



Oregon State University
College of Engineering

Risk Communicator

Kathryn Higley



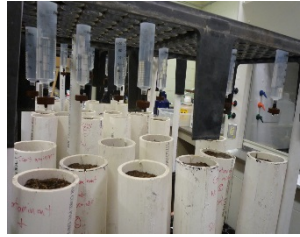
About Me: Experience and Education

- BS in Chemistry
- MS and PhD in Radiological Health Sciences
- One of only ~1200 Certified Health Physicists in the world

- Teach graduate and undergraduate classes in nuclear science, radioecology, radiation biology, dosimetry, and radiation safety
- More than forty years' experience in dealing with radionuclides and related exposure to people and the environment, including the development of computational tools and field work in contaminated environments worldwide.

- Asked by the US Department of Energy to serve as a Risk Communicator for the community around the Portsmouth Plant

Examples and Locations of Laboratory and Field Research Work: K Higley and Students



(Lab) Remediation of Cesium-137 in soil



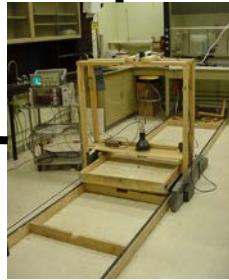
(Lab) Earthworms in Cesium-137 soil



(Lab) Radiation effects on pinto beans



Uranium impacted soils, New Mexico



(Lab) Scanning speed vs detection efficiency for Americium 241 and Cesium 137



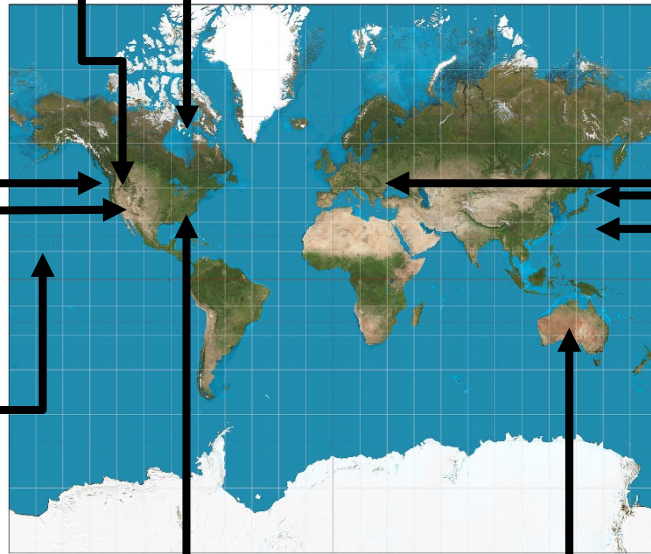
Plutonium contamination, Johnston Atoll, Pacific



