Bob Palais* (bob.palais@uvu.edu), 800 West University Parkway, MS 261, Orem, UT 84058. Math for rapid identification of SARS-CoV-2 and other disease causing pathogens and mutations using high-resolution melting analysis.

We discuss mathematical methods used to model and analyze high-resolution DNA melting, that are incorporated in a widely used platform for rapid detection and identification of infectious agents including SARS-CoV-2, and in systems used to diagnose a variety of genetic disorders. (Received September 11, 2020)