Matthew Ando, Jennifer McNeilly and Jeremy T. Tyson*, 1409 West Green Street, Urbana, IL 61801. Mathways: building a pipeline to undergraduate research in the Illinois Geometry Lab. Preliminary report.

I will report on an NSF-funded initiative aimed at increasing the participation of underrepresented students in undergraduate mathematics research. The Mathways project builds a bridge between two successful programs in the Illinois Mathematics Department: the Merit Program for Emerging Scholars and the Illinois Geometry Lab (IGL). Targeted recruitment of Merit students and expanded research capacity within the IGL combine to increase both demand for and supply of undergraduate research opportunities. At the same time, Mathways creates new opportunities for postdocs to contribute to the IGL's mission of fostering a culture of undergraduate research. Merit students involved in IGL programs also participate in the lab's numerous outreach activities, particularly, in the Summer Illinois Math camp, an IGL-sponsored and Mathways-funded summer camp for middle and high school students. The outcome of this initiative has been greater engagement and interest in undergraduate research, as well as outreach activity at all levels from pre-college to postdoctoral researcher. (Received September 24, 2018)