

Orchestrated Organisms

Dupre, Zack (School: South Terrebonne High School)

The purpose of this experiment was to examine the *Staphylococcus aureus* found on most types of band instruments. Can the bacteria found on band instruments be potential pathogens for the human immune system? I took twenty-eight band instruments and swab them with long clean cotton tip sticks, then placing their content on an isolation media designed specifically to find the *S. aureus* on the instrument. I then let them grow over a span of a week where they grew in an incubator at room temperature (seventy-two degrees). Once grown plates that turned yellow (which is a sign of *S. aureus*) it was taken off and put on a clean plate where we tested with the bubble method (in which hydrogen peroxide was place on top of eat sample taken from the yellow plate and if it bubbled it was positive) and the clotting method (in which again another sample was taken form the yellow plates and placed in water to where it was incubated for twenty-four hours and if there was a clot found within the container it was again reassure positive) for the five that tested positive. After doing this last test there was five instruments that tested positive to obtaining *Staphylococcus aureus* on them. These five were; two trumpets, one tuba, one baritone, and one set of mallets. With this research it is known that instruments can and have the potential to obtain harmful pathogens that can hurt the human immune system. With this we can now know that instruments need to be clean before anything dangerous happens.