

NSABB Public Consultation on Guidance for Enhancing Personnel Reliability and Strengthening the Culture of Responsibility at the Local Level

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At NSABB I told our story, listed what went right, what went wrong (I didn't have slides, so this was verbal lists) and ask a few questions for discussion purposes.

Up front I noted that for us there were two take home messages that we acquired from our experience.

1. Based on our experience with laboratory sabotage and the feedback we received from others with similar lab personnel mishaps, if you suspect somebody of wrongdoing in the laboratory, your suspicion is probably misplaced and the true criminal (and they are criminals) is somebody you don't suspect.
2. Sharing our experiences of laboratory malfunctions with the wider community through reputable media (in our case Nature magazine) is the responsible thing to do even if it has the potential to hurt us in the short run. We decided that we were responsible not only for what we reported, but also for what we didn't report.

So, our story of sabotage that we alternatively call Bhrigu-gate, The case of the intoxicated HELA cells or the crazy case of our sloppy saboteur or How the mentally weak commit laboratory sabotage, fraud and sloppy science or How to be mentally strong to combat evil laboratory forces within and without began for me on Sunday Feb 28th of 2010. I was having a very pleasant daydream about rolling in imaginary R01 funds when I was awoken by an alarming email from Heather a graduate student in my laboratory indicating that she had convincing evidence that somebody was sabotaging her work. She asserted they were doing this by putting alcohol into her tissue media. I fired off a reply email of disbelief and distress and ran into the lab. She then showed me the flask that wreaked of alcohol and I asked if she had a suspect. She said no. She also said that she'd been having a lot of experimental busts recently and wondered if that were due to such felonious activities. I said, I'd have to sleep on the problem and get back to her in the am.

I then proceeded to talk to any colleague I could find in person or over the phone (I called 10 different professors at the U by the end of that Sunday) for advice about the next step. I even tried to talk to my husband who is a scientist but to no avail as the Canada-USA Olympic hockey game was on. Not an ordinary hockey game...Canada won. The colleagues all said, RELAX it's likely she is sabotaging herself due to the fact that things normally just don't work in the lab and human beings want to have an excuse. At first I hadn't thought of that possibility but once they told me to think about it, I did and it made sense. It did make sense because the method of "sabotage" was just too obvious. Although it was sad to think this way, I figured we could just chalk this craziness up to stress. The next day I told her allegations of sabotage were serious and would be happy to ignore the exchange that happened the day

before if she decided that she wanted to do do that. To my dismay, Heather persisted. Realizing that turning a blind eye would not help at all, I persisted too.

I then proceeded to talk confidentially to more colleagues and ultimately after a couple of days of continuous investigation found out who the authorities were at the U. The Regulatory Affairs authorities (Pat and Ray) agree a likely culprit was Heather and asked me to send her to the school therapist for eval and assistance. I told Heather that Pat and Ray were stumped but that they did want me to make the therapist available to her in this time of stress. At no point did I let on to her that she was a suspect. It just didn't seem necessary and was definitely not kind. We all (Pat, Ray, Heather and myself) decided to keep the situation under wraps in an effort to catch the criminal. There was one exception, I did tell my longtime lab manager Kay of 9+ years. After meeting with Heather, the councilor told me he wasn't sure if heather was it or not.

More episodes of tissue culture intoxication followed. Ultimately we asked the police to get involved. Reluctantly, they took our call. They advised that we put locks on the freezers revealing their lack of knowledge of lab culture. I explained that there were too many freezers and if there were other types of sabotage locks would not protect against that. They suggested changing the locks on the lab door. I explained that we wanted to catch the criminal. I intuitively estimated that the cost of the property damage was upwards of 50,000 dollars.

