GERP Awardees

2014 - Dr. Rivka Glaser & Dr. Erin Zimmer

Drs. Rivka Glaser (Stevenson University) and Erin Zimmer (Lewis University) were awarded $10,000 in 2014 for their project, Living in a Genomic World: Tools to Evaluate Students' Understanding of Genetic Data and Complex Traits, which proposes to develop a case-study activity that explores genetic variation in complex traits, to identify gaps in current genetics concept inventories apropos complex traits, and to develop assessment tools to repair those gaps. Research on the genetics of complex traits is advancing rapidly, but the relevant concepts are underrepresented in both college and high school genetics curricula. As a result, research is needed to understand more about the teaching and learning of complex trait genetics. This project should help repair our current knowledge deficit.

2013 - Dr. Dina Newman & Dr. Kate Wright

Drs. Dina Newman and Kate Wright, Rochester Institute of Technology, were awarded $10,000 for their proposal Development and Evaluation of an Assessment Tool for Central Dogma Conceptual Understanding, which received enthusiastic support from ASHG’s Information and Education Committee.

Their project—to develop a concept inventory to assess undergraduate students' understanding of the central dogma of molecular genetics—was selected from a strong pool of interesting and worthy proposals and will advance our understanding of genetics teaching and learning. The development of reliable, validated assessments to evaluate student understanding is essential for the advancement of scientific teaching because they facilitate rigorous comparisons of curriculum and pedagogy. ASHG hopes that by supporting such comparisons, the life sciences will follow in the footsteps of the physics and astronomy communities, which have ushered in a wave of improvements in undergraduate instruction.
2012 - Dr. Steven Farber

Dr. Steven Farber and colleagues at the Carnegie Institution for Science were awarded $10,000 for their proposal to evaluate the implementation of their outreach program, BioEYES, through ASHG's 2012 Genetics Education Research Program.

Specifically, they will conduct a thorough evaluation of the impact of model teachers on the implementation of BioEYES—his team's successful genetics and embryology outreach program, which has been used to educate more than 55,000 middle and high school students nationwide. A particular strength of their plan is to work with evaluation specialists at the Johns Hopkins School of Education to understand the experience of model BioEYES teachers in Philadelphia and Baltimore after they no longer have the intensive support of BioEYES outreach coordinators. Their results will enable them to implement best practices as BioEYES continues to expand nationally. By publishing their results, their findings regarding the relationship between teacher preparedness and student learning may help improve other teacher training programs and, ultimately, improve genetics instruction.

2011 - Dr. Maurice Godfrey

Dr. Maurice Godfrey (University of Nebraska) was awarded $10,000 for his proposal “Luck of the Draw—An Ethics Values Game”, through ASHG’s 2011 Genetics Education Research Program.

Dr. Godfrey will use the award to adapt into electronic form a very successful, print-based educational game that teaches about genetics, medicine, and ethics. The print program has been used from middle school through medical school, but because the current format is labor intensive to implement, it has not been widely disseminated. The electronic version will be highly adaptable for different audiences and will be easily disseminated to a broad audience. The project will be evaluated formatively and summatively for usability, satisfaction, quality of discussions, and student knowledge gain, including critical thinking about genetics and ethics.
2010 - Dr. Bethany Bowling

In 2010, Dr. Bethany Bowling, Northern Kentucky University, was awarded the first grant from the American Society of Human Genetics under its new Genetics Education Research Program.

Dr. Bowling received her award, $10,000 over two years, to test the effectiveness of a specific educational intervention, called conceptual change texts, in helping undergraduate students counter or avoid common misconceptions about genetics. ASHG has published research on misconceptions in genetics, and Dr. Bowling’s research will complement the Society's ongoing efforts to modernize the genetics curriculum. Her research will focus on large-enrollment undergraduate classes for non-science majors and thus may eventually have a broad impact on improving genetics education instruction.