

Preface

In 1999 the AMS received a grant from the National Security Agency to sponsor a three day conference on Summer Undergraduate Mathematics Research Programs for the purpose of bringing together mathematicians from across the country who were involved in summer mathematics research programs for undergraduates to exchange ideas, discuss issues of common concern, establish contacts, and gather information that would be of value to others interested in establishing similar programs. By 2006 the numbers of NSF REU programs had doubled, the NSA had greatly increased its support for summer research programs, the MAA had initiated a national REU for underrepresented students and began a minigrant program to support conferences for undergraduates to showcase their research, more students wanted to participate in the poster sessions at the joint meetings than could be accommodated, Ph. D. granting institutions with VIGRE grants were integrating undergraduates into research groups with graduate students and faculty, and many of the most talented undergraduate mathematics students felt that they needed to have an REU experience to be admitted to the top graduate programs. With this great increase in interest in promoting research by undergraduates it seemed to me to be time for another conference for the same purpose as the 1999 conference. A conversation with Jim Schatz, a phone call to Barbara Deuink, and an email to John Ewing eventually led to a grant proposal to the NSA and a three day conference in late September 2006 at the Westin O'Hare Hotel in Rosemont, Illinois.

The 2006 conference featured plenary talks, panel discussions, and small group sessions. The topics included summer research programs, academic year research opportunities, diversity issues, assessment methods, and perspectives from alumni of research programs. In this volume we compile articles written by many of the participants as well as articles I solicited from people who did not attend but had something valuable to contribute. Also included are the surveys about the activities of program participants and a summary of a survey of students who had participated in an REU between 1997 and 2001.

The people responsible for planning and conducting the conference were Frank Connolly, Barbara Deuink, John Ewing, Joseph Gallian, Aparna Higgins, Ellen Maycock and Ivelisse Rubio. We are grateful to the National Security Agency for providing the funding.

I wish to thank the AMS staff for their excellent work in producing the volume and to Phil Matchett Wood for taking notes throughout the conference. The proceedings of the 1999 conference are available at <http://www.ams.org/employment/REUproceedings.pdf>.

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