1116-52-2200   **Casey Mann*** (`cemann@uw.edu`), University of Washington Bothell, School of STEM, 18115 Campus Way N.E., Box 358538, Bothell, WA 98011-8246, and **Jennifer McLoud-Mann** (`jmcloud@uw.edu`) and **David Von Derau** (`davidvonderau@cobaltblue.us`). *The Search for Convex Pentagons that Tile the Plane: Challenges in Computation and Dissemination.* Preliminary report.

Our search for convex pentagons admitting tilings of the plane presented several computational challenges, including problems of computational scale, algorithm implementation on a computing cluster, and analysis of the output. We will discuss how we approached these issues. Further, we are confronted with the challenge of disseminating the results of a massive computer search; how should the data be archived and presented? Lastly, we will discuss the media attention received by our discovery of a 15th type of pentagon and the challenges of communicating mathematical results to a lay audience though the fast-paced digital media. (Received September 23, 2015)