

House passes early childhood STEM and national lab bills

February 13, 2018

On February 13, the House of Representatives passed five bipartisan bills by voice vote to more equitably allocate National Science Foundation (NSF) research funding towards early childhood studies and to support research facilities and programs at Department of Energy (DOE) national laboratories.

The Building Blocks of STEM Act (H.R.3397), sponsored by Representative Jacky Rosen (D-NV-3) with 31 cosponsors, directs NSF to consider age when awarding grants through the Discovery Research PreK-12 (DRK-12) program so that more research is conducted on early childhood science, technology, engineering, and mathematics (STEM) activities. The bill further directs NSF to award grants to research and programs aimed at increasing the participation of young girls in STEM and computer science activities.

Three bills focused on providing for construction or upgrades to instrumentation at DOE national laboratories, which host approximately 30,000 researchers annually to utilize world-class, open-access facilities including supercomputers, x-ray light sources, photon sources, and neutron sources.

- Representative Randy Weber (R-TX-14) and others sponsored the Nuclear Energy Research Infrastructure Act (H.R.4378) to direct DOE to construct a Versatile Neutron Source (VNS) – a research reactor capable of providing fast neutron irradiation services, which is only currently available in Russia. The legislation authorizes a total of \$1.985 billion over fiscal years 2018 through 2025 for the Office of Nuclear Energy to design and construct the VNS facility, which would enable next-generation nuclear energy research and facilitate private-sector investment and development of advanced reactor technologies in the United States.
- The Accelerating American Leadership in Science Act (H.R.4377) mandates certain upgrades to research equipment and facilities, as called for in a June 2016 report by the Basic Energy Sciences Advisory Committee. The bill includes an upgrade to the Advanced Photon Source at Argonne National Laboratory that would allow the brightest x-ray source in the Western Hemisphere to be 100 times brighter, as well as upgrades to Oak Ridge National Lab's Spallation Neutron Source and construction of a Long-Baseline Neutrino Facility to build the world's highest intensity neutrino beam.
- Representative Steve Knight (R-CA-25) sponsored the Department of Energy Research Infrastructure Act (H.R.4376) to upgrade the Advanced Light Source at Lawrence Berkeley National Laboratory and the Linac Coherent Light Source at the National Accelerator Laboratory at Stanford University, and to complete construction of the Facility for Rare Isotope Beams at Michigan State University by 2022.

Finally, the Low-Dose Radiation Research Act (H.R.4675), introduced by Representative Rob Marshall (R-KS-1), directs the DOE Office of Science to carry out a basic research program following the recommendations of a Government Accountability Office report that suggests DOE should lead interagency collaboration for research on low-dose radiation's health effects.

Sources: E&E News, Library of Congress, U.S. Department of Energy
