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Developing Broader Impacts Activities through Informal STEM Education Collaborations and Strategies
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With the National Science Foundation and other funding agencies' renewed emphasis on broader impacts merit criterion in proposals, investigators and directors of education, outreach and engagement are challenged to identify, plan and implement innovative and transformative activities that engage a variety of audiences in the broader impacts of scientific research. These activities are also often required to have an evaluation plan for assessing the effectiveness of the strategies employed to achieve learning goals or other intended impacts. One approach to developing such plans is to partner with an informal science education institution, program, project or individual to create exhibits, media or programming that will convey the scientific concepts and processes involved in research and engage students and public audiences in appreciation for, and understanding of same. A growing body of evidence-based knowledge about what works for whom and under what conditions in fostering science learning and literacy in informal settings, as well as an expanding network of informal science, technology, engineering and math (STEM) education professionals provide researchers, graduate students and staff resources to tap into as they consider their broader impacts directions. Web infrastructure like the informalscience.org website and others offer aggregated, vetted, and searchable examples of successful partnerships and strategies, as well as access to a community of colleagues working at the nexus of scientific research and informal education for further exploration. Through heightened awareness, stronger connectivity and a growing repository of knowledge, projects like the Center for Advancement of Informal Science Education (CAISE) hope to support and disseminate the results of efforts that are enhancing the quality and visibility of broader impacts activities in whatever form they take.