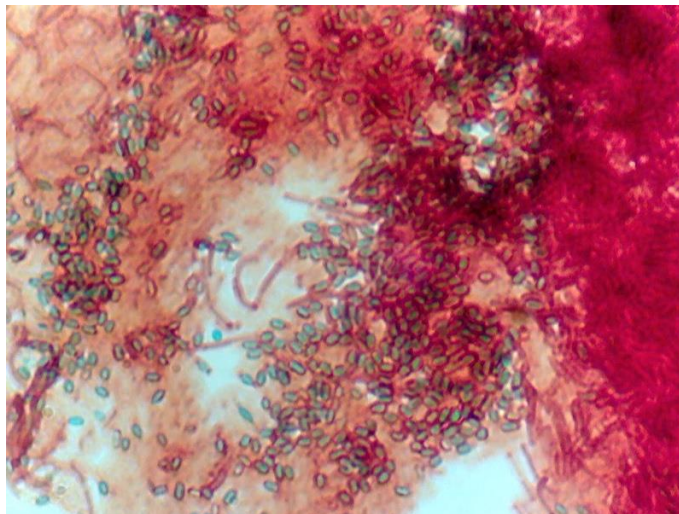


We did something bad: is this the end of the antibiotic era? | Antimicrobial Resistance in *Bacillus* Strains Found in Probiotics

Research in the Van Laar lab broadly focuses on all things bacterial. Of particular interest is antimicrobial resistance (AMR), one of the most urgent global health threats. We study how AMR occurs within biofilms and aim to identify molecular mechanisms of AMR evolution in important human pathogens.

In conjunction with our collaborator at UC Merced (Dr. Mark Sstrom), we are testing for antimicrobial resistance found in commercially available probiotics. Gut probiotics are live microorganisms marketed as providing therapeutic and protective effects against gut bacteria imbalances. Probiotics are found in a variety of foods, drinks, and dietary supplements. Some of these products are likely to contain *Bacillus* species, which have proven to be reliable in the probiotic manufacturing process. Although probiotic benefits are well documented, little is known about any antimicrobial resistance they may have and whether they have the ability to transfer this type of resistance to gut pathogens. Manny's thesis addresses the issue of antimicrobial resistance in these *Bacillus* species as a form mitigating the emerging risks of antimicrobial resistant infections.



Dr. Tricia Van Laar and Manny Flores

Friday November 22 2019

3:00 – 4:00 PM

Science 2, room 109

for further information: www.csufresno.edu/biology

If you need a disability-related accommodation or wheelchair access, please contact Lindasue Garner at the Department of Biology at 278-2001 or e-mail lgarner@csufresno.edu (at least one week prior to event).