Informal Physics Education: Outreach from a National Laboratory

JOSE SANCHEZ, PATRICIA DIXON, ROXANNE HUGHES, National High Magnetic Field Laboratory — This presentation highlights strategies for K-20 teaching and learning about materials research in informal settings. The National High Magnetic Field Laboratory’s Center for Integrating Research & Learning is in a unique position to conduct programs that reach K-20 students and teachers. As part of a national laboratory the Center provides the infrastructure around which informal education programs are implemented, including the nationally-recognized programming as well as facilitating scientists’ educational outreach in the community. Research Experiences for Undergraduates, focuses on encouraging women and other underrepresented groups to pursue STEM careers reaching approximately 200 students many of whom have pursued careers in research as well as academia. The Research Experiences for Teachers program has provided internships for over 150 teachers; the Center also reaches over 10,000 students each year through school and community outreach. Success of informal education programs relies heavily on establishing strong mentoring relationships between scientists and K-20 students and teachers. The Center’s success at maintaining diverse programming that transforms how materials education is presented beyond the traditional classroom is the focus for this presentation.

Patricia Dixon
National High Magnetic Field Laboratory

Date submitted: 04 Oct 2011