Grant Title: STEM-C PARTNERSHIPS: MSP (STEM-CP: MSP)

Funding Opportunity Number: NSF 14-522

Agency/Department: National Science Foundation

Area of Research: Science, Technology, Engineering and Mathematics, including Computing.

Release and Expiration: N/A

Application Deadline: Full Proposal Deadline Date: March 18, 2014.

Amount: Prototype project is $1,500,000 (average annual budgets of $500,000) with a duration of up to 3 years. The maximum total budget for a Targeted Partnership that is an Implementation project is $7,500,000 (average annual budgets of $1,500,000) with a duration of up to 5 years.

Length of Support: 3-5 years

Eligible Applicants: Academic Institutions

Summary: The STEM-C (Science, Technology, Engineering and Mathematics, including Computing) Partnerships program is a major research and development effort of two NSF Directorates, the Directorate for Education and Human Resources and the Directorate for Computer and Information Science and Engineering. STEM-C Partnerships combines and advances the efforts of both the former Math and Science Partnership (MSP) and the former Computing Education for the 21st Century (CE21) programs. The STEM-C Partnerships program addresses both the need for advances in K-12 STEM education generally, as well as the need to elevate the inclusion of computer science education. From MSP, STEM-C Partnerships embraces any of the STEM disciplines --within the natural science, mathematics, engineering, or computer science -- and maintains its commitment to institutional partnerships and opportunities for funding of Targeted proposals in one of four focal areas: Community Enterprise for STEM Teaching and Learning, Current Issues Related to STEM Content, Identifying and Cultivating Exceptional Talent, and K-12 STEM Teacher Preparation. From CE21, STEM-C Partnerships adds a discipline-specific focal area on the teaching and learning of computing and computational thinking, a strong commitment to broadening participation in computing, an emphasis on in-service teacher professional development, and support for the implementation of computer science courses at the high school level. It is expected that the merging of the MSP and CE21 programs will strengthen both and serve as a model for future incorporation of discipline-specific concerns into programs focused more broadly on STEM. The STEM-C Partnerships program supports Partnerships that promote effective K-12 STEM education, building knowledge of teaching and learning in ways that deepen understanding and stimulate further exploration of STEM education in both in- and out-of-school settings. The Partnerships' cross-disciplinary teams call upon the expertise and research perspectives of learning scientists, including cognitive scientists, educational, developmental and social psychologists, social scientists and education researchers, as well as STEM, discipline-specific teachers, faculty, researchers, and scientists. The needs of a particular Partnership related to advancing the teaching and learning of any of the STEM disciplines at the K-12 level should drive the focus of the Partnership's work. The program requires institutional commitment to evidence-based teaching and learning which improves the achievement of all students studying STEM, with particular attention to educational practices that are effective for groups underrepresented in STEM-women, minorities, and students with disabilities. Through this solicitation, NSF seeks to support both STEM-C Partnerships Target awards and STEM-C Partnerships Computer Science Education Expansion awards. The Target Partnerships are supported at two funding levels (Implementation and Prototype) and are open to innovative Partnerships composed minimally of at least two Core Partners, a K-12 School District and an institution that brings disciplinary expertise in the natural sciences, mathematics, engineering and/or computer science and is actively engaged in the production of STEM teachers.