PCMI 2015 Workshop for Mentors of Undergraduate Students

Part I: Recruiting and mentoring undergraduate students

Part II: Proposal writing and funding opportunities

Monday, July 6

9:40-10:40  Introductions. Participants describe what they would like to gain from the workshop and describe the climate in their department for supporting mathematics majors.

11:00-12:00  Recruiting first-year students into the major. Why should a first-year student declare mathematics as a major? Review of letter of invitation. Discussion as to what a welcoming letter should look like.

1:00-2:00  What does the undergraduate mathematics major program of study look like? What is it preparing students to do? Is the mathematics major preparing students for the past or for the future?

2:00-3:00  Students of mathematics often run into difficulty. Mentoring students in trouble presents challenges. How can faculty help these students? Participants begin the COURSERA course: Learning How to Learn (https://www.coursera.org/learn/learning-how-to-learn/home/info)

Tuesday, July 7

9:40-10:40  a) Participants will present drafts of their letters of invitation.

b) Students add the mathematics major later on in their course of study. Review of letter of invitation for students beyond their first year. Obstacles that departments and universities impose.

11:00-12:00  Important transition points. Developing intervention projects to help in these transitions.

a) Entering first-year students

b) Community College transfer students

c) Transitioning into abstract mathematics

d) Advising students for post-graduation

1:00-2:00  Group Discussion: Mentoring ideas (bringing students into the pipeline and keeping them there)

2:00-3:00  Recruiting minority students into the major. Using resources to create interventions projects. MAA Tensor Summa grants (http://www.maa.org/programs/maa-grants/tensor-summ-grants)
**Wednesday, July 8**

9:40-10:40 Help Hints and Fatal Flaws for Proposal Writing

11:00-12:00 Funding Opportunities for Learning and Teaching in the Mathematical Sciences

Afternoon activity and group dinner

**Thursday, July 9**

9:40-10:40 a) Participants will present drafts of their letters of invitation for students beyond their first year.

Participants should have finished lesson 1 of the COURSERA course. Discussion will continue into the afternoon. Are there any other on-line courses/materials that would be helpful to students? What impact does this course have on our teaching of mathematics?

11:00-12:00 REUs: Technical Issues and Funding sources

1:00-2:00 Stereotype Threats

2:00-3:00 Unconscious and Implicit Bias

3:15-4:15 (Tentative) Panel Session: Interaction with other PCMI attendees on mentoring ideas

**Friday, July 10**

9:40-10:40 Managing an REU

11:00-12:00 Designing and Running an REU for Students from Underrepresented Groups

1:00-2:00 Participants discuss (present) Project Ideas

2:00-3:00 Discussion on how to improve the workshop