2020 Ethics Case #1 – Data Access, Analysis and Reporting within a Research Group

As you go through this case, keep in mind that some key details are intentionally missing to encourage everyone to think through how the scenario might play out differently depending on some of the further case details you might want to know about.

When Dr. John Thomas (an M.D./Ph.D.) joined Dr. Rick Peterson's lab as a clinical fellow, Dr. Peterson told him about an exciting new compound they were studying that showed promise for treating schizophrenia. The lab was currently completing a Phase 1 clinical trial under the leadership of Dr. Sally Simpson, a staff clinician in Dr. Peterson's lab, who served as Lead Investigator (LI) and Medically Accountable Investigator (MAI) on the study with Dr. Peterson as Principal Investigator (PI). Dr. Simpson had just gone on early maternity leave unexpectedly due to complications, and the project needed someone to take over. Dr. Peterson suggested that Dr. Thomas take over the project and start planning the Phase 2 trial because Dr. Simpson wasn't expected to return for at least six months and Dr. Peterson was eager to keep the project moving. While Dr. Thomas found the science and experimental findings very interesting, he felt uneasy about taking over the project of another investigator who would be returning to the work. Dr. Peterson told him not to worry about it because as a staff clinician, Dr. Simpson would always have projects to work on and it didn't matter if she stayed with any one study through completion because she wasn't 'ambitious in that way'.

1. How can disruptions in workflow due to unexpected absences be dealt with?
2. Are there other ways Dr. Peterson could have approached this?
3. What if the Phase 1 trial had been funded by a bench-to-bedside grant (or other outside funding mechanism) obtained by Dr. Simpson? What if Dr. Simpson had served as PI on the study within Dr. Peterson's lab?
4. How could Dr. Simpson have handled the situation differently?

While Dr. Thomas still felt unclear about Dr. Simpson's future role on the protocol, he was excited about the opportunity to work with this compound and agreed to Dr. Peterson's plan. He learned all he could about the compound and the Phase 1 trial and took over the day-to-day supervision of data gathering and safety monitoring, reporting back to Dr. Peterson regularly. At Dr. Peterson's suggestion, Dr. Thomas occasionally emailed Dr. Simpson about potential side effects/adverse events in the participants since she had the most experience with the compound. He then began writing up the Phase 2 protocol, which was generally very straight-forward, but after his extensive review of the preclinical data, Dr. Thomas added a novel assessment of cognitive function to the standard clinical measures of psychosis. Again at Dr. Peterson's suggestion, he sent the protocol to Dr. Simpson, who was still on leave recovering from her complicated pregnancy and caring for her premature son, for input. Dr. Simpson reviewed the protocol, raised several helpful points, and suggested that a novel assessment of mood also be included.

5. Is it appropriate for Dr. Peterson to repeatedly suggest Dr. Thomas involve Dr. Simpson in ongoing work while she is on leave? What issues should be considered in a situation like this?
6. What other actions might Dr. Thomas take in this situation?

Dr. Simpson returned to the lab after about 6 months and opted for a flexible work schedule to accommodate childcare responsibilities she shared with her husband. She worked 10-hour days in the office on Mondays and Tuesdays (days her husband was responsible for childcare issues) and 20 hours flexibly the rest of the week, some of which could be unscheduled telework, in order to be available for any emergencies that might arise with her young son. Dr. Simpson told Dr. Peterson she wished to resume her work with the compound she had already spent so much time and effort developing but Dr. Peterson told her that Dr. Thomas needed to stay on that project because he was going to be applying for faculty positions and needed to demonstrate his ability to see a big project through the many phases required for developing a new treatment. Dr. Peterson also told her he thought

the project needed someone who would be reliably in the office every day in order for it to continue running smoothly. He did, however, encourage her to continue to help Dr. Thomas with the protocol and told her she would be included on any publications from the project. Dr. Peterson assigned Dr. Simpson to another protocol that he felt was more suited to her irregular schedule. Dr. Simpson saw little difference in the needs of the two protocols except that her new protocol was decidedly less likely to result in high-impact results.

