



**CALIFORNIA STATE SCIENCE FAIR  
2015 PROJECT SUMMARY**

<b>Name(s)</b> <b>Diana C. Valenzuela</b>	<b>Project Number</b> <b>J1522</b>
<b>Project Title</b> <b>Clean Hands?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> Handshakes, fist bumps, and high-fives are ways of greeting someone. They have become rituals and they seem pretty normal to us. But, have you not ever wondered how many germs can be transmitted through these forms of salutation. So I would like to know which form of salutation (fist bump, handshake, or high-five) spread the most germs? <b>Methods/Materials</b> What I used for my project was the following: -Glogerm -Blacklight -Petri Dish -Agar - 15 Volunteers - Camera <b>Results</b> Handshakes had the highest results it transmitted 90-95% of germs .As well for the agar experiment, it grew sixteen colonies. Then the high-five was the second highest germ transmitter. It transmitted 50-55% of germs in the glogerm test and it produced eleven colonies. And lastly, the fist-bump transmit 25-30% of germs on the glogerm test and on the agar test the fist-bump only produced at least six colonies. <b>Conclusions/Discussion</b> As a conclusion I found out that in fact, a handshake will transfer at least twice or more germs than a high-five. You would think the high-five would transfer a lot of germs, but no it at least transferred 50% of germs as for the handshake it at least transmitted 80-90% of germs. The fist bump was the most effective salutation. It did not transmit or pass a large amount of germs. I would say if you do not like getting sick try fist bumping, it might not look appropriate, but it's cleaner.	
<b>Summary Statement</b> What greeting transferred the most germs: Hanshake, High-five, or Fist-Bump.	
<b>Help Received</b> None	