

## The Boice Report #28



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### United States and the United Nations

Last month I dined at Sigmund Freud's favorite restaurant (the Landtmann) in Vienna after an especially challenging day at the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR). More on this later. The delegation, which I've been a member of since [1993](#), is in a state of transition. Fred Mettler, who was the United States representative to UNSCEAR since 1987, retired last year. Julian Preston, who recently retired from the U.S. Environmental Protection Agency, took up the mantle, and four new delegates participated in the July 2014 sessions. The established delegates also have been with UNSCEAR for many years and several are looking to step down in the next year or two. In addition, there is a need for enhanced recognition and support from the United States and for a focus on the future.

**What's the mission?** UNSCEAR was established by the General Assembly of the United Nations in 1955 and its mandate is to assess and report levels and effects of exposure to ionizing radiation. Governments and organizations throughout the world rely on UNSCEAR's estimates as a scientific basis for evaluating radiation risks, establishing radiation protection and safety guidance, and regulating radiation sources ([unscear.org](http://unscear.org)). The first U.S. representative was Shields Warren (1956–1963), who was also my mentor at Harvard in the 1970s.

**Should I be aware of UNSCEAR?** Definitely. UNSCEAR was born because of concerns over radioactive fallout resulting from [nuclear weapons testing in the 1950s](#) (2008). After the pioneering publication in [1958](#), the scope was expanded to include medical, occupational, and background exposures. The definitive work on [childhood exposure](#) was recently published (2013) and the latest evaluation of exposures and potential health effects following the [Fukushima](#) reactor accident was just made available (2014). Important documents on [radiation carcinogenesis](#) (2008), [Chernobyl](#) (2011), [radon](#) (2008), and [hereditary effects](#) (2001) are among the many documents freely available. Check them out!

**What's been the U.S. involvement?** Substantial. The United States has been influential since the beginning. Our U.S. representatives have been Shields Warren (1956–1963), Richard Chamberlain (1964–1974), Robert Moseley (1975–1986), Fred Mettler (1987–2013), and Julian Preston (2014). U.S. delegates have included some of the stellar scientists and leaders in the radiation profession. Perhaps many of you worked with or knew Vic Bond, Austin Brues, Eugene Cronkite, Jim Crow, Merrill Eisenbud, Giovanni Failla, John Harley, Alex Hollander, Charles Meinhold, Jim Neel, Harold Rossi, Bill Russell, Paul Selby, Warren Sinclair, Art Upton, John Villforth, Ted Webster, and Harold Wyckoff. For more than [50 years](#) we have participated in the development, review, and approval of the scientific documents that are the underpinnings of UNSCEAR—not only as delegates, but as consultants who prepare the documents that are eventually published and used throughout the world to enhance scientific understanding of all things related to radiation.

**Current and future program.** A publication on uncertainties in radiological risk assessment is complete and will be out shortly; it will complement the recent [National Council on Radiation Protection and Measurements \(NCRP\) Report No. 171](#) (2012) on uncertainty. A publication on the issues of attributing effects to exposures at low doses will be out at the end of the year (this was somewhat of a challenge in that the philosophy of science was called upon in some discussions on how we know what we know [and what we do when we don't know]). A cancer epidemiology report

on low dose rates from environmental sources ([Techa River](#) and [high background radiation](#) areas) is in the works, as are reports on the biological effects from intakes of internal emitters (uranium and tritium). Other reports involving sources of radiation during the production of electrical power and during medical applications are ongoing.

**Challenges?** In this state of uncertainty and transition, it is of real importance to enhance the recognition and support of U.S. involvement in UNSCEAR. There have been changes in our delegation leadership and changes in U.S. State Department personnel assigned to UNSCEAR. The Secretary of State appoints the U.S. representative who in turn is responsible for selecting the delegates. Each year the delegates must be reappointed (and approved as special government employees) or we aren't allowed in the meetings. This year the approval process was particularly challenging, but with substantial assistance from our State Department colleagues, we managed to gain entrance. I feel that the process has to be more streamlined and secure. I hope that visits by the UNSCEAR secretariat and UNSCEAR chairman this October will be possible with key people in the State Department as well as important U.S. agencies, including the U.S. Nuclear Regulatory Agency and the U.S. Department of Energy.

**I didn't complete my Freud restaurant story.** My French colleague sat down and said, "I'm tired and thirsty and I must have . . . wine." My German colleague said, "I'm tired and thirsty and I must have . . . beer." I then responded, "I'm tired and thirsty and I must have . . . diabetes!" Not only is it time for a transition and a renewal, time is running out for the United States and other countries to train, engage, and retain young professionals in order to maintain competence in radiation protection for the future needs of the nation, if not the world (e.g., [Germany](#) has already begun a serious remediation effort). Stay tuned for the upcoming NCRP statement on [WARP](#) (Where Are the Radiation Professionals?).

### 2014 United States Delegates to UNSCEAR



Top row, left to right, Armin Ansari (Centers for Disease Control and Prevention), Lynn Anspaugh (University of Utah, retired), and John Boice (NCRP)

Middle row, left to right, Helen Grogan (Cascade Scientific), Naomi Harley (New York University), and Vince Holahan (U.S. Nuclear Regulatory Commission)

Bottom row, left to right, David Pawel (U.S. Environmental Protection Agency), Julian Preston (U.S. Environmental Protection Agency, retired, U.S. representative), and Gayle Wolschak (Northwestern University)