# CALIFORNIA STATE SCIENCE FAIR
## 2004 PROJECT SUMMARY

**Name(s)**
Samuel E. Gibbs

**Project Number**
**J1116**

**Project Title**
## Investigating How Different Fibers Will Inhibit Bacterial Growth

**Abstract**

**Objectives/Goals**
I want to find out which materials will inhibit bacteria from passing through onto someone's skin. My hypothesis sated that Linen would be the most effective in blocking bacteria

**Methods/Materials**
I will make a baterial solution using bacillus substills. I will take this solution and spray from 6 inches away onto different materials that are placed over a petri dish. I will have different trials for each material. For my control I will simply spray from 6 inches directly onto the petri dish. The materials are linen, silk, cotton, and wool.
After 10 days I will count how many colonies have grown onto the petri dish. This will be done in a scientfic order.

**Results**
I found that silk had the best effect in blocking bacteria from pasing through the material.
This wasn't what my hypothesis stated.
Linen was the least effective material.

**Conclusions/Discussion**
I learned that if you are wearing silk, although not foolproof, silk does help block bacteria from reaching your skin. Linen is very ineffective at protecting you.

**Summary Statement**
Can different materials help block the passing of airborne bacteria from reaching your skin

**Help Received**
Mr. Russell (teacher)