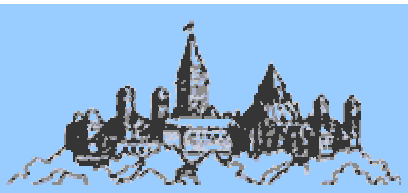
IEEE Ottawa Section



How prepared are we for responding to a radiological/nuclear mass casualty event?

Since the nuclear weapons era, about 60 years ago, scientists have been working towards establishing physical and biological methods for detecting radionuclides, determining exposure doses, identifying irradiated individuals, understanding the associated immediate and long-term health risks and providing medical countermeasure solutions. Throughout this time, much of the effort was directed at responding to individual exposures as opposed to large-scale events where many people may be irradiated. With the change of political climate and recent threats of dirty bombs, a new challenge faces the scientific community and medical professionals. How prepared are the emergency response teems in dealing with radiological/nuclear mass casualty events? Do they have the tools to rapidly identify those individuals that would benefit the most from the limited expertise and resources available for treatment? Are there new technologies in as yet unexploited areas of science that could further the developments in this area of research. Can the scientific community provide enough basic research to support the development of new diagnostic and therapeutic strategies? How can some of these new therapeutic strategies be tested before they are urgently needed? How prepared is the Canadian medical community to deal with these issues? These are some of the concerns presently being addressed by today's medical and scientific communities, both at the national and international level.

Dr. Diana Wilkinson

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Diana Wilkinson is a defence scientist with the Radiological Analysis and Defence group at DRDC Ottawa. She holds a bachelor's degree in microbiology and immunology and a PhD in molecular biology. From 1987 to 2002, she was employed by Health Canada as a Radiation Biologist and a lead of the Molecular Biology/Genetics Unit. In 2002 she joined the DRDC Ottawa team to lead the radiation biology research. The group's research is focused on the development of novel biodosimetry techniques and the identification of sensitive biomarkers of ionizing radiation response in order to assess individual risk and develop medical countermeasures to manage accidental, medical and belligerent exposures.

March 16, 2006

admission is free
5:30 – 7:00 pm
Mackenzie Building 4359
Carleton University

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