Project Title: Medical Isotope Production Without Highly Enriched Uranium
PIN: NRSB-O-06-01-A
Major Unit: Division on Earth and Life Studies
Sub Unit: Nuclear and Radiation Studies Board
RSO: Crowley, Kevin

Subject/Focus Area: Project Scope
The National Academies will conduct a study and provide findings and recommendations to the Department of Energy on the production of medical isotopes without highly enriched uranium. As mandated by Congress in Section 630 of the Energy Policy Act of 2005 [See Section 630(A) in Attachment 1], the study will determine the following:

1. The feasibility of procuring supplies of medical isotopes from commercial sources that do not use highly enriched uranium, using the definition of feasibility defined in Section 630 of the Energy Policy Act of 2005. [See Section 603(B) in Attachment 1.]

2. The current and projected demand and availability of medical isotopes in regular current domestic use.

3. The progress that is being made by the Department of Energy and others to eliminate all use of highly enriched uranium in reactor fuel, reactor targets, and medical isotope production facilities.

4. The potential cost differential in medical isotope production in the reactors and target processing facilities if the products were derived from production systems that do not involve fuels and targets with highly enriched uranium.

If the National Academies determines that the procurement of medical isotopes from commercial sources is not feasible as defined in Section 630 of the Energy Policy Act, it should estimate the magnitude of the cost differential and identify additional steps that could be taken by the Department of Energy and medical isotope producers to improve the feasibility of such conversions. In estimating the magnitude of cost differentials, consideration should be given to facilities utilized by both large and small producers. The National Academies should also identify any reliability of supply issues that could arise as a result of such conversions.

This project is sponsored by the U.S. Department of Energy, National Nuclear Security Administration

The start date for the project is 9/25/2006.

A report will be issued at the completion of the project.

Project Duration: 24 months

Provide FEEDBACK on this project.

Contact the Public Access Records Office to make an inquiry or to schedule an appointment to view project materials available to the public.