SUPER-M: School and University Partnership for Educational Renewal in Mathematics

2009 Graduate Student Application for NSF Graduate Teaching Fellows in K–12 Education (GK–12)

The SUPER-M program:
SUPER-M proposes to integrate and disseminate the research of mathematics graduate students in K–12 schools with the goal of improving mathematics education at all levels. Fellows will bring their knowledge of the process of mathematics as a research discipline into the classroom and will provide activities and demonstrations based on modern research, at a level appropriate to the teachers and students in the program. We expect to reach K–12 teachers and students on Oahu, the Big Island and on Maui.

SUPER-M Fellows will be selected on the basis of a competitive application process. Each Fellow will receive a stipend of $30,000 supplemented by a cost-of-education allowance for tuition, health insurance and fees not to exceed $10,500. Initial appointment will be for a twelve month period, but the stipend and benefits are renewable for a second twelve month period. The stipends and benefits are available pending funding approval from the National Science Foundation.

SUPER-M is best suited for Ph.D. students, but highly qualified M.A. students are encouraged to apply.

Each year one Fellow will work in the field of cluster technology. The primary classroom activity for this Fellow will be the creation of a computational cluster using the Bootable Cluster CD. Desirable qualifications for this position include experience in high performance computing, knowledge of parallel computing fundamentals, and familiarity with computer operating systems. If you are interested in the area of high performance computing, please indicate this in your application.

Eligibility:
• SUPER-M Fellows must be full-time graduate students in the Department of Mathematics at UH Manoa. While students may apply to the graduate program of the Department of Mathematics and to the SUPER-M program concurrently, acceptance into the graduate program must be granted before a SUPER-M Fellowship can be offered.

• SUPER-M Fellows must be citizens, nationals or permanent residents of the United States.
Expectations: As part of their duties, SUPER-M Fellows will:

- Participate in a two-day workshop before the start of the fall semester.
- Complete the semester course “Issues in K–12 Mathematics Education”.
- Design workshops for teachers based on ideas from the Fellows’ research.
- Spend ten hours per week in the K–12 classrooms and five hours per week in on-campus activities dedicated to K–12 education during the academic year.
- Design and run holiday camp programs at the University of Hawaii to teach K–12 students about Science, Technology, Engineering, and Mathematics (STEM).
- Work with local institutions organizing special events to raise awareness in the population at large about issues in mathematics education and the modern need for proficiency in mathematics.

Application: An application to the SUPER-M Program includes:

- The application cover sheet.
- A statement of interest in the SUPER-M program. In the statement, describe the expected impact of the program on your long-term career goals and mention any prior teaching or other relevant experience working with children or young adults.
- A letter of recommendation. The letter should address your ability to participate as a SUPER-M Fellow.

We will begin reviewing applications on March 1st and expect to interview select applicants shortly thereafter.

Send your application to:
Michelle Manes
2565 McCarthy Mall
Department of Mathematics
University of Hawaii at Manoa
Honolulu, Hawaii 96822

Contact information:
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http://math.hawaii.edu/SUPERM