



First runner-up:

Cedars-Sinai Medical Center

Cedars-Sinai Medical Center (CSMC) is a full service academic medical center lab which serves the needs of inpatients as well as outpatient clinics in addition to its outreach to clients throughout Southern California.

The department of Pathology and Laboratory Medicine has more than 80 MDs and PhDs and more than 500 employees. In 2016, the lab received more than 287,000 outreach laboratory requisitions and performed more than five million tests.



Melva Javier, CLS, in the Emerging Infections Self-contained Lab during an Ebola training drill

In partnership with the Antimicrobial Stewardship committee at Cedars-Sinai, the Microbiology division collaborated with Pharmacy to expand rapid diagnostic testing (RDT) to support timely decision making for a patient with bacteremia, with the goal of optimizing antimicrobial therapy. This has resulted in a 10 percent decrease in Antibiotic Days of Therapy house-wide. An even more significant decrease (32 percent) was also seen in days of therapy using anti-pseudomonal antibiotics without substitution.

Improving the patient's experience has been a major initiative over the past year. CSMC lab leaders have identified the following four "Vital Behaviors:"

- 1) Treat patients, family members, and co-workers with courtesy and respect.
- 2) Explain things in a way that patients, family members, and co-workers will understand.
- 3) Listen carefully in order to understand patients, family members and co-workers.
- 4) Anticipate and respond to patient, family member, and co-worker requests and concerns in a timely manner.

In 2015, the Molecular Pathology division was selected as the sole Roche AmpliPrep testing site for Bio-Rad's Value Assignment Program. Molecular pathology establishes the reference range for Bio-Rad QC materials manufactured for HBV, HIV, and HCV quantitative viral load tests.

In 2016 Cedars-Sinai was selected by the U.S. Department of Health and Human Services to serve as a regional treatment center. Cedars-Sinai and the California Department of Public Health will share the grant from the federal agency through fiscal year 2019 to strengthen the delivery of specialized emergency medical care. The federal grant is part of the \$339.5 million in emergency funding appropriated by Congress in 2014 to ensure that the nation's healthcare system is prepared to treat future patients with Ebola or other highly infectious pathogens. Their national network will serve patients from California, Arizona, Nevada, Hawaii, and United States territories in the Pacific.

Also last year, the CSMC Microbiology division expanded the use of existing molecular platforms using syndromic pathogen identification panels to diagnose sepsis, respiratory, HSV, diarrheal and parasitic infections. Organism identifications that use to take two to three days via culture are now available the same day.

The lab also saw significant advancements in 2016 with regard to turnaround time more generally:

- CSMC added a new STAT PTH assay to their Roche Cobas e411 in the Cancer Center has reduced TAT by 60 percent.
- Fluid Cell Count (FCT) specimens from the Emergency Department (ED) are now sent to the Core Laboratory instead of the ED, resulting in 80 percent of testing completed within a 60-minute goal (vs. 26 percent, previously).
- The lab implemented a workflow analysis for its Kidney Transplant Services, which reduced lab TAT by 15 percent. It also worked with laboratory support services to ensure that it is getting samples in a timely manner, which reduced TAT by 50 percent.

CSMC has also been successful with adding an automated coagulation testing process, improving a process that frequently had issues where the specimen was not delivered either in a timely manner or at all. The programming of the automated line was modified such that when testing at the first location was complete, all coagulation specimens would be put back on the line and aliquoted for the secondary location if there was additional testing. In this manner, the process was automated and no specimens are missed for secondary tests. 🐼



Rhoda Mae Ocubillo, CLS, instructing student interns Marlin Abdelsaid and Charles Hernandez on calculating coagulation factor assays