Embargoed until 11:00 a.m. Eastern time, February 22, 2021

100,000 BABY TEETH READY FOR SCIENTIFIC RESEARCH

Over 100,000 baby teeth collected in the 1960s are now available for scientific research.

Funding from the National Institutes of Health (NIH) to Harvard T.H. Chan School of Public Health in 2020 supported data entry of information on 3 x 5 cards on teeth and teeth donors into a computer file, making it possible to plan research studies.

“This is one of the largest known collections of human samples,” says Joseph Mangano, Executive Director of the Radiation and Public Health Project (RPHP). “There are numerous ways that researchers can use these teeth,” he adds, citing environmental toxins, genetics, analyses of disease, dental research, and anthropology as examples.

The teeth were part of a 1958-1970 study by Washington University in St. Louis, which tested teeth in a lab to measure build-up of radioactivity in bodies from above-ground atomic bomb test fallout. Results helped speed passage of the treaty signed by President John F. Kennedy banning these tests.

In 2001, Washington University officials found teeth not tested in the study in a remote storage area near St. Louis. The school donated the teeth to RPHP, which was conducting a study of in-body radioactivity near nuclear plants. RPHP has recently teamed with Marc Weisskopf, Cecil K. and Philip Drinker Professor of Environmental Epidemiology and Physiology at Harvard Chan School, to begin a study of early-life heavy metal exposures and their link with neurodegeneration. “The collection of teeth that RPHP has is a tremendous resource for health and other research,” said Dr. Weisskopf. “We are now trying to recontact the donors to explore important questions about early life influences on later life health. This is a resource that can allow for addressing such questions in many different fields.”

The data base includes teeth from “Baby Boomers” born 1946 to 1965. About 80% of the teeth were from persons born in the St. Louis area. The remainder includes those born in each of the 50 U.S. states, plus 45 foreign countries.