

October 2011

It is with great pleasure that I write this letter, recognizing the 20<sup>th</sup> anniversary of USC's Oral Microbiology Testing Laboratory's (OMTL). In its two decades, the OMTL has established itself as an increasingly important contributor to the dental profession. I would like to highlight some unique aspects of services provided by OMTL:

1. While mild and moderate periodontitis seem to be in decline in the United States, the prevalence of advanced forms of the disease has remained steady at about 5-8 percent of the population.
2. A vast body of published studies has found that systemic antibiotic treatment, when administered properly, can significantly arrest the progression of advanced periodontitis.
3. The core of OMTL services is to guide dental practitioners in the selection of the most effective antibiotic therapy for their patients.
4. Determining antibiotic susceptibility to periodontal pathogenic bacteria must be done with specialized culture techniques, not techniques using DNA methodologies.
5. Antibiotic resistance is a growing phenomenon for periodontal bacteria. With that in mind, microbiological testing of individual patients is the most effective way to determine a proper antibiotic. OMTL microbiologists believe that the mere presence of a limited number of periodontal pathogens—as shown by DNA methodologies—does not provide sufficient evidence for prescribing an effective antibiotic.
6. The OMTL service identifies classical periodontal pathogens as well as “unusual” bacteria of periodontopathic significance. “Unusual” bacteria—which can make up 20 percent of the periodontal microbiota—include enteric gram-negative rods, yeasts, staphylococci, and other medical pathogens. These bacteria often require antibiotics other than those traditionally used in periodontics. Again, DNA-based services do not identify the unusual pathogens.
7. The OMTL service is owned by the Herman Ostrow School of Dentistry at USC and is a state-certified microbiology lab. OMTL applies microbiology methods used in medical microbiology laboratories. Microbiologists working at OMTL have many years of experience in hospital settings.

We at OMTL look forward to helping you with your periodontal treatment needs.

Sincerely,

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