

## **The U.S. Transuranium and Uranium Registries**

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The United States Transuranium and Uranium Registries are funded by a grant from the U.S. Department of Energy to Washington State University to provide long-term follow-up of individuals with confirmed internal depositions of uranium, plutonium, and other radionuclides. The primary mission of the Registries is to determine the validity of biokinetics models used to describe the human metabolism of these radionuclides, by comparing tissue contents determined postmortem with those estimated from bioassay or other in-vivo data. The results are intended to provide an improved basis for radiological protection standards, such as annual limits of intake and derived air concentrations. The Registries operate by identifying exposed individuals in cooperation with workplace dosimetry or occupational medical staff, soliciting voluntary enrollment at 5-year intervals. The voluntary nature of participation is emphasized, and individuals may withdraw at any time. Care is taken to obtain and maintain proper informed consent, both from registrants and their next-of kin. Tissue samples have been obtained from 340 donors, and just over 440 living registrants are currently being followed.

The Registries also operate and maintain the National Human Radiobiology Tissue Repository, a collection of over 20,000 tissue samples, solutions, and slides from exposed individuals. These materials are available for collaborative research in such areas as biomarkers, oncogene activation, and subclinical effects of internal radiation exposure.

USTUR-0007-94