1106-A1-2686   **Alice E Petillo*** (`alice.petillo@marymount.edu`), Marymount University, Mathematics, 2807 N Glebe Road, Arlington, VA 22207. *Mathematics, fractals & fashion design: A student-created fractal sculpture.*

Serendipity: faculty members from fashion design and mathematics have lunch together during the first week of classes. Unexpected: a non-fashion-minded mathematics faculty member recognizes the name of Jhane Barnes as the Designer of the Year for the university's upcoming annual Portfolio in Motion show. Interdisciplinary Learning Opportunity: Students build a Sierpinski tetrahedron sculpture to feature fractals, a key element of Jhane Barnes textile designs. A mathematical art gallery, curated in collaboration with the Fine Arts Department, highlights further connections between mathematics and art.

After learning about surface area and volume in an Applied Geometry class, students constructed the initial stages of the Sierpinski tetrahedron. Students calculated the sum of the edge lengths, surface area and volume at different iterations. These constructed tetrahedrons were then combined to form single fractal tetrahedron which was over 4 feet tall. The fractal sculpture generated a lot of interest from the student body as well as visitors to the university. The presenter will share qualitative data on the impact of the the event, suggestions for building relationships across campus, and the actual process of putting such a sculpture together. (Received September 16, 2014)