Experiencing Ethics Lecture Series

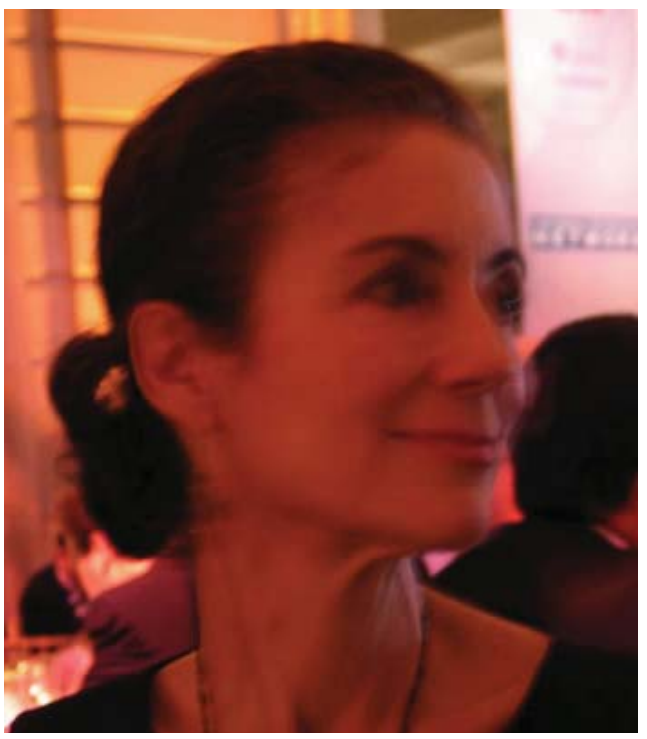
Featuring Dr. Kristin Shrader-Frechette

March 5, 2012 • 11:00 am-12:00 pm • Philip Guthrie Hoffman Hall 232

Regulating Ionizing Radiation: Flawed Standards, Flawed Ethics

Current flawed standards for ionizing radiation kill tens of thousands of Americans annually, and yet most people are not aware of the scientific and ethical problems with these standards. Many ethical problems regarding ionizing radiation arise from **scientific practices** that threaten rights to life, rights to know, and rights to consent to risk. These questionable practices include radiation experiments (without their consent) on retarded children and Native Americans; suppression of reactor-accident data from Chernobyl, Three Mile Island, and Fukushima; falsification of radiation-worker dose data; and cover-up of weapons-testing-radiation harm to civilians, to soldiers, and to "atomic veterans."

However, there also are ethical problems inherent in the **scientific theory** underlying radiation standards themselves. Current regulatory standards for ionizing radiation are both scientifically and ethically indefensible. They victimize ordinary people-but especially, workers, children, and future generations. This talk provides an overview of radiation hazards and their scientific rationale, outlines questionable radiation-related scientific practices and scientific theory underlying regulations, and responds to the objections of those who defend current radiation standards.



Kristin Shrader-Frechette, Ph.D.

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Author of nearly 400 articles and 15 books, including *Taking Action, Saving Lives* (2007) and *What Will Work: Fighting Climate Change with Renewable Energy* (2011), Shrader-Frechette has held membership on many US National Academy of Sciences boards/committees, the US Environmental Protection Agency Science Advisory Board, and many UN committees. The first woman president of three international scholarly/scientific organizations (Society for Philosophy and Technology, Risk Assessment and Policy Association, International Society for Environmental Ethics), she has lectured throughout the world. Her research, funded by the National Science Foundation for 28 years, is translated into 13 languages.

Most of her work deals with radiobiology, quantitative human-health risk assessment, and ethical/methodological issues in science and public health. In 2004 Shrader-Frechette became the third American to win the World Technology Award in Ethics. In 2007, *Catholic Digest* named her one of 12 "Heroes for the US and the World" for her global, pro-bono environmental-justice and public-health work with minority/poor communities. In 2011, Tufts University awarded her the Jean Mayer Global-Citizenship Award for her pro-bono and scholarly work related to environmental justice and public health.

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