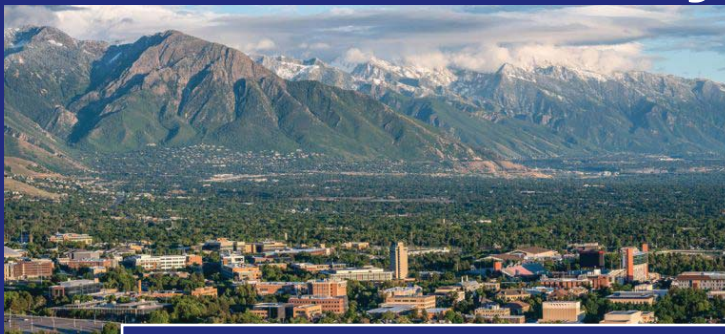


A 5-DAY SHORT COURSE

# Latest Developments in Internal Dosimetry



University of Utah, Salt Lake City  
May 20-24, 2024

## A Professional Development Opportunity

This 40-hour comprehensive course is focused on internal dosimetry for advanced professionals. The course begins with a review of the methodology employed within internal dosimetry, considering the developments in the lung, GI, and biokinetic models. Participants go through several hand calculations including evaluation of bioassay information. The course then discusses advanced systemic models as provided in ICRP 78 through changes advocated in ICRP 130 and the OIR database. Participants are walked through the software code IMBA, supplied by an arrangement with the United Kingdom Health Security Agency (UKHSA). After an introduction to IMBA, students are guided through case studies to understand the nuts and bolts of the software including its limitations and helpful features. The goal will be for participants to walk away understanding IMBA and how to use the software for their program's needs. In addition to IMBA, new developments in the field of internal dosimetry will be discussed including the EURADOS IDEAS framework (with permission from WG 7) and advances in nuclear medicine. Finally, students are introduced to Taurus, the latest software package in bioassay evaluation produced by UKHSA, with a series of hands-on practical exercises. A side aspect of this training is an hour lecture on MDA/MDC (via L.A. Currie and A. Brodsky), the concept of DQO, and finally the concepts of DIL. This course has been developed over the years within a graduate academic setting and may be the most comprehensive available. The included workshop will also have a special set of presentations on wound dosimetry and will include an in-depth review of the United States bioassay intercomparison results from 2020 through 2023 with a presentation of the 2024 intercomparison exercises. Keynote speakers include Dr. Ray Guilmette, member of the NCRP Report No. 156 and Jeffrey Yap and Peter Jenkins from the University of Utah with the latest developments in nuclear medicine. This workshop will provide students with an opportunity to study and review the topics covered in class and will also have a special set of presentations on wound dosimetry as presented by Dr. Raymond Guilmette, the NCRP-156 committee chair of the wound model, and will include an in-depth review, including a step-by-step workshop considering approaches to the United States bioassay intercomparison data sets.

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# Latest Developments in Internal Dosimetry

University of Utah, Salt Lake City

May 20-24, 2024

## LEAD PRESENTOR:



**Dr. Richard Brey** is currently a professor of Health Physics at Idaho State University.

Dr. Richard Brey received his Ph.D. from Purdue University in Health Physics in 1994. He has engaged in a wide variety of research projects varying from radiation physics and detec-

tion to agricultural applications of radiation and radiation producing machines, this list importantly includes internal dosimetry; in which he has engaged in various collaborative efforts including the evaluation of historical exposures, evaluation of animal experimental data, and redefining/evaluating radioactive material translocation models. As a byproduct of these efforts he has published over 45 peer reviewed scientific publications and presented more than 130 times in various scientific venues. He was the 2002 recipient of the Health Physics Society's Elda E. Anderson award for his contributions to the profession in research and service. During the spring of 2013, he was elected to serve as a Council member of the National Council of Radiation Protection and Measurements. Since 1995 he has been the director of an environmental radioanalytical laboratory which performs approximately 1,200 sample analyses per quarter, and the Director of the ISU Health Physics Program. Through 2005 until 2011 he served as the Director of The ISU Technical Safety Office and University Radiation Safety Officer. Between 2009 and 2010 he served as the Interim Chair for the ISU Department of Physics. Between 2004 and 2007 he served as a commissioner for ABET's Applied Science Commission representing the Health Physics Society. Between 2007 and 2011 he served as Commissioner at Large for the ABET Applied Science Accreditation Commission. He served as Associate Chair for the Department of Nuclear Engineering and Health Physics between 2010 and 2013 when he was appointed as the chair of that department. He assumed the duties of Interim Dean of the College of Science and Engineering on July 1, 2013.

## Cost: \$900

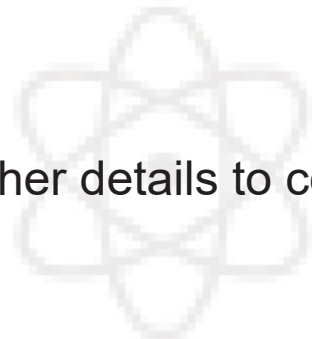
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The fee includes a copy of IMBA for use during the week; IMBA training and Internal Dosimetry Workshops; Dosimetry Intercomparison Exercise Workshops; evening tours of the Huntsman Cancer Institute including an operating production cyclotron; small group sessions on IMBA, medical physics, and nuclear medicine; guest lecturers; as well as a dinner at the Huntsman Center on Thursday evening.

## HOW TO REGISTER:

Visit our website at [www.tmscourses.com](http://www.tmscourses.com) and click on "Register"

AAHP has awarded 40 continuing education credits for this training

Further details to come!



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