This talk will describe two initiatives to support women in STEM, at the faculty and undergraduate levels.

First, West Virginia University recently received an NSF ADVANCE award through which they aim to support the success of female faculty members across campus through various programs. One program, now in its second year, involves junior female faculty members working with external mentors on clearly identified projects with specific outcomes. Some preliminary data and results from the mentoring program will be described.

Second, the talk will describe one project funded through this program which aims to increase interest among female undergraduate students in STEM through curricular and pedagogical changes implemented in a Calculus I class. The talk will describe an attempt to expose undergraduate students in mathematics courses to the ways in which mathematics is utilized in society, with the belief that increasing their understanding of the sociological and communal value of mathematics has the potential to result in increased interest and persistence in mathematics. (Received September 12, 2012)