

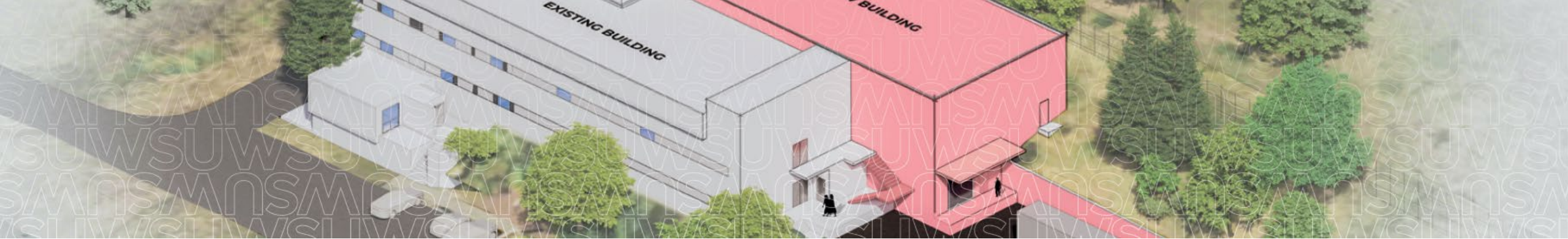


WASHINGTON STATE UNIVERSITY
Nuclear Science Center



WSU Nuclear Science Center Hot Cell Facility

Coming soon! WSU will construct a **new hot cell facility** that will result in immediate enhancements of current reactor operations, radioisotope production capabilities, and catalyze future growth of nuclear science and engineering at WSU. The newly constructed addition will add approximately 5,000 sq. ft. to the northeast section of the Dodgen Research Facility.



The facility will house:

- ▶ Hot cells
- ▶ Wet laboratory space
- ▶ Teaching space and touring area
- ▶ Shipping/receiving area
- ▶ Loading dock

Addition of this hot cell facility will allow for:

- ▶ Production, research, and use of high activity radioisotopes
- ▶ Increased materials research of materials in extreme nuclear environments
- ▶ Development of new fuels, materials, and systems
- ▶ Development of production and utilization processes for nuclear materials and radioisotopes

Construction of hot cells as anticipated will grow:

- ▶ Ongoing national preparedness exercises
- ▶ National security
- ▶ Energy security
- ▶ Nuclear non-proliferation research
- ▶ Federally funded isotope development, production, and use projects
- ▶ Enabling future research projects in nuclear energy, radiochemistry, nuclear science, material science and engineering, and energy security



Mission driven

Operational Excellence

Reactor operations staff ensure reactor is available and operational for short turn around, no-notice experiments for critical mission needs.

Innovative Research & Outreach

Reactor and other nuclear science instrumentation run as a WSU User Facility. Irradiation, production, shipment, and design services are utilized by national laboratories, commercial, and faculty research projects.

Workforce Development

Training next generation of reactor operators & nuclear scientists and engineers.

Livetime: 296.3

Br-82	Br-82	Br-82	Br-82	Br-82	Br-80
554	619	698	777	828	104
keV					

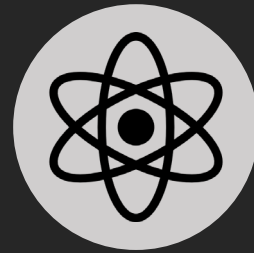
WSU CAPABILITIES SUPPORTING NATIONAL NEEDS

PROJECT AREAS



Emergency Response Exercises

Surrogates for real-world first responder training detector development, modeling, plume validation for collaborators at INL & LBNL to develop capabilities for detection & source mapping.



Workforce Development

Reactor operator classes, nuclear science undergraduate courses, graduate student research support, certificate, and advanced degrees with nuclear science focus.



National Security Capabilities

CTBTO activities, national exercises, short lived isotope production, process chemistry development, energy security, & novel detector research