

# LOGISTICS.

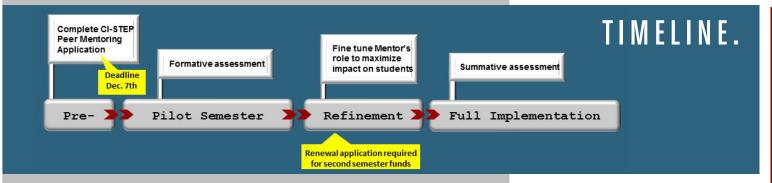
- 1. Complete "Application for Peer Mentoring". Available at http://step.iupui.edu or by contacting CI-STEP directly at step@iupui.edu. The application requires:
  - a. course demographics, DFW rates, current class format (i.e. lecture, lab, recitations etc.)
  - b. identification of Peer Mentor(s)
  - c. format requested for Peer Mentor (i.e. cyber, recitation or other).
- 2. Meet with CI-STEP personnel to finalize format and assessment plan
- 3. At semester's end, work with CI-STEP assessment team to evaluate Peer Mentor impact on student performance and DFW rates. If deemed valuable, request renewal of funds for additional semester.

# CI-STEP.

The Central Indiana STEM Talent Expansion Program at Indiana University-Purdue University Indianapolis (IUPUI) is creating a central Indiana pipeline to increase the number of students from the greater Indianapolis region (central Indiana) obtaining STEM degrees. The goals of this project are to increase the numbers of students of all demographic groups who:

- Pursue STEM academic and career pathways:
- Participate in STEM research, industry internships, and honors activities;
- Graduate with an undergraduate degree in STEM fields; and
- Transition into industry, graduate and professional programs.

The program has set a target of increasing the number of STEM graduates at IUPUI by 10% per year (an increase of an additional 782 STEM graduates by 2015).



#### A Story of Success.

IUPUI has long realized the benefit of undergraduate peer mentoring on success of students in Gateway Courses (typically large enrollment introductory courses for majors or non-majors). Peer mentoring is generously supported in 5 such courses each semester in the department of Biology, reaching over 2,500 students each fall and spring semester. However, no corresponding peer mentoring exists many of the upper level courses. In 2011, CI-STEP funded a peer mentor for Genetics K322. Enrollment of this course has steadily increased over the last 5 years, with enrollments exceeding 130 students in a single lecture section now common for the fall semester and just over 100 in the spring. This past fall 2011 and spring 2012, a peer leader was hired to provide extra time and problem solving assistance to all genetics students, with up to 10 hours per week of time available for drop-in-mentoring hours.

### Major findings include:

During the fall semester, at least 48 students (36%) attended one or more mentoring sessions, similar to the attendance in the spring. There was a modest decrease in the DFW rate in Genetics in both the fall and spring (from an average rate of 16% in the previous 5 years before the introduction of mentoring to about 14% in the past two semesters with mentoring). It is difficult to say whether this modest benefit was a result of the peer mentoring, but due to the difficulty of the genetics course, student evaluations and focus group comments were overwhelmingly positive of the benefits of the extra support. The two faculty members teaching the course were also highly positive and have requested that the mentoring continue, both stating that they will promote the benefits of attending the peer mentored sessions to the Genetics students this coming fall and spring.

## FUNDING.

CI-STEP has allocated funds specifically for adding **Peer Mentors** to STEM courses across the School of Science and School of Engineering and Technology. Taking advantage of this opportunity is easy, see panel to the left for details.

There are also other funding opportunities, for example, the Curriculum Enhancement Grant (CEG) program at the Center for Teaching and Learning. This program is open to IUPUI and IUPUC faculty, regardless of school affiliation. Visit the CTL webpage for more details. http://ctl.iupui.edu

"The presence of a Peer Mentor has improved my students' comprehension dramatically"

## BENEFITS.

#### For Students.

Having additional instructional opportunity in any course has proven helpful for students. Peer mentors can present material in different ways, meet students on a more one-on-one basis and serve as a point person for material questions.

There is also a benefit to the Peer Mentors themselves. By teaching the content, it serves to reinforce the material and increase their communication and teaching skills.

"My understanding of the material is much deeper and stronger because of our Peer Mentor"

#### For Professors.

Having a Peer Mentor benefits the professor by providing student support, can serve as a reviewer of course material and can help assess student performance. The addition of a Peer Mentor has proven to reduce DFW rates in many courses which ultimately benefits the professor, the student and the University as a whole.