7. Does Dr. Simpson have a 'right' to return to the project she was working on prior to her leave?
8. Would it matter if Dr. Simpson had taken the lead on the early development of the compound?
9. What issues arise when 'ownership/leadership' of a project has changed hands?

Dr. Thomas struggled to get FDA approval for his phase II protocol. Dr. Simpson, who had extensive experience getting FDA approval for protocols, helped him navigate several rounds of queries and get the approvals from both the FDA and IRB so he could start enrolling participants. Dr. Thomas finally began enrolling participants, but recruitment was slow, and it was difficult to maintain adherence through the one-year follow-up visit, which is far longer than typical Phase 2 studies. Dr. Peterson wanted the longer follow-up because it would allow for a more clinically relevant assessment of the drug and because long follow-up phases are possible at NIH where it's part of the mission to do long-term studies that are not feasible in other settings.

In the third year of his clinical fellowship, Dr. Thomas had a motorcycle accident, badly breaking several bones and requiring an extensive leave of absence. Dr. Peterson tapped Dr. Simpson to fill in while Dr. Thomas was recuperating, which she was easily able to do since she already knew the protocol well and had covered for Dr. Thomas for 10 days when his mother unexpectedly passed away. Recruitment picked up with Dr. Simpson in charge because she had relationships with community psychiatrists who felt comfortable referring their patients knowing she was running the study. When Dr. Thomas was ready to return to work about 6 months later, Dr. Simpson again asked to stay on the project and let Dr. Thomas manage another project for the remainder of his clinical fellowship. Dr. Peterson again said that it was important for Dr. Thomas's job prospects to remain in charge of the project he had started with, while Dr. Simpson already had a stable job and didn't need this project for her CV or advancement.

10. What do you think of Dr Peterson's decision-making process regarding management of this project?
11. What assumptions is Dr. Peterson making about Dr. Simpson's career, including her future plans? Is this appropriate? Might it reflect bias?

With the papers from his Ph.D. research and one publication from the Phase 1 data, which Dr. Peterson had allowed him to write up as first author, Dr. Thomas applied for jobs and was offered a soft money position as an Assistant Professor at a large research university. He negotiated some start-up funds but needed to apply for grant money as soon as he started. He asked Dr. Peterson to unblind the trial's treatment-arm data for participants who had completed the protocol to date (about half of the planned cohort) so he could analyze the study and use it as preliminary data for grant applications, without discussing this with Dr. Simpson.

12. Is this an appropriate reason to unblind an ongoing protocol? Why might Dr. Peterson refuse to unblind?
13. Would the situation be any different if this protocol was a preclinical study investigating the impact of the compound in a preclinical model?

Dr. Peterson agreed to unblind the completed participants, and Dr. Thomas analyzed the unblinded data quickly and began writing grants. He discovered that the compound appeared to have marginal efficacy for the primary outcome of psychotic symptoms, no effect on the cognitive functions he had hypothesized would benefit, but a strong effect on some aspects of mood that was already significant at the one-month follow-up in this initial

cohort sample. The mood measures had been added at Dr. Simpson's suggestion. He formulated his next hypotheses around these mood findings and started writing up a manuscript as well, since the findings were very interesting, even if preliminary, and having a paper would help his chances of securing grant funding.

Dr. Simpson found out about Dr. Thomas's analysis and results when he sent around a manuscript with himself as first author, Dr. Peterson as senior author, and Dr. Simpson as second author. Dr. Simpson complained to Dr. Peterson that the mood assessment was her contribution to the protocol and that she had planned to present the data at a conference and serve as first author. She also thought it was premature to publish the data as a paper, since the study was ongoing and had not yet met its planned enrollment numbers. Dr. Peterson mentioned that Dr. Thomas was submitting a grant to follow up on the mood findings. Dr. Simpson was not happy, as she had planned to follow up on this hypothesis if the data looked promising.