Radioactive trees, Savannah River Site, Georgia



Radionuclide releases, Hanford



Tritium, carbon 14, strontium-90 in Wetlands, Chalk River, Canada



Environmental samples, Red Forest, Chernobyl



Fukushima, Japan



Fukushima Trace, Pacific Ocean



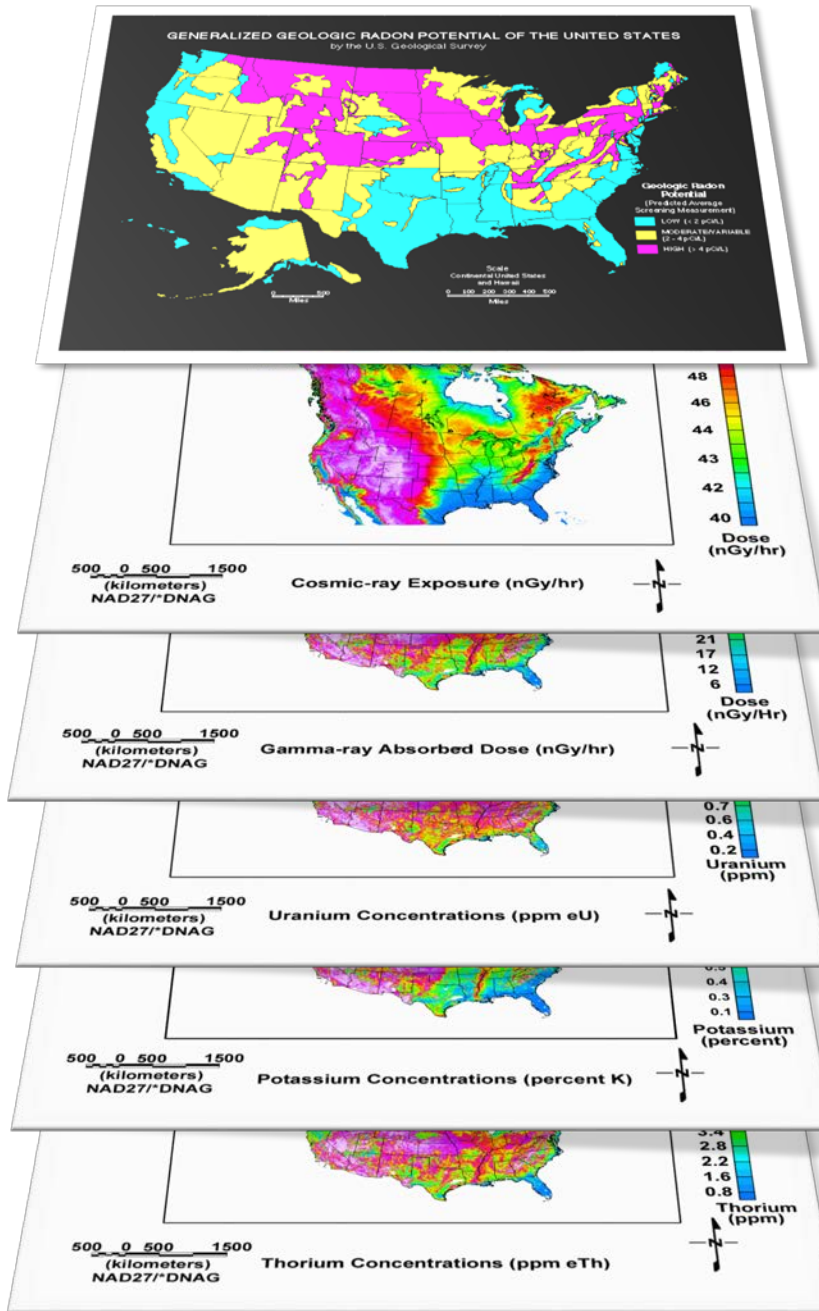
Fukushima release, Japan



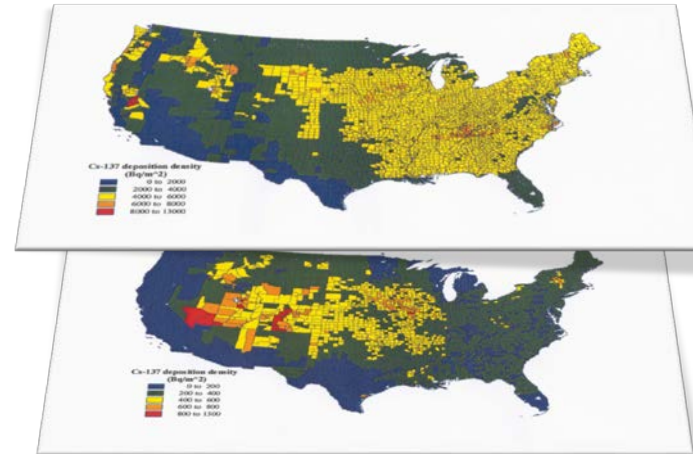
Plutonium uptake Maralinga, Australia



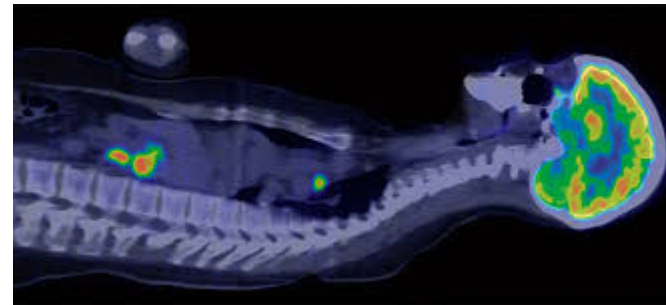
Background



Natural Radioactivity



