Getting Results

Participants: Jenny Ito, second-year graduate student in Holzer’s laboratory  
Chris Holzer, Professor in the Dept. of Biology  
Ruth Thompson, Jenny’s roommate and a graduate student in English

(Chris Holzer and Jenny Ito are having their weekly meeting to discuss the results of the research project Jenny is working on.)

Jenny: So, all of the surgical pins stick out one-quarter of an inch and I’ve inoculated them at the insertion point with $1 \times 10^5$ Staph. Aureus, just as you showed me. But so far, none of the 30 rabbits show any sign of infection, whether they have the pins with the anti-bacterial coating or not. And although I’ve been giving them morphine on the schedule we decided on, I’m not sure its necessary because none of them seem to be particularly uncomfortable.

Chris: Well, if we don’t get an infection, we won’t learn anything. Here’s what we’ll do. Since it would be a shame to have put these rabbits through this, not to mention wasting all your time, without getting some results, I want to give this a little nudge. I want you to inoculate all the rabbits with $1 \times 10^9$ Pseudomonas aeruginosa. We’ll see what happens then.

Jenny: But the protocol specifies Staphlococcus.

Chris: It’s only a small change. We’ve been approved to run the risk of infecting these rabbits, all we’re going to do is give the process a little boost. (He walks away.)

(That evening at home, Jenny describes the situation to her roommate Ruth.)

**Ruth:** Why are you so squeamish now? Go ahead and do it. In fact, if you really want to make him happy, you should put the new bacteria on just the untreated pins. – That’ll prove his point!

**Jenny:** Now that’s helpful. You know I can’t do that – It would be bad science!

**Ruth:** The whole thing is bad science. After all, you’re torturing bunnies!!

**Jenny (throwing up her hands in exasperation):** You’re not helping me at all, Ruth! I know you don’t approve of animal experimentation, but sometimes it’s necessary, and I’m convinced this is one of those times. Still, Pseudomonas can cause a really nasty infection, and I hate to subject the rabbits to it, especially since it is so hard to treat. You know how cute they are and I’ve gotten kind of fond of them over the last month. And then there is the question of the protocol…

**Ruth:** Well, your boss has already told you that it falls within the realm of reasonable interpretation of the protocol. Besides, you always planned on some of the rabbits developing infections. What does it matter if they’re infected by one bacterium or another? Look at it this way: if you don’t get results, you’ll have to yank to pins from this batch and operate on a new bunch of bunnies. In the end, it would reduce the suffering if you just brewed up the new bugs and poured them on.