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Responsible Conduct of Research Role-Plays: Animals

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Responsible Conduct of Research

Role Plays

Animals



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Using Role-Plays in Ethics Education

Role-playing can be a powerful learning experience and stimulate lively discussion and debate. However this active learning technique, which most people are unfamiliar with, can also make participants feel awkward and uncomfortable at first. The key to its use is to introduce and frame the technique to any group before starting.

Note to Moderator:

After the workshop participants should receive as a handout the section labeled “Resources.” That section also includes a summary of the role-play.

Introduction (2-3 minutes)

We generally start a session by talking about the technique and why we use it. We often label it as “experiential” or “active” learning as we talk about it. This introduction can be done relatively quickly and will improve the participation and comfort level of the group.

Points we make include:

- Role-playing is a type of active learning technique. As such, it promotes deep learning, long-term retention and can be very memorable and powerful
- Participants might feel awkward at first, but they are encouraged to participate as fully as possible. The more authentically they engage in their role the more they will learn
- There are no “right” answers in role-plays
- Participants are not being graded
- The purpose of the exercise is to provide an active learning experience in a safe setting where ethical issues can be explored without being about a real problem
- Because role-plays (or simulations) are participatory, educators believe that the information learned will be retained longer and will be more easily accessible in the future if it is needed
- This training will help participants be prepared to recognize and address ethical problems. By grappling with the sorts of ethical problems that arise regularly in professional life in this safe, non-threatening role-play setting, participants can think through the problem and gain some skills and tools to use should they ever encounter such a problem. We think of this as an “inoculation model.” By practicing these conversations you become “vaccinated” and thus better able to resist confusion and anxiety when questions of ethical research arise.
- These scenarios are based on real situations that real people encountered. (You cannot make this stuff up.)
- After the role-play we will discuss the experience. We also will discuss the outcome of the real-life situation upon which the role-play is based, where possible.

For anyone who is truly too uncomfortable to try it out, we have an observer role. The observers are expected to take notes as they watch others do the role-play and then to provide comments back to the other participants in their group at the end of the process.

Instructions (3-5 minutes)

After introducing the technique, we give the group instructions and an overview of the procedures.

- 1) Materials should have been copied in advance on different color paper, so the roles are easy to distinguish. For example, the professor role might be on blue paper, the student on yellow paper, and the observer role on green paper. **Participants know only what is in their own roles, and have no information on what is in the other roles; that comes out as the session proceeds. Decide in advance whether you will be distributing the discussion starters with the roles. If you are, the discussion starters for each role (and only that role) should be on the same color paper as the role.**
- 2) Ask participants to divide into groups of two (professor/administrator and student) or three (professor, student, and observer). Each group must have one each of the two main roles (professor/administrator and student).
- 3) Announce that everyone will start together and end together. (This keeps the noise level down while directions are being given.)
- 4) When partners have been selected, hand out the roles and discussion starters. Participants are not obligated to use the discussion starters, but it does make the exercise less daunting for many.
- 5) Verify that every group has two or three people and that each one has a different color paper.
- 6) Ask participants to leaf through their materials: each should have role information and a role-play starter. Using the role-play starters is optional, not required. They are provided to help those who need a little guidance to ease into the role-play.
- 7) Announce the amount of time available. 10-15 minutes is plenty of time for these short scenarios.
- 8) Provide a bit of time for individual preparation. Suggest that participants make notes of what you want to find out, and what your first sentence will be.

Optional step:

If time and space permit, it can help focus the role-plays and make sure all aspects of the scenario are covered if you verbally review the key points of the scenario and the participants' role. To do this, take one group — all of whom are playing the same role — out into the hallway and keep the other together in the classroom. If there is only one discussion leader, appoint one member of one of the groups to read the role information aloud to the group while the discussion leader works with the first group. When the leader completes briefing the first group, leave that group to discuss the role among themselves and go brief the second group and answer any questions they might have.

9) Start the role-play. Walk around the room, listening to various groups to get a sense of topics discussed and how the activity is proceeding. Stop the process after it appears that most have exposed the main dilemma and have spent a little time talking about how to approach it.

10) Make sure at the end of the session that participants receive the “Resources” sheets as a take-away handout.

Discussion (30-45 minutes)

After the role-play the moderator should lead a discussion. Follow the discussion guidelines provided following the role-play. It’s also useful to plan for a few concluding remarks at the close of the session to consolidate the discussion.

Suggestions for Leading Discussions

Opening questions and guidelines for leading a discussion are provided below.