14. Who should control use of the data in this situation?
15. Is it appropriate to publish an interim analysis of an ongoing study? To include it in a grant application or present it at a conference?

After two more years, the protocol completed its final one-year follow-up visit. With the assistance of the current clinical fellow, Dr. Simpson analyzed the data and found that the compound significantly improved psychotic symptoms, mood, and cognition after a year of treatment. She drafted the findings for the three outcomes, with herself as first author, Dr. Peterson as senior author, the current clinical fellow as second author, and Dr. Thomas in the middle of the author list. Dr. Thomas, now three years into his new position and struggling to secure grant funding, was upset that Dr. Simpson had included all the data in one manuscript and thought the cognitive findings warranted their own paper which he wanted to write. He complained to Dr. Peterson.

16. How should decisions about publishing and authorship be handled after a post-doc has left the lab?
17. Is it reasonable to publish results separately in order to provide first-authorship opportunities for more study team members? What considerations should go into deciding what data get published together vs. separately?

2020 Ethics Case #2 – Moving On

Dr. Pat Suarez has been a highly productive postdoc with Dr. Jones at the NIH for three years. Though excited to begin a second postdoc at the University of GreatState (UofG) in a week's time, Pat is torn. He just received data back for samples he had submitted to the NIH Sequencing Core. The data are from patients with the disease that the Jones lab studies, and the results are expected to provide insights into why some patients are unresponsive to treatment.

Pat offered to undertake the bioinformatics analysis of the data even though he was formally leaving the lab, but Dr. Jones was resistant. He gave as his reason that Pat should immerse himself in the work of his new lab, but he also had in mind that the analysis would be a good first project for the new computationally-trained postdoc scheduled to join the lab in a few days. Dr. Jones reminds Pat of all he has accomplished in three years and assures Pat that he would be co-first author on the primary publication from the project.

Though Pat highly respects Dr. Jones, he decides that Jones couldn't possibly be unhappy if he was able to rapidly analyze the sequencing data after leaving the lab (working evenings and weekends). On his way into lab on his last day, Pat stops to purchase a high capacity flash drive at his favorite computer supply store and copies the data files. He finally finishes late in the evening, grabs the three lab notebooks he's filled over the years and heads for the door.

1. Who owns the data generated by an NIH lab or research group?
2. Does Pat have the authority to take copies of the sequencing data with him? What about the lab notebooks?
3. How could this situation have been better managed by Dr. Jones?

A few days later Pat starts work in his new lab. His new PI had purchased a laptop for him, which Pat configures for use on UofG's network. He is eager to get a start on analyzing the data from the Jones lab before getting too busy with new work. When Pat gets home, he immediately loads the data from the flash drive to his new laptop and gets to work.

4. Apart from the right or wrong of taking a copy of the data, how have Pat's actions put the security of the data at risk?
5. It is not uncommon for trainees (as well as other NIH scientists) to finish up projects after leaving the NIH. For someone in Pat's situation (i.e., leaving NIH for another training position), what is the appropriate arrangement consistent with NIH data use policy?
6. What additional or different considerations would there be if Pat were leaving NIH to accept a position as independent investigator at a university? Or what if Pat were starting a job in industry?

Over the next few weeks and on his own time, Pat analyzes the sequencing data he brought from the Jones lab. He is pleased because he had been taught to use some sophisticated, home-grown bioinformatics tools in his new lab at UofG and they have proved very useful for analyzing the Jones lab data. He has found some exciting results, and when he emails his analysis to Dr. Jones he feels sure that Dr. Jones will be impressed.

But Dr. Jones is NOT happy. He tells Pat that a new computationally trained postdoc in his lab had been doing some nice analysis of the same data set with the understanding that it was HER project. And he is very concerned about Pat using software tools developed at his UofG lab. Pat is dismayed.

7. Should Dr. Jones be upset? What are his interests and obligations in this situation?