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UNIVERSITÄT
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INSTITUTE OF SOCIAL AND
PREVENTIVE MEDICINE
UNIVERSITY OF BERN

Scientific Workshop

Natural background radiation and
cancer risks in children
June 5-6, 2018

How studies of background radiation and childhood cancer can improve our understanding of the effects of low-dose ionizing radiation.

SPEAKERS

Prof. Richard Wakeford
University of Manchester, UK

Dr. Ausrele Kesminiene
International Agency for Research on Cancer
Section of Environment and Radiation
World Health Organization, France

Prof. Mark Little
National Cancer Institute
Division of Cancer Epidemiology and Genetics
Radiation Epidemiology Branch, Bethesda, Maryland, USA

Prof. Ole Raaschou-Nielsen
Institute of Cancer Epidemiology
Danish Cancer Society, Denmark

Dr. Gerry Kendall
Childhood Cancer Research Group
University of Oxford, UK

Dr. Jacqueline Clavel
Dr. Denis Hémon
French Institute of Health and Medical Research (INSERM)
Paris Descartes University, France

Prof. Anssi Auvinen
Dr. Atte Nikkilä
School of Health Sciences
University of Tampere, Finland

PD Dr. Peter Kaatsch
PD Dr. Claudia Spix
German Childhood Cancer Registry
University Medical Center Mainz, Germany

Dr. Ben Spycher
Institute of Social and Preventive Medicine
University of Bern, Switzerland

Register by April 30
www.xxxxxxxxxx.ch

Venue
ISPM Bern
Seminar Room
Mittelstrasse 43
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Switzerland

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Background and Objectives

It is well established from studies of atomic bomb survivors and other exposed groups that medium to high doses of ionising radiation can induce cancer. Furthermore, children are known to be more sensitive to radiation. However, the direct epidemiological investigation of cancer risks associated with low dose radiation (<100 mSv) remains a major challenge.

Recently, several large record-based studies have investigated associations between the risk of childhood cancer and exposure to natural background radiation. However, the evidence from these studies is mixed.

This scientific workshop will bring together researchers in the field and interested parties from around the world to discuss how epidemiological studies of exposure to background radiation and risk of childhood cancer can improve our understanding of the effects of low-dose ionising radiation.

The first day is organized as plenary sessions followed by a panel discussion that will provide the opportunity to highlight the methodological challenges and discuss the limitations of previous studies.

The second day will be held as round table discussions to debate methodological advances and initiate a multi-national collaboration between the research study groups. The study teams of the recent epidemiological studies will be represented, but the session is open to all interested people.

For more information please contact:
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Program

Tuesday, 5 June (room 24)

13.00 Welcome & setting the scene
[Ben Spycher](#)

Broader context

Chair: [Matthias Egger](#)

13:15 Epidemiological evidence of cancer risks following exposure to ionising radiation in childhood
[Richard Wakeford](#)

13:45 Childhood leukaemia and CT scans: Overview of recent epidemiological studies
[Ausrele Kesminiene](#)

14:15 Methodological challenges of epidemiological research on the effects of natural background radiation
[Mark Little](#)

14.45 Coffee Break

Recent studies on background radiation and childhood cancer

Chair: [Claudia Kühni](#)

15.15 Indoor radon and childhood leukaemia
[Ole Raaschou-Nielsen](#)

15.35 A record-based case-control study of natural background radiation and the incidence of childhood leukaemia and other cancers in Great Britain during 1980-2006
[Gerry Kendall](#)

15:55 Background ionizing radiation and the risk of childhood cancer: a census-based nationwide cohort study
[Ben Spycher](#)

16:15 Coffee break

16.30 Residential Exposure to Natural Background Radiation and Risk of Childhood Leukaemia in France, 1990-2009
[Jacqueline Clavel / Denis Hémon](#)

16.50 Background radiation and childhood leukemia: A nationwide register-based case-control study
[Anssi Auvinen / Atte Nikkilä](#)

17.10 Background gamma radiation and childhood cancer in Germany: an ecological study
[Claudia Spix / Peter Kaatsch](#)

Panel discussion

Chair: [Richard Wakeford](#)

17:30 What have we learnt?

19:30 Dinner

Wednesday, 6 June (room 220)

Round table discussion

Chairs: [Ansi Auvinnen](#), [Ben Spycher](#)

8:30 Open questions and methodological challenges

10:00 Coffee break

10:30 Possibilities and scope of future collaboration

12:00 Summing up

12:30 Stand-up Lunch / Farewell