

Outstanding Achievement in Quality Improvement

Saliva SARS-CoV-2 Surveillance Testing Group

Team Members

Pathology & Immunology: Jared Amann-Stewart, Victor Brodsky, Yang Cao, Charles Eby, Jon Heusel, Mike Isaacs, Julie Neidich

Genetics: Lauren Burcea, Richard Head, Jeff Milbrandt, Shelly O’Laughlin, Chris Sawyer

Informatics Institute: Albert Lai

Occupational Health: Eva Aagaard, Amanda Wilkins

Office of General Counsel: Patty Hastings

Student Health: Stephanie Hammer, Cheri LeBlanc

Early in June, 2020, the above departments at Washington University came together to launch a surveillance test for SARS-CoV-2 for the undergraduates on Danforth campus. Most of the team were geneticists or genetics/genomics lab staff, and not viral genome specialists, or informatics faculty and staff.

Within two months they developed and validated an assay that gained Emergency Use Authorization by the FDA. They successfully launched the assay in time for the students return to campus for the Fall Semester 2020.

The group created all the pre- and post-analysis workflow, ran clinical trials to assure the assay was accurate, sensitive, specific, rapid, and useful with high enough throughput to allow for thousands of samples to be reported out per day. It required interaction with the FDA and with others who eventually would use the same assay on the same platform.

To date, over 140,000 samples have been tested successfully, including samples from the State of Missouri, several grants which brought testing to the underserved, and to a sports organization.