

## Biographies

### Jerry Cuttler

Dr. Cuttler graduated from the University of Toronto in 1964 with a BAsC & Eng degree in Engineering Physics, Nuclear Option. He carried out R&D in Israel and received the MSc degree in Nuclear Engineering in 1967 and the DSc degree in Nuclear Sciences in 1971 from the Technion, Israel Institute of Technology. He managed a nuclear radiation detector company.

In 1974, he joined Atomic Energy of Canada Limited and led the teams that designed and provided the reactor control, safety system and radiation monitoring instrumentation for the CANDU 6 reactors at Pt. Lepreau (New Brunswick), Gentilly-2 (Quebec) and Embalse (Argentina) and for the reactors of the Pickering B and Bruce B stations in Ontario, while providing support to the Douglas Point, Pickering A and Bruce A stations. He was engineering manager of AECL's work on the Bruce B Project and in 1985/6 was resident engineering manager in Romania for the Cernavoda Project. During 1987-1990, he was the engineering manager of the 10 MW SLOWPOKE Energy System Project and provided a licensable design for a reactor that could heat the University of Saskatchewan. He served four years as Manager, Operating Station Support at Pickering NGS to provide AECL services, and was later appointed Manager, Engineering Integration for the CANDU 9 Project. Then he was the technical manager for updating the KANUPP Safety Report; for assessing costs related to radioactive waste management at Chalk River, and for AECL Y2K support to owners of legacy products and support to the CANDU stations during the Y2K rollover.

He retired from AECL in 2000 and formed Cuttler & Associates Inc. He provided engineering services to Ontario Power Generation for the return of reactor Unit 4 of Pickering A to service and to AECL for the MDS Nordion Medical Isotopes Reactor Project (to supply molybdenum-99). He now prepares regulatory submission letters for:

- Bruce Power, for restart of Bruce reactors 1 and 2 after their 10-year lay-up, and
- Ontario Power Generation, for extending the service of Pickering B for another 30 years.

Dr. Cuttler served on the council of the Canadian Nuclear Society for more than 15 years and was president in 1995/6. He was appointed Fellow CNS in June 2000.

During the past 14 years, Dr. Cuttler has been assessing the effects of ionizing radiation on health and has drawn widespread attention in Canada and abroad to the beneficial effects of low doses.

## **Myron Pollycove**

|         |   |
|---------|---|
| 1921    | Born, Nogales, Arizona  |
| 1942    | California Institute of Technology, B.Sc. (Physics, Mathematics)  |
| 1942-46 | Physicist, U.S. Navy, Bureau Naval Ordnance, Radar Officer, during WWII   |
| 1946-50 | University of California, San Francisco School of Medicine, M.D.  |
| 1950-53 | U.S. Army Medical Corps, during Korean War  |
| 1950-51 | Harvard Medical School, Boston City Hospital, Resident, Internal Medicine   |
| 1951-53 | US Army Chemical Center, Edgewood, MD, Biophysicist, Biophysics Division  |
| 1953-55 | Tufts Medical School, Boston Veterans Administration Hospital, Resident, Internal Medicine  |
| 1955-61 | U of California Berkeley (UCB), Lawrence Radiation Lab, Donner Lab, Research Associate  |
| 1962-91 | U of California San Francisco (UCSF), School of Medicine, 1964 Professor, Lab Medicine and Radiology, 1991 Professor Emeritus                     |
| 1962-91 | San Francisco General Hospital (SFGH), SFGH Clinical Laboratory, Assistant Director, 1968 Director; Nuclear Medicine Department, Chief of Service |
| 1964    | Board Certified Pathologist (CP), American Board of Pathology   |
| 1972    | Board Certified, American Board of Nuclear Medicine   |
| 1991-02 | US Nuclear Regulatory Commission (NRC), Visiting Medical Fellow   |

Biomedical research began in 1951 at the US Army Chemical Center with two-year establishment of the cause of non-hemorrhagic fatal traumatic shock. Hematology research began in 1953 at Boston VA Hospital using chromium-51 and iron-59 to quantify iron and red cell kinetics in normal subjects and patients. This research was refined and expanded at UCB. Metabolic studies of glucose, monocarbon pool, folic acid, and vitamin B12 were initiated at Donner Laboratory, UCB and continued at SFGH (110 publications, 66 abstracts). As Director of the Clinical Laboratory SFGH, I was responsible for services of the Chemistry, Microbiology, and Immunology Divisions and additionally responsible as Division Chief of the Nuclear Medicine, Hematology, and Blood Bank services. Teaching of Nuclear Medicine, Hematology, and Clinical Pathology to residents, medical students and house officers was also a major responsibility. Participation in numerous national and international organizations and activities served to develop the specialties of nuclear medicine, hematology, and clinical pathology.

The NRC Visiting Medical Fellow is expected to understand and be familiar with the charge, policy and function of the NRC; to provide the NRC with expertise in the medical use of radioisotopes, both diagnostic and therapeutic; and be an effective liaison responsive interface and good communicant between the NRC and the medical community. In addition, a number of projects were of special importance: The Quality Management Program and extension to Pregnancy and Breast Feeding; The National

Academy of Science Institute of Medicine Review and Assessment of NRC Regulation of Medical Activities; General Morbidity and Mortality Risks of General Anesthesia, Surgery, Chemotherapy, Radiation Therapy and Radiation Therapy Misadministration; International Symposium and Workshop on Quality Guidelines in Nuclear Medicine; Evaluation of EPA Risk Analysis of I-129 Release from a Spent Fuel Repository; and the Sacred Heart Hospital Investigation, and Evaluation and Communication of the Radiobiological Effects of Low Level Radiation Exposures. This evaluation and analysis continues to be my primary research project because of its overriding importance to our understanding of low-dose radiation in health and disease and its consequent impact on prevention and therapy of cancer, the disposal of radioactive waste and the needless expenditure of many hundreds billions of dollars. This project includes meetings, conferences, lectures, publications, collaboration with the United Nations Scientific Committee on the Effects of Atomic Radiation in preparing Annex B of the UNSCEAR 1994 report, and support of Biological Effects of Low Level Exposures (BELLE) activities (1993-2008).

Publications: 130 journal articles; 12 book chapters