They then had their detective, R.Z., get involved and he interviewed me, Kay and Heather. Det Z felt that the student was the main suspect at this point, asked my permission to give her a lie detector test and after much drama he did it. She passed. Now what? Cameras. Fast forwarding through lots of additional drama we put cameras in the lab in three strategic places (this is a story in itself) and made out our list of suspects. Students techs and ex students as well as non members of the lab were considered. Heather was still a top suspect because the complexity of sabotage allegations in my mind made only her and me the only real possibilities. I did suspect I was going crazy and it could be me--of course the unconscious me.

On April 22, 2010, exactly 1 year after hiring a postdoc named Vipul Bhrigu, cameras together with a confession showed without a shadow of a doubt he was our saboteur. Bhrigu was the only unsuspected lab member...the most cooperative, passionate, friendly guy that you could imagine. We were all in shock. The events of that day, that day my postdoc was arrested, is a story in itself.

The aftermath of the discovery was where it got crazy. First, the state of Michigan prosecuted him for a felony due to destruction of public property...he hired the highest priced defense attorney in A squared (retainer in the 10 of thousands of dollars), he lost his work visa and still he got another job as a postdoc in Ohio. I found this out when I was given the green light by the prosecutor to talk to whomever I wanted to talk to about this mess. The first phone call I made was to his PhD mentor who after hearing the story told me the bad news. Bhrigu was hired in a lab nearby his. Later I found out that of course he lied (still, where was human resources?)--a lot-- to get that job. I immediately called nature magazine in distress hoping that they would help keep this guy out of science by publicizing it or letting us publicize it. The law had let him leave the state. At the advice of the prosecutor, I wrote a victim impact letter to the judge explaining the reason his crime was so heinous and at sentencing on July 22 (4 months after we caught him on camera) the judge decided jail time would be a great option for him, Nature came to the sentencing and wrote a great news article, Bhrigu was ultimately sentenced to pay restitution, serve probation and get a court ordered psych eval and then "suddenly" (premeditated is a better word) fled the country to move back to India with his 9 months pregnant wife (who was also a postdoc at the U of

M, as well). A bench warrant went out for him, the high priced defense attorney was still working on the case long distance and Bhrigu is now serving probation from India, getting the psych eval there and paying us 1000 dollars a month until he pays the 30,000 dollars restitution (tuition, materials and salaries of Bhrigu and Ames during the months of sabotage was how we arrived at that number). The lab is now in recovery. The silver lining is that I have provided heather with a personal technician (with 20 years of bench experience) to help her finish her thesis. In addition Heather is the hero of all grad students worldwide due to her strength and persistence in the face of being sabotaged for at least 3 months. Getting that article in Nature was a way for me to show appreciation to her, as well!

2. What went right?

- before going public in the lab we caught guilty one on tape with a confession
- nature article got us some restitution and eradicated at least a few job opportunities in science for Bhrigu.
- Cooperation with the police and the university was enthralling and interesting – great team work.
- student was strong and observant.
- The laboratory members got closer as a result of the hardship that they all faced...after the discovery that Bhrigu was not what we thought he was.

3. What went wrong?

- felony downgraded to a misdemeanor by a high priced defense attorney without scruples and a judge that needed to be educated.
- more money went to the lawyer rather to the lab as restitution.
- my laboratory is now in a slow painful recovery and I was completely distracted for close to a year. this was not good for the lab's health or productivity.

4. Lessons learned

- get help -- we met interesting ppl and depending on yourself just won't work.
- Keep notes -- detailed.
- the one you suspect is likely not the one -- stay open minded
- One good experiment (cameras) is worth more than gazillion expert opinions.
- don't publicize anything until it is legally sealed. I have since heard about cases of fraud where papers were retracted before getting a confession from the suspects...that's a mess.
- get the police and prosecutor emotionally invested in the case
- explain to the judge with a letter and victim impact statement why this kind of crime is more than vandalism, why it violates cancer research integrity, donor and tax payer faith and compromises cancer research education (although the education to Heather in experience could be considered by many unparalleled in its positive impact, nothing like experience).

5. Discussion

- How do we keep these types of individuals out of science?-
- this is not considered scientific misconduct by the ori ...should it be?