The Boice Report #48



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A Remarkable Month for Radiation Protection—and for the USA

Apologies for missing, in the last newsletter, my first Boice Report in four years. There was an outpouring of concern (one email), but the reason was four conferences. The National Council on Radiation Protection and Measurements (NCRP) annual meeting addressed the needs of the nation. Dick Toohey has a wonderful summary in this newsletter. The Main Commission of the International Commission on Radiological Protection (ICRP) met in Cape Town, South Africa. The International Radiation Protection Association (IRPA) held its 50th anniversary celebration in Cape Town, and I had seven presentations. The 100th anniversary of the Center for Radiological Research (CRR) recognized the giants in radiation science and protection and the latest science that supports radiation protection.



My wife Jennifer and son Justin proving that NCRP will go to any remote corner of the world to provide radiation protection for man, beast, and the environment!

Photo courtesy of John Boice

NCRP 2016 Annual Meeting. Our annual meeting reinvigorated the NCRP WARP (Where Are the Radiation Professionals?) initiative on the crisis associated with the decline in radiation professionals. We may call this reinvigoration the "NCRP Call to Action," modelled after the "Bonn Call for Action" aimed at the international radiation protection needs in medicine. The NCRP Call for Action will cover how to reverse the decline in professionals and will provide specific goals and recommendations on ways to improve the engagement of, training of, and job opportunities for young professionals.

ICRP. The <u>Main Commission met</u> for four days in Cape Town. We discussed future strategies to improve radiation protection, protect the environment, address medical radiation protection needs, implement the recommendations, and propose research

needs in radiation protection. Ways to make documents more accessible and understandable to scientists, the public, the media, and the authorities who make decisions on funding protection activities were discussed. One example is a new draft educational module for <u>health care providers</u>, updating a previous one for <u>medical practitioners</u>. The 4th ICRP Symposium will be 10–12 October 2017 in Paris (near EuroDisney). We have French and European support but additional contributions from the United States would be welcomed (<u>contact me</u>).

IRPA. The 50th anniversary celebration of IRPA was held in Cape Town this May. The five-day Congress 14 on <u>Practicing Radiation Protection</u> was comprehensive and embraced the need for international improvements and harmonization of approaches. Health Physics Society (HPS) and U.S. involvement was substantial, e.g., Matt McFee (HPS member since 1983) was on the Organizing Committee. Kevin Nelson at the General Assembly presented the HPS interest to host the 2024 IRPA16 Congress in Orlando. HPS won the bid by an overwhelming margin of votes made by the 179 official delegates!

Additional recognition of U.S. professionals was given to the Sievert Award and Gold Medal recipients. I started the first plenary session with the <u>Sievert Lecture</u> and was only the second American in 50 years to be so honored; the first was <u>Laurie Taylor!</u> For the first time, the lecturer was given a medal. The last plenary lecture was by Ethel Gilbert. <u>Ethel won the Gold Medal for Radiation Protection</u>. This trifecta has never happened before and reflects the strong U.S. interest in radiation protection internationally.









CRR Directors, clockwise from top left: Gino Failla, Harald Rossi, David Brenner, and Eric Hall

CRR. The CRR held a centennial celebration symposium in April at Columbia University, recognizing 100 years of excellence in radiation science and protection. Mark Maiello's summary is in this newsletter. Notably, the scientific leaders were actively involved in radiation protection activities throughout their scientific careers. Gino Failla established CRR in 1916 and played a seminal role in developing the philosophy of radiation protection in the United States. He served on nine NCRP committees and was the primary author of NCRP Report No. 17 (NBS Handbook 59), "Permissible Dose from External Sources of Ionizing Radiation." Gino served on ICRP committees in the 1950s, was one of the founders of the Radiation Research Society in 1952, and was largely responsible for launching the Radiation Research journal. The second director was Harald Rossi. Harald was a charter member of NCRP and listed in our Congressional Charter of 1964. He served on six NCRP committees, chaired Report No. 38, "Protection Against Neutron Radiation," and delivered the NCRP Taylor Lecture in 1984. He served on the United Nations

Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), along with Warren Sinclair, NCRP's second president.

Edith Quimby was a leading scientist at CRR for 40 years. She is #1 on the NCRP hit parade by serving on 12 committees and was also a charter member. Edith chaired Report No. 37, "Management of Patients Who Received Radionuclides." Albrecht Kellerer, a friend and another leading scientist at CRR, worked with Rossi for many years. He served on two NCRP committees and was the Taylor Lecturer in 1995. He also served on ICRP committees and on UNSCEAR. The third CRR director is Eric Hall, also a friend. Eric served on four NCRP committees including Report No. 136, "Evaluation of the Linear Non-Threshold Dose-Response Model." His Taylor Lecture in 1998 remains an engaging read: "Chimney Sweeps to Astronauts: Cancer Risks in the Work Place." The last director in these 100 years is David Brenner. David served on three NCRP committees, including Report No. 160, "Ionizing Radiation Exposure of the Population of the United States." He contributed to Report No. 136 and spoke at our April 2016 annual meeting. To meet the national need to train the next generation of young radiation scientists, CRR enhanced its training and education program and increased funding opportunities for students, influenced in part by the NCRP WARP initiative.

Summary. It has been a remarkable month for radiation professionals and for recognizing U.S. contributions. We should continue to participate in committee work. <u>Failla in the 1950s</u> "recognized the responsibility and the need for scientists trained in radiation physics and biology to aid in preparing new people for work in the field." We should support efforts to replace ourselves, and we should recognize those giants whose shoulders we stand on (but hopefully don't fall off of)!

ICRP Main Commission in Cape Town, South Africa—May 2016



Left to right: Donald Cool (United States), Jai-Ki Lee (South Korea), Christopher Clement (scientific secretary, Canada), Carl-Magnus Larsson (Australia), Claire Cousins (chair, United Kingdom), John Harrison (United Kingdom), Jacques Lochard (vice chair, France), Eliseo Vañó (Spain), Hans-Georg Menzel (Germany), Kathryn Higley (United States), Sergey Romanov (Russia), Werner Rühm

(Germany), Ohtsura Niwa (Japan), Haruyuki Ogino (assistant scientific secretary, Japan), John Boice (United States). Hua Liu (China) was unable to attend.