

JULIA: Have you heard back about your paper?

MILES: No...

JULIA: Bummer...

MILES: Oh, hey! Are you dressing up for the Halloween party?

JULIA: Yeah, ya have to. It's a costume party.

MILES : What are you going as?

JULIA: I'm wearing a beard and a black slip...

MILES: That's weird.

JULIA: Well, wait... Guess what I am?

MILES: Ummmm... What?

JULIA: ...A Freudian Slip!

MILES: Now that IS funny.

JULIA: [laughs] Thank you.

SHERRI: Hey, I got a little something to surprise you with for Halloween.

MILES: You do?

SHERRI: I do. In my hand I hold the reviews of your paper from the Editor.

MILES: Oh God. Really?

SHERRI: Yeah, well, they're actually really good.

MILES: You're kidding!

SHERRI: Not at all. Looks like they're interested in publishing.

JULIA: Miles! That's fantastic!

SHERRI: Yeah, congratulations Miles. This is your first paper, you should be very proud. I know how hard you worked on it, and it's well deserved praise for excellent work.

MILES: ...thanks, guys...

JULIA: What's the matter, Miles? What's it say?

MILES: It looks like there's a bit of a condition... Am I reading this right?

SHERRI: Reviewers often come back with edits or suggestions for experiments.

JULIA: This happens all the time... to everyone. What are they saying?

SHERRI: Well, what they're saying, basically, is that the manuscript will be accepted for publication if we can demonstrate that the mutant ion channel is significantly more sensitive to the drug than the wild type.

MILES: So, they're looking for a specific result?

SHERRI: They think this added experiment is going to greatly increase the paper's significance. What I want you to do is not look for the "right result"... let's get "the" result.

JULIA: Yeah, of course.

MILES: OK. So, more work?

SHERRI: Yes. But that's not a bad thing.

MILES: [sighs]

SHERRI: Just hold on, hear me out Miles. What I think we should do is blind the experiment. You and Julia will each perform the experiment, so that we can see what the two independent iterations show. And I'll also ask Puran in the lab downstairs to blind the samples for us.

MILES: That's actually a great idea! It'll provide an additional level of blinding. You think Puran will be OK with doing that for us?

SHERRI: Don't worry, he owes me a big favor.

JULIA: Hey, I'm on the paper, I'm in.

SHERRI: [laughs]

MILES: OK. Let's do it!

SHERRI: Great! Thanks guys. Keep me posted and let's get together once you've got the results.

MILES: So, we did it exactly the way we discussed, collecting recordings like we always do... and I just don't get it. The wild-type channel is more sensitive to the drug than the mutant channel.

SHERRI: OK, um. Let me think a second.

MILES: I did not expect this.

SHERRI: Let me ask you something. In what order did you record from the two channels?

MILES: Umm...the data from the wild-type channel was collected in the morning, and the data for the mutant channel was collected in the afternoon.

SHERRI: And you used the same drug solution to treat the plates, all day?

MILES: Yep.

SHERRI: I hate to do this to you, but I want you guys to do this again. And this time, prepare the drug solution fresh for each plate, and let's see what results we get. OK?

MILES: ...OK.

MILES: Yeah, the mutant channel was more sensitive to the drug than the wild type channel, when we prepared the solutions fresh for each plate.

SHERRI: So, what does that tell you?

MILES: Well, I think the reason why the initial results suggested that the wild-type channel was more sensitive to the drug was because the solution was fresh when it was used with the wild-type channel.

SHERRI: And the compound likely degrades over time in solution.

JULIA: And we were preparing it in the morning, and then using it all day.

SHERRI: Yup.

MILES: Wow. I mean, that never occurred to me, but that makes total sense.

SHERRI: Listen, this kind of stuff happens all the time. That's why I was so diligent about making you guys repeat things.

MILES: Thank you so much, Sherri!

SHERRI: Well, you know, that's why I make the big bucks!

[laughs]

JULIA: Well, it certainly isn't because of your sense of style, am I right?

SHERRI: What? I'm wearing this to an ugly Christmas sweater party tonight.

JULIA: oh... yeah.

MILES: It is pretty hideous, Sherri.

SHERRI: Alright, that's enough. You guys have a paper to revise.