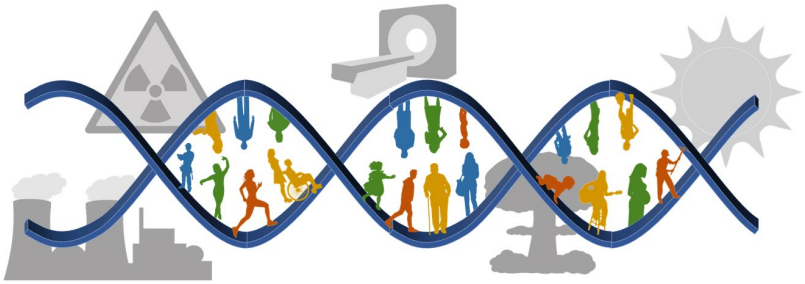
NIH NATIONAL CANCER INSTITUTE

SAVE THE DATE

Radiation Epidemiology & Dosimetry Course

September 9-12, 2019

NCI Shady Grove, 9609 Medical Center Drive, Rockville, MD



A ***FREE*** course intended for those interested in learning about the health effects of radiation exposure. Registration and additional details to follow. Email NCIREBCourse@mail.nih.gov to be added to the notification list. Course runs 9 to 5 pm daily.

Monday, September 9

Fundamentals of Radiation Epidemiology, Radiation Physics and Dosimetry, and Risk Modeling

- Principles of epidemiology
- Principles of radiation physics and dosimetry
- Radiation risk modeling
- Introduction to the statistical software package *EPICURE*

Tuesday, September 10

Overview of Radiation Health Effects & Exposure Assessment

- Radiation and cancer risks
- Radiation and risk of non-cancer diseases
- Radiobiology
- Radiation exposure assessment

Medical Radiation Exposure – Diagnostic

- Diagnostic radiation exposures and cancer risks
- Dosimetry for epidemiologic studies of diagnostic radiation exposures

Wednesday, September 11

Medical Radiation Exposure – Therapeutic

- Cancer risks from conventional radiotherapy
- Cardiac risks from conventional radiotherapy
- Dosimetry for epidemiologic studies of conventional radiotherapy
- Cancer and non-cancer risks from emerging radiotherapy techniques
- Dosimetry for epidemiologic studies of emerging radiotherapy

Occupational Radiation Exposure

- Cancer and non-cancer risks among medical workers
- Dosimetry for epidemiologic studies of medical workers
- Cancer and non-cancer risks among nuclear workers
- Dosimetry for epidemiologic studies of nuclear workers
- Potential for cancer and non-cancer risks among space workers

Thursday, September 12

Environmental Radiation Exposure

- Cancer and non-cancer risks after nuclear accidents
- Dosimetry for epidemiologic studies of environmental exposures
- Cancer and non-cancer risks in the Atomic bomb survivors
- Cancer risks from natural background radiation and radon

Susceptibility to Radiation Health Effects

- Genetic and genomic laboratory tools
- Genetics of radiation-related cancer
- Genetics of radiation-related non-cancer diseases

Non-ionizing Radiation

- Ultraviolet (UV) light dosimetry and epidemiology
- Cell phones and cancer risk