The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Radioactive Sources: Applications and Alternative Technologies

Virtual Meeting Agenda

August 18, 2020, 10:00-11:30 (EDT)

Connection details:

Link: https://nas-sec.webex.com/nas-sec/j.php?MTID=mdd78af011872e61764e6531ec8eed365
Meeting ID: 199 477 8701
Password: htPnrCHk677 (48767245 from phones and video systems)
Telephone: +1-415-527-5035 and +1-929-251-9612
Access code: 199 477 8701

10:00 am – 10:10 am	**Call Meeting to Order and Welcome** Bonnie Jenkins, Committee Chair and Charles Ferguson, Study Director
10:10 am – 10:35 am	**Improving Cancer Therapy in Low- and Middle Income Countries: What Does that Mean for Radiation Sources and Alternative Technologies?** C. Norman Coleman, International Cancer Expert Corps
10:35 am – 10:50 am	**Q+A and Discussion**
10:50 am – 11:10 am	**Perspectives on Alternative Technologies from the International Source Suppliers and Producers Association (ISSPA)** John Miller, ISSPA
11:10 am – 11:30 am	**Q+A and Discussion**
11:30 am	**Closing Remarks** Bonnie Jenkins, Committee Chair

Updated 8/10/2020

Sample Questions Submitted to Speakers

ICEC

- Please introduce the organization and scope.
- Please provide examples of success stories with advancing radiation therapy in LMICs.
- How many countries is ICEC working with and planning to work with? What is the global/regional coverage?
- What are the challenges that your organization faces and who supports the efforts and how?
- What are ICEC's observations about use of cobalt versus LINAC in LMICs and trends of use of the different technologies the past 10 years?
    - What are some factors that lead these trends?
- What do you anticipate the trends will be the next 10 years?
    - What are the factors that lead these trends?
- How does ICEC balance the need for security risk reduction versus availability of radiation therapy?
- Please provide any additional information or advice that you think is relevant to this committee's work.

ISSPA

- Please introduce the organization and scope
- Does ISSPA keep a database of how many sources are deployed and their status including repatriation efforts? If yes, could you provide a breakdown of sources for medical applications, sterilization (medical device sterilization, SIT, phytosanitary, food, and miscellaneous uses), and other applications?
- Views on needs for alternative technologies nationally (US) and internationally and work of the organization in facilitating use of alternatives
- Examples of promising alternative technologies being developed for different applications (medical, industrial, other) with emphasis on potential game-changers
- Examples of applications without good alternatives and reasons; suggestions on reducing risks linked to those applications
- Activities related to source disposition including recycling
- Challenges with adopting alternative technologies nationally (US) and internationally (e.g., costs, other resources, training)
- Suggestions on companies or other entities the committee should hear from
- Please provide any additional information or advice that you think is relevant to this committee's work.

BIOGRAPHIES

Dr. C. Norman Coleman received his MD from Yale University and is board certified in medical oncology from the National Cancer Institute (NCI) and radiation oncology from Stanford University. He was a faculty member at Stanford for seven years and from 1985-99 he was Professor and Chairman of the Harvard Medical School Joint Center for Radiation Therapy. Since 1999 he has been in the Radiation Research Program at NCI. Additionally, since 2004 he has also been a Senior Medical Advisor in the Office of the Assistant Secretary for Preparedness and Response in the Department of Health and Human Services working on the national radiological and nuclear disaster response. For this and for his work assisting in Japan during the 2011 multiple disaster he was awarded the 2011 Samuel J. Heyman, Service to America Homeland Security Medal.

With a career-long interest in community outreach to the medically underserved he helped develop a community radiation oncology satellite program for Stanford and he established a unique academic-community outreach model for the underserved cities outside Boston while at Harvard Medical School. At the NCI he helped conceptualize the Cancer Disparities Research Partnership program which demonstrated the success of mentoring in building cancer research programs in regions many thought “too hard” to reach. This successful mentorship model forms the basis of ICEC and illustrates the critical importance of sustainability. Experience shows that sustainability requires a non-government organization that can partner with other countries, professional societies, industry, philanthropy and government programs. From extensive international travel with his wife Karolynn for over 40 years he has an appreciation for how much different cultures can learn from one another and the potential benefit from bringing the world together in cancer care and research by a bottom-up, listening-to-one-another approach. He has personally collaborated with many of the world renowned experts who are the founding members of ICEC. Federal regulations are such that the ICEC is separate from his work at NCI, yet ICEC and the Center for Global Health at NCI will work together when possible. He is serving as the Senior Scientific Advisor of ICEC.

Mr. John Miller is a certified health physicist with over 25 years of experience in the nuclear industry. Mr. Miller possesses a Master of Science degree in environmental engineering and a Bachelor of Science degree in health physics. He is the radiation safety and regulatory compliance officer for International Isotopes Inc., a US based source manufacturer. He is also the current chairman of the International Source Suppliers and Producers Association.