PRIMES

MIT PROGRAM FOR RESEARCH IN MATHEMATICS, ENGINEERING, AND SCIENCE FOR HIGH SCHOOL STUDENTS (WEB.MIT.EDU/PRIMES)

CUMULATIVE REPORT

MIT PRIMES students at the Third Annual PRIMES conference at MIT, May 2013

MIT PRIMES is a free, year-long after-school research program for high school students, offering projects in mathematics, computer science, and computational biology. This is the only program in the United States that gives students an opportunity to pursue serious research in a university setting at a natural pace, over the period of one year, under the guidance of academic mentors.

- In 2011-2017, 226 research projects completed by PRIMES students;
- All projects presented at seven annual PRIMES conferences;
- 44 students invited to present at the MAA Undergraduate Student Poster Session of the Joint Mathematics Meetings in 2012-2015, and 11 received an Outstanding Presentation award;
- 1st, two 3rd, and one 4th Awards at the Intel International Science and Engineering Fair;
- 1st Prize ($100K scholarship), four 2nd Prizes ($50K), two 4th Prizes ($30K), two 5th Prizes ($20K), two national finalists ($25K), 28 regional finalists, and 57 semifinalists in the Siemens Competition in Math, Science & Technology;
- 1st Place ($150K), three 2nd Places ($75K/$175K), two 3rd Places ($35K/$50K), 4th Place ($40K), 6th Place ($80K), 10th Place ($20K), 13 national finalists, and 29 national semifinalists/scholars in Intel/Regeneron Science Talent Search;
- Four Davidson Fellow Laureates ($50K) and five Davidson fellows ($25K & $10K).
Currently 56 local PRIMES students are working on individual and group research projects and studying in reading groups in mathematics, computer science, and physical and computational biology. PRIMES-USA, a distance-mentoring research section for out-of-state students, has expanded to 21 students. We have established partnerships with CUNY – City College, Penn State, Tufts University, the University of Illinois at Chicago, UMass Amherst, and MathWorks, which provide projects for several PRIMES students. PRIMES Circle, a math enrichment section for students with disadvantaged backgrounds from local high schools, has 15 students (87% female; 13% African-American; 13% Hispanic). The total number of students has reached 90, including 21 girls.

PRIMES Circle student making an expository presentation at MIT, December 2013

SPONSORS

PRIMES acknowledges generous support from MIT Mathematics Department, MIT EECS Department, National Science Foundation, Quanta Computer, MathWorks, EHA Foundation, Webster Foundation, Hamilton Foundation, Rosenbaum Foundation, and individual sponsors. PRIMES is currently seeking funding for the 2019 cycle from sources both within and outside MIT. Please contact PRIMES Program Director Dr. Slava Gerovitch at <primes@math.mit.edu>.

PROGRAM COORDINATORS

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