

General Information

The course is open to:

- MSc students and PhD students
- young scientists and researcher
- maximum 12 participants

There is no course fee.

Accommodation will be provided free of charge or financially supported. Travel and other costs need to be covered by the participants themselves.

Application

The application deadline is 15 May 2023.

Participants will receive feedback until 20 May.

Applications should contain:

- letter of motivation
- CV
- letter of support from the supervisor or head of Laboratory (for students only, very short)

Please email your application to
biodora-training@bfs.de

For more information please contact:

Dr. Martin BUCHER
Federal Office for Radiation Protection
Biological Dosimetry Section | WR2
biodora-training@bfs.de

Join the BIODORA training course

online lectures: 26 June to 6 July 2023

on-site lab session: 10 to 14 July 2023

deadline for application: 15 May 2023

biodora-training@bfs.de

Legal notice

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1. Auflage

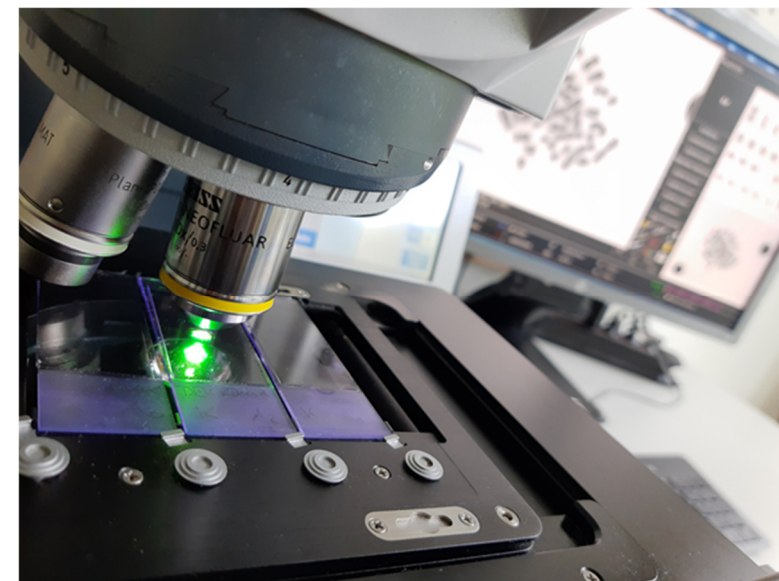


Federal Office for
Radiation Protection

Application of Biological Dosimetry in Radiation Protection & Radiation Research

BIODORA

Training course to maintain
competence in radiation protection



This course is funded by PIANOFORTE research partnership. PIANOFORTE partnership has received funding from the European Union's "EURATOM" research and innovation program under the 101061037 grant agreement.



BIODORA training course

The BIODORA training course is initiated by the Federal Office for Radiation Protection (BfS) in Germany within the framework of the European Partnership for Radiation Protection Research “PIANOFORTE”.

The BIODORA course introduces the methods of biological dosimetry that are commonly applied in radiation protection and can be used for individual dose reconstruction, emergency preparedness or radiation biology research. The benefits and pitfalls in the application of the different methods will be addressed. The aim is to encourage the participants to critically review the results of their work and to integrate them into the various aspects of radiation protection.

Course contents and laboratory activity

The course is divided into two parts.

Lecture session

The theoretical part with methodological lectures and key note lectures is held in an online format over 7 days. This session part is distributed over two weeks (3-4 hours per day). The following topics will be addressed:

- introduction to various methods of biological dosimetry
- applications of biological dosimetry methods
- quality assurance and management
- standardization
- statistical evaluation and dose estimation
- physical dosimetry in *in vitro* experiments
- networking
- linkage of biological dosimetry with medical consequences and interventions

Laboratory session

The practical part is carried out over 5 days in the laboratories of the Federal Office for Radiation Protection (BfS) and the Bundeswehr Institute for Radiobiology in Munich, Germany.

Here, the different methods of biological dosimetry are demonstrated and the participants carry out practical work in the laboratory themselves: sample and slide preparations according to the different endpoints, analysis of the results and dose estimation.



Dicentric Analysis



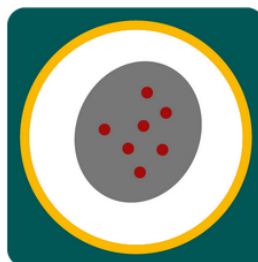
Translocation Analysis



PCC Analysis



Micronucleus Analysis



γH2AX Analysis



Gene Expression Profiling

International experts

The course is held in collaboration with well-known experts in the field of biological dosimetry, most of them active in the RENEB network (Running the Network for Biological Dosimetry and Retrospective Physical Dosimetry).



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