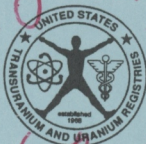


Karen Gay Silkwood,
(19 Feb 1946 - 13 Nov 1974)

and J. L. Arnold
(1994 - ?)



both have hard
and soft tissue in hrt.
(my little finger and Karen's)

UNITED STATES

TRANSURANIUM AND URANIUM

REGISTRIES

finger, lung and brain.

College of Pharmacy

Washington State University



Washington State University

Tri-Cities

100 Sprout Road • Richland, WA 99352
(509)375-6010 • (collect 24 hours a day)

UNITED STATES TRANSURANIUM & URANIUM REGISTRIES

Washington State University
100 Sprout Road
Richland, WA 99352
(509)376-6010 (collect 24 hours a day)

Ronald L. Kathren, Director

*Operated for the U.S. Department of Energy
by Washington State University*

Facts About the Registries

The U.S. Transuranium and Uranium Registries (USTUR) are a unique scientific research program with the primary goal of assuring the adequacy of radiation protection standards for actinide elements such as plutonium, uranium, and americium. To accomplish this, the Registries study the uptake, distribution, retention, and dose of uranium and its daughters, thorium and plutonium, as well as other transuranic elements in exposed persons.

The Registries seek voluntary tissue or whole body donations from persons with known or documented exposure to the actinides. Selection of registrants is based on exposure as well as bioassay and other data that are essential to final scientific interpretation.

The Registries are a major contributor to our knowledge of transuranic elements. This understanding is accomplished through the evaluation of health physics data, medical information and radiochemical analyses of tissue from exposed employees.

Participation

There are two ways in which you can help the scientific world extend its knowledge of how transuranic elements, uranium, and thorium are taken up, deposited and retained in our bodies:

- **Tissue Donation.** Authorizing an autopsy permits the Registries to receive and examine selected organs or portions of organs for analysis of transuranic elements, thorium or uranium and its decay products, and pathological changes in the tissues. If the participant has surgery in which tissue is removed, the Registries are interested in analysis of the material(s) for the presence of radioactive elements--especially teeth extractions or portions of bone.
- **Whole Body Donation.** Just as you may donate your entire body to a medical school for research purposes, you may authorize a whole body donation to the Registries. Priority for accepting the donation of a whole body is extended to those individuals with an estimated deposition of 4 nanocuries (150Bq) or greater of a transuranic element or those with measurable amounts of uranium or its decay products.

The Registries pay for the autopsy and expenses incurred in obtaining tissue for analysis. A \$500 honorarium is extended to the spouse or next-of-kin of participants in the program. Every effort is made to ensure the privacy and anonymity of participants. Information obtained from the postmortem tissue analysis is available to the participants spouse, or listed next-of-kin, upon written request.

Publication

Results of the Registries' research are made available through publication in the open peer reviewed scientific literature and through annual and topical reports. Registries' publications are available to interested persons upon request.

If you would like more information about the Registries, please complete this pre-addressed form. No postage is necessary.

Name: _____

Address: _____

City: _____

State: _____

Zip: _____

Home Phone: _____

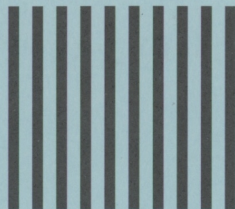
☐ I am interested in learning more about the Registries; please send me additional information.

☐ I would like to receive a phone call to further discuss the Registries.

☐ Please send me written materials and the appropriate enrollment forms.

Sign here: _____

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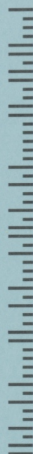


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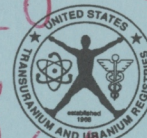
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Washington State University Tri-Cities
100 Sprout Road
Richland, WA 99352-9913



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Washington State University
100 Sprout Road
Richland, WA 99352

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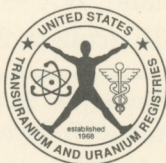
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National Human Radiobiology Tissue Repository (NHRTR)



United States Transuranium and Uranium Registries

*College of Pharmacy
Washington State University*



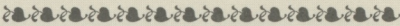
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100 Sprout Road • Richland, WA 99352-1643
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•••••

(open)



The National Human Radiobiology Tissue Repository (NHRTR)

**U. S. Transuranium and
Uranium Registries
Ronald L. Kathren, Director**

Washington State University
100 Sprout Road
Richland, WA 99352-1643
(509)376-6010 (collect, 24-hours a day)

*Operated by Washington State University under
a grant from the U.S. Department of Energy*



What is the NHRTR?

The National Human Radiobiology Tissue Repository (NHRTR) of the United States Transuranium and Uranium Registries (USTUR) is a centralized facility for the storage of tissues, solutions, histopathology slides, tissue blocks, and related materials from persons (primarily workers) with documented intakes of radium, americium, plutonium, uranium, or other radioactive elements. These materials are used by the USTUR to study the dose distribution, organ retention, microdistribution, translocation and other pharmacokinetic properties of actinides and to produce new or refine existing biokinetic models on which radiation protection standards are based. This unique collection of tissues, records, and related materials is available to other researchers studying radiation effects, cancer, and other biological phenomena.

What kind of tissues are being collected?

The NHRTR is comprised primarily of tissues obtained at autopsy from voluntary donors to the USTUR and an existing collection of tissue materials obtained from the radium dial painter study. The Registries receive, preserve, and catalog a portion of each organ and bone from whole body donors as well as tissue and organ samples from routine autopsy donors. Additionally, the Registries receive tissue samples from surgical specimens from Registrants and tissue-related materials, including histopathology slides, from other radiation worker studies. Proffered tissue materials and slides from others with documented internal depositions of radioactivity are also considered for inclusion in the collection.

How are tissue samples stored?

The NHRTR collection includes tissue solutions primarily as acidic solution of ashed tissue from USTUR registrants as well as dried bone samples and formalin-fixed samples of bone and soft tissue from the radium dial painters. In addition, the Registries have a large number of bone and soft tissue samples maintained at -70 °C to preserve their biochemical qualities, making them useful for molecular biology, in situ hybridization, and immunocytochemistry studies.

How are the tissues cataloged?

Information on each tissue sample is catalogued and maintained in a computerized database. In addition, the USTUR Paradox Relational Database System contains information on each Registrant such as: radiation exposure history, work history, bioassay and other dosimetry results,

chemical exposures, smoking history, cause of death, and results of radiochemical analysis of tissue.

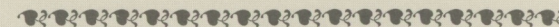
Is information available about the cases?

Exposure and medical histories are available for the majority of the cases from whom tissues or related materials have been obtained. However, the identity of all cases is strictly protected and confidentiality is maintained in accordance with legal and ethical requirements. Data are released without personal identifiers.

How can a scientific investigator obtain tissue samples from the Registries?

The unique materials of the NHRTR are available to reputable investigators for scientific research purposes. Any scientific investigator may request, in writing, tissues or tissue samples from the NHRTR for legitimate research purposes.

Investigators must agree to maintain the privacy of the cases and to follow all ethical human subjects considerations and legal requirements as well as the published policies of the Registries. If available, the Registries will provide the most suitable tissue requested, e.g. frozen, formalin-fixed, or dried. In addition, if the radiochemical results are known at the time of the request, these can be provided as well. The only stipulation is that the Registries be acknowledged as the source of the samples or radiochemical data used in scientific proposals or manuscripts submitted for publication. Scientific collaboration with the Registries' scientific staff is encouraged as appropriate.

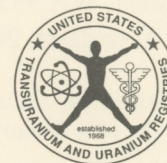




For further information, contact:
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