



GK-12 REGIONAL CONFERENCE

**University of Notre Dame
Notre Dame, IN**

Notre Dame extended Research Community (NDeRC)

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The Notre Dame extended Research Community (NDeRC) is a continuation and expansion of a decade-long effort to transform the local STEM community and culture. We invite both university and K-12 colleagues to form a single community with a common culture.

To promote a single community and a common culture we host and organize a variety of events and opportunities. The events and opportunities foster participation, mutual enculturation and collaboration. Last December we hosted a forum, "Partnering for Education and Research", that provided an opportunity for GK-12 Graduate Fellows, university faculty and K-12 faculty to discuss how they might collaborate in the future. This past summer we hosted several institutes aimed at providing local teachers with an opportunity to learn more about modern science concepts and laboratory techniques. We currently are hosting a series of seminars, "Introduction to Pedagogy", for Fellows, K-12 faculty and university faculty.

The cornerstone of our project is summer research. During the summer Fellows, university faculty, K-12 faculty and high school students collaborate on research projects that range from cellular biology to particle physics. Typically the Fellows and the K-12 faculty continue their collaborative efforts in the classroom during the academic year.

Last year several of the Fellows and local K-12 faculty piloted the BioEYES activity in several local schools. This week-long activity was developed at Thomas Jefferson University in Philadelphia as an educational outreach of its zebrafish research facility. This year we will visit 80 classrooms (2200 students), and our current trajectory suggest that we will visit 150 classrooms (4000 students) next year. Our Fellows have also developed activities in scanning probe microscopy and astronomy. One of the Fellows and a K-12 faculty member also started a robotics club.

In all we do we try to model for the GK-12 Graduate Fellows and other members of our community effective approaches to fostering an enduring STEM community and a vibrant STEM culture. We believe that enduring communities and vibrant cultures are mutually enriching.

