Vaccines for Antibiotic Resistant Bacteria: Our Experience with Multidrug Resistant *Acinetobacter baumannii*

Speaker: Michael McConnell M.D., Ph.D.
Centro Nacional de Microbiología
Date: 16/11/18- 12:30h
Place: Salón de Actos CIPF

Abstract: Antimicrobial therapy is a pillar of modern medicine. Unfortunately, the worldwide dissemination of multiple bacterial species with resistance to different classes of antibiotics threatens to limit the effectiveness of antimicrobial therapy. Over the last three decades, very few new antibiotic classes have been introduced into clinical use, requiring the development of novel strategies for the treatment and prevention of infections caused by antibiotic resistant strains. Vaccines have proven to be safe and highly efficacious in the prevention of infectious diseases, however there have been only a handful of initiatives with the objective of developing vaccines for antibiotic resistant infections. Our group is currently developing prophylactic vaccines for multiple bacterial pathogens that demonstrate resistance to multiple antimicrobials. We have developed a novel multi-antigen vaccine against the multidrug resistant bacteria, *Acinetobacter baumannii* based on genetically modified whole cells. This vaccine has been shown to produce a robust immune response and provide protection against infection with multidrug resistant clinical isolates in experimental models of infection with *Acinetobacter baumannii*. This vaccine is currently being developed for clinical testing, and may provide a novel approach for preventing infections by this microorganism.