

Kayelani Kirschbaum

*Typing of Bacteria: A Human Skin Microbiome Project*

The purpose of this research project was to determine if individuals have a unique mix of bacteria on their hands, different from anyone else. The student researching this project prepared the 60 nutrient agar plates and labeled them. She then disinfected the keyboards. The researcher swabbed the front side of the test subjects' hands and used the streak plate method to plate each on agar plates. Test subjects typed the story she provided and repeated the same method with the plates this time swabbing the keyboards. The plates were incubated, counted, and the researcher identified the Staphylococcus bacteria colonies on each plate. Three trials were completed. After looking at the data, the researcher had approximately a 50% success rate in matching number of Staphylococcus colonies from the hands to the number transferred to the keyboard. In test 1, five of the ten subjects tested had a match to hand colonies and keyboard colonies. For example in Subject 4, he/she had 109.9 colonies and on the keyboard had 109.9 colonies. This also occurred in Subjects 1, 5, 6, and 8. In the second trial again 5 out of 10 had a matching hand colony number and keyboard colony number. Subject 3 had 94.2 hand colonies and the same number on the keyboard. This again occurred in Subjects 2, 4, 5, and 6. In the third and last trial, four of the ten subjects matched in colonies from hands and keyboards. Subject 10 had 141.3 hand colonies and keyboard colonies. This occurred in Subjects 3, 8, and 9.