

Clinic pathologist presents keynote in Australia on the ‘Marshfield One-Health Model’

Marshfield Clinic Pathologist Thomas Fritsche, M.D., was invited to present the keynote address at a meeting of the Australian Centre for Antimicrobial Resistance Ecology (ACARE) on July 12 in Adelaide. ACARE is a recent national initiative in Australia aimed at stemming the tide of antibiotic resistance by integrating and analyzing data from both veterinary and human diagnostic testing laboratories to identify where and in what populations antibiotic resistance is emerging.

Dr. Fritsche has spent the past several years working on developing a laboratory model that rapidly, accurately and cost-effectively identifies human and animal bacterial pathogens. This model uses a method called proteomic mass spectrometry, followed by detection of antibiotic resistance using an internationally-recognized standard method to guide therapy. His presentation was on the ‘Marshfield One-Health Model’ that is being considered for adoption by the 22 veterinary laboratories in Australia and many of the human testing labs.

Dr. Mark Schipp, Chief Veterinary Officer for Australia, opened the meeting by stressing the importance of laboratory integration for generating comparable data from the human and animal testing sectors, to better our understanding of the origins and movement of antibiotic resistance that can then lead to improved antibiotic stewardship.

Much of the work at the Marshfield Clinic has been performed in conjunction with Dr. Fran Moore, director of Veterinary Services; Dr. Thomas Novicki, Mary Stemper and the technical staff of the Clinical Microbiology Laboratory; and Dr. Jennifer Meece and Brooke Olson of the Marshfield Clinic Research Institute. Dr. Fritsche serves as the service line medical director for the Division of Laboratory Medicine.

