following the May 2022 workshop in Budapest.

TG122 Review of cancer risk models and non-radiation-related parameters and data for detriment calculation (Co-Chairs R Wakeford and L Vaillant). This is a new TG with the remit to update the calculation of detriment for cancer. Meetings with IARC and UNSCEAR took place in July 2022.

TG123 Classification of harmful radiation induced effects in human health for radiological protection purposes (Chair L Vaillant). The aim of this new TG is to review the classification of effects in the system and to assess any need for updates.

Other topics discussed during the meeting

The new **Technical Secretaries** for the TG activities as well as the new **C1 TG mentees** were welcomed. Consideration of **Uncertainties in ICRP work** and **Individualization / stratification of dose and risk in medical radiological protection** were discussed with the other committees.

The **next meeting of Committee 1** will take place virtually, in April 2023.