Nuclear Weapon Fallout



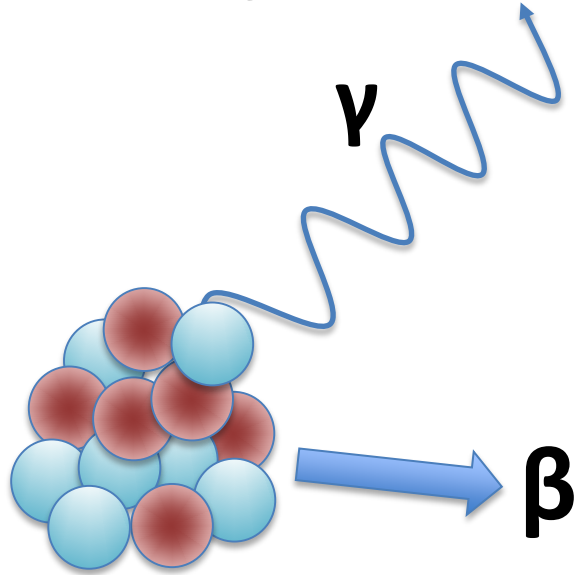
Nuclear Medicine



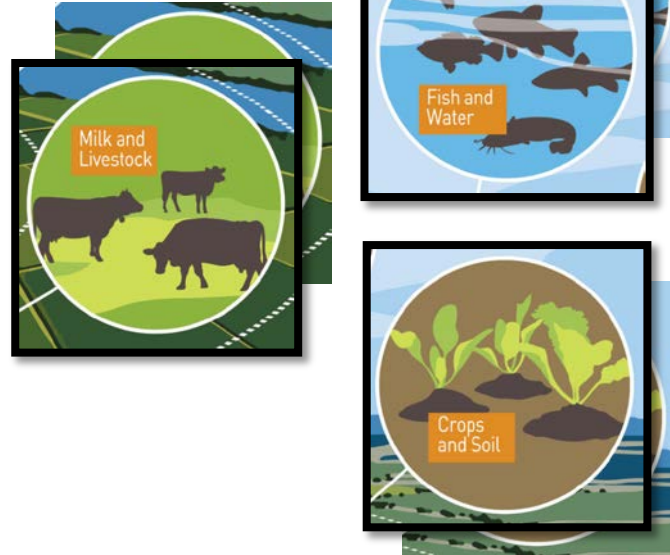
Natural but Enhanced



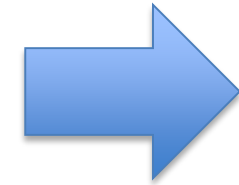
Identify



Pathways

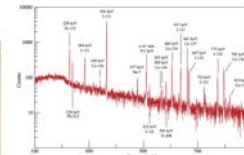
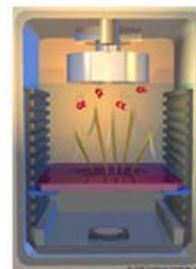
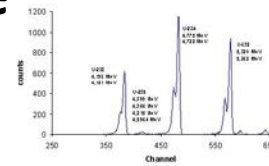
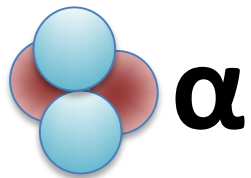


Calculate
Dose



Predict
Risk

Measure





My contact information

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