FY 2024 INFRASTRUCTURE REPORT SUMMARY - Idaho State University

ISU FY 2024	Total \$	Detailed Allocations
Library Support	\$0	
Graduate Research Assistantships / Research Associates	\$24,656	Support for Graduate and undergraduate students
Post-Doctoral Fellows	\$0	
Technician Support		
Maintenance Contracts	\$13,432	Preventative Maintenance on the purification system in Biolgy. Instrument service for the Milli-Q 7015 Purification System.
Research Equipment	\$122,005	DNA Sequencer: This piece of equipment provides Next-Generation Sequencing data to ISU faculty as well as external reseachers and classrooms. BD FACSMelody Flow Cytometer: newly acquired instrument in the Molecular Research Core Facility. This Instrument is used for sorting blood cells and quantifying types of immune cells in the blood sample. Humidity Boiler was purchased for our Animal facilities used for research. System install costs: install and commission an Elemental Scientific laser ablation system connected to an Agilent mass spectrometer at CAMAS, ISU. The funds for instrument acquisition were provided by a NSF Major Research Instrumentation award (BCS: 2320040; \$744,396). Instrument provides hands-on training for undergraduate and graduate students in advanced chemical analysis of solid samples; enabling them to engage in cutting-edge research on archaeological artifacts, geological mineral identification and dating, and isotopic studies. These types of learning experiences provide our students with valuable technical skills, enhancing both their academic and professional readiness across multiple disciplines including archaeology, environmental sciences, forensics, and geology.
Competitvely Awarded Summer Research Support		
Start-Up Funds for New Hires	\$0	
Incentives to Reward Faculty for Research Achievements	\$0	
Other	\$89,907	The funding was used to improve research infrastructure for a unique facility (former Armory Building) on the campus that was in need of partial roof replacement. Reactor Security Upgrades: 2 video surveillance cameras installed and existing magnetic locks were replaced with electronic strike locks. Repair on the Horiba Pump.
Total Allocation	\$250,000	

ISU FY 2024	
Publications in Refereed Journals	
Presenations at Professional Meetings and Conferences	
Grants Received as a Result	The data from the Illumnia MiSeq was part of a collaborative multi-year, NSF EpSCPR project.
Grants Pending	
Student Participation	The DNA sequencer provides data from this instrument impacts many ISU research endeavors with grant funded projects and graduate and undergraduate studies. Our graduate students are also using the Flow Cytometer in there research activities.
Faculty Participation	DNA sequencer provide data for ISU faculty as well as external researchers. FLOW Cytomter: Our faculty in Biological Sciences and Anthropology are both utilizing this instrument in their current research programs with the potential to bring in more users and collaborations in the future.
Other Participation	The data from the sequencer was used in a Microbiome summer course taght by the Nevada Genomics Center, University of Nevada Reno.
Patents Awarded	
Patents Pending	