AWM Awards Given in Boston

The Association for Women in Mathematics (AWM) presented three awards at the Joint Mathematics Meetings in Boston, Massachusetts, in January 2012.

Shafer Prize

The Alice T. Schafer Prize for Excellence in Mathematics by an Undergraduate Woman was established in 1990. The prize is named in honor of Alice T. Schafer, one of the founders of AWM and one of its past presidents. Schafer passed away in September of 2009.

The 2012 Schafer Prize was awarded to FAN WEI of the Massachusetts Institute of Technology. She is a senior at MIT who has distinguished herself both by her outstanding coursework and by the excellence and unusually broad range of her research. She has authored or coauthored five upcoming papers in fields as diverse as number theory, combinatorics, statistics, and tropical geometry. She has participated in multiple undergraduate research projects at MIT and in two summer REU programs. Of the latter, the first was at Williams College (summer of 2010), where she cowrote a paper investigating the properties of Rikuna polynomials. The second one was at the University of Minnesota–Twin Cities (summer of 2011), where she produced two papers: one on a connection between the evacuation of Young tableaux and chip-firing and the second on tropical properties for general chain graphs. The latter paper is single authored.

She has already presented her results at two conferences: Young Mathematician's Conference, Ohio State University (2010), and Permutation Patterns, Dartmouth College (2010). Her work is being described as "elegant," "intricate," "very creative," "quite surprising," and "having stirred up a lot of interest [in the area]." According to her mentors, she is expected to have a very successful career as a research mathematician because "she learns very quickly" and has "an excellent instinct for seeing what needs to be done and then doing it." In addition to her varied research projects, her coursework at MIT is absolutely outstanding: she has earned the top grade in twenty-one advanced mathematics courses, five of which were at the graduate level. Her MIT instructors describe her as "incredibly bright," "truly outstanding," "one of the best students I have ever had in the course," and "destined to excel." Aside from her research and coursework, Wei was part of a Meritorious Winner Team for the Mathematical Contest in Modeling (2010); she is a mentor for the Girl's Angle Math Club in Cambridge; and she has served on the board of MIT's Society of Women Engineers.

Louise Hay Award

Established in 1991, the Louise Hay Award for Contributions to Mathematics Education recognizes outstanding achievements in any area of mathematics education. Louise Hay was widely recognized for her contributions to mathematical logic and her devotion to students.

The 2012 award was presented to BONNIE GOLD of Monmouth University for her long career of dedicated service to mathematics and mathematics education. Trained in mathematical logic (Ph.D., Cornell University, 1976), she found her true calling not only in teaching university-level mathematics but also in writing about and working for mathematics and mathematics education in the areas of assessment and philosophy of mathematics, in developing and directing New Jersey's Project NExT (New Experiences in Teaching), and in serving as the founding chair of the Special Interest Group of the Mathematical Association of America (MAA) on the Philosophy of Mathematics (POMSIGMAA). She has won local and MAA section teaching awards, has served as chair of two very different mathematics departments, and has developed a huge variety of courses, ranging from calculus for the biological sciences to Platonic dialogues as drama. Her publication contributions are similarly wide ranging: from coediting the books *Assessment Practices in*

Undergraduate Mathematics and *Proof and Other Dilemmas: Mathematics and Philosophy* to contributing articles to a variety of MAA publications to writing insightful reviews of numerous books on mathematical philosophy.

Gold has given generously and extensively of her time to professional service. In addition to Project NExT and POMSIGMAA, she has served on and chaired MAA committees ranging from the Committee on Assessment to the Coordinating Council for Education and the Committee on the Teaching of Undergraduate Mathematics. Roger Simon writes eloquently of the "very high standards of quality and thoroughness" that she brings to all that she does. He notes that she has been an outstanding teacher of mathematics, a department chair of two very different departments, a "sustained contributor of service" to the profession, and a "leader in developing departmental assessment techniques," noting that "Louise Hay's career had the same kind of highlights." He goes on to note that her professional work with POMSIGMAA has resulted in "sustained, effective efforts to rekindle mathematicians' interests in the philosophy of mathematics." She has done all this with two major motivations: one is "to get many more mathematicians to think about philosophical issues"; the other "is that she believes that our understanding of what mathematics is affects the way we teach or should teach."

M. Gweneth Humphreys Award for Mentorship of Undergraduate Women in Mathematics

This award is named for M. Gweneth Humphreys (1911–2006). Humphreys graduated with honors in mathematics from the University of British Columbia in 1932, earning the prestigious Governor General's Gold Medal at graduation. After receiving her master's degree from Smith College in 1933, Humphreys earned her Ph.D. at age twenty-three from the University of Chicago in 1935. She taught mathematics to women for her entire career. This award, funded by contributions from her former students and colleagues at Randolph-Macon Woman's College, recognizes her commitment to and her profound influence on undergraduate students of mathematics.

The 2012 award was presented to DEANNA HAUNSPERGER of Carleton College. Her nomination letters describe the amazing community of women in mathematics that she has created and nurtured for many years. She is a dedicated mentor, going out of her way to help young women make connections in the mathematical world. Together with Stephen Kennedy, she conceived of the Summer Mathematics Program (SMP) to mentor talented women early in their undergraduate studies. They have directed it nearly every summer since 1995, with Haunsperger playing the primary role in mentoring the participants. This program is different from other mathematics programs for women because it is intended for mathematically talented students in their first or second year of college who are uncertain about their future mathematical trajectories. Many are from small colleges from which few students go on to earn a Ph.D. in mathematics. The program gives these students a community of women who are serious about mathematics, and in the end many pursue graduate studies in mathematics.

Haunsperger has brought her energy and leadership to other projects as well. Colleagues at Carleton credit her with helping to build and sustain the strong community of mathematics majors there (the number of majors has doubled in the seventeen years since her arrival). She served as coeditor of *Math Horizons* and as second vice president of the MAA and chaired a key strategic planning group on MAA activities for students. More than fifty SMP graduates already have Ph.D.'s, and fifty more are currently in mathematics graduate programs. Her enthusiasm and dedication make the program and community the great success that they are.

— Elaine Kehoe