



NIH Seeks SBIR Applications for “Serious STEM Games for Pre-College and Informal Science Education Audiences”

September 8, 2014

The National Institutes of Health (NIH) recognizes that serious games function as a bridge technology that converts gaming from a social pastime to a powerful educational tool that challenges students with game-based problem solving, conceptual reasoning, and goal-oriented decisions. The agency further highlights that well-designed educational games imitate successful teacher pedagogy and exploit student interest in gaming. Such games integrate imbedded learning and provide real time student assessment.

Accordingly, the NIH has released a funding opportunity announcement (FOA), *Serious STEM Games for Pre-College and Informal Science Education* ([PAR-14-325](#)), to provide opportunities for eligible small business concerns (SBCs) to submit Small Business Innovation Research (SBIR) grant applications to develop serious games. The games should focus on biology that addresses health and medicine questions for pre-kindergarten to grade 12 (P-12) students and pre- and in-service teachers or Informal Science Education (ISE) audiences.

The FOA defines “serious games” as the use of “gaming technology to train, educate, and encourage behavioral changes in a virtual world format where progressive learning, feedback on success and user control are combined into an interactive and engaging experience.” Its objective is to make SBIR funding available to P-12 and ISE educators so that they can translate their classroom or science museum STEM curricula into serious STEM games. The science education research objective of the FOA is the development of new STEM gaming resources that will advance the understanding of how STEM-based gaming can improve student learning.

Recognizing the importance for the American public to understand that their quality of health is defined by lifestyle habits, the FOA also encourages the development of STEM games that will stimulate behavioral changes towards a healthier lifestyle. The announcement also aligns with the five-year Federal CoSTEM Strategic Plan in the priority [areas](#) of “game for learning” and “citizen science activities that advance both science and learning.”

Applications are due November 12, 2014.