- After the role-play, discussion usually takes off on its own in light of the experience. However, if no one speaks right away, don’t worry.
- After you ask the opening question, let at least 10 seconds go by to give people a little time to volunteer. When you are at the front of the class 10 seconds feels like eternity, but that amount of time allows participants to begin to gather their thoughts and work up the nerve to respond.
- If the discussion is really lagging at any point, a useful technique can be to ask participants to discuss whatever the proposition is with their neighbors. This “buzz groups” approach can build up enough confidence that people will start talking.



Role-Play Discussion Guidelines: Moderator

General questions to ask:

After the role-play is over and the groups come back together, ask the participants what was going on in this interaction.

Work to elicit the whole story, by alternately asking those who played each role what their concerns were:

- For those playing the student, what were their concerns and how they understood the situation?
- Ask those playing the faculty member, what were their concerns and how did they understand the situation?

Then summarize for the group the essential facts of the two main roles. It can be helpful to make a two-part list on an overhead or chalkboard while you are eliciting information, noting the concerns of the faculty member and the concerns of the student.

If there were recurring themes in the groups you picked up while the role-play was under way, work those into your discussion. Ask the group how closely the two versions that emerged in discussions match. If they do align, what was the most helpful in eliciting information and establishing trust, leading to a useful and constructive discussion? If they do not match (you may have some groups in each category), what kept the two versions from aligning? Was information missing? What kept it from coming out?

Other general questions to ask:

- What were the most helpful things that were said?
- What do people on each side wish the person on the other side had asked or said?
- Who should take the next step here? Why?
- Is there a good outcome to this situation?
- What elements might make it more or less likely to come out well?
- What could the student or the adviser have done earlier (if anything) to change or prevent the current outcome?

If you had any observers, ask them what they saw going on; see if anyone picked up signals the participants missed. What were they? What difference might it have made if the missed signal had been caught?

Ask the group to identify the issues that are presented in this role-play.

Specific questions to ask:

- What is the balance/ can there be a balance between “blowing the whistle” and your own ethical obligations? Is it okay to use animals without a protocol? (Answer: never?) Why? Why not?
- Is it okay purchase animals without authorization?
- What should the adviser do next; what are the adviser’s responsibilities, if any?
- What’s likely to happen if the adviser takes those steps?

- Should the student just let this drop?
- What is likely in either scenario?
- Is this something that adviser *can* let drop once the student brings it up? Is proceeding entirely up to the student?

Principles that apply in animal care:

Extensive federal regulations and guidance apply to animal care:

- Animals transferred from one institution to another require materials transfer agreement
- At every institution, the IACUC conducts internal inspections of animal facilities and labs twice per year
- The USDA conducts external inspections of animal facilities and labs, now three times per year
- Protocols must be submitted and approved by the IACUC
-

Obligation of professor:

- Use animals with a protocol
- Making only authorized purchase of animals
- Prevent spread of disease by keeping animals in quarantine
- Avoid involving students in violation of animal care regulations, and especially students very early in their research careers.

Alternative Formats:

A: After the discussion, ask for two volunteers, and do the role-play again, in a “fishbowl” format where the audience observes one pair proceed through the scenario that the group just discussed. Stop the action every now and then and ask for suggestions from the audience on what might be done differently to improve the outcome. Ask the role-players to back up a bit in the interaction and try to incorporate that advice as they move forward again. See if there are differences in how the interaction goes. What lessons can be learned?

B: Before the discussion, pass out the roles and have each person prepare individually. Ask for two volunteers to come forward to do the role-play in a “fishbowl” format, and then follow with the discussion portion.

Close by telling the end of the story in the real-life situation on which this role-play was based.

When the University discovered this violation, it resulted in a number of negative outcomes for the professor, students, and other researchers at the University working with animals, even those with no violations in their own conduct.

- The professor in whose laboratory the problems were discovered was prohibited from using animals in his research for two years, followed by an additional year of intensive oversight and probation

- The professor lost an NIH research grant that likely would have been funded, because of violation of federal regulations
- Publications from the lab were withdrawn because of the violations (it is unethical to publish research based on violations of regulations and thus prohibited), hurting the progress of co-authors as well as the professor himself
- Because the graduate students in his group couldn't do their work without access to animals, they were all transferred to other advisers for the remainder of their degree programs; while all efforts were made to reduce the consequences for them, and they were protected to the maximum possible extent, the entire process was disruptive and upsetting
- At the University level, *all* animal users on campus were required to take a refresher course in animal care regulations, and the administration spent enormous amounts of time in lengthy and detailed correspondence with the funding agency, the Department of Health and Human Services
- Actions were also taken at another University where a professor had delivered unauthorized animals to the University of Illinois
- If the violations (animals in the laboratory instead of in the approved facility) had been discovered by an external agency, for example the USDA, our regulatory agency in one of their routine inspections, instead of by the University itself, penalties would have included fines and possible suspension of animal research activity and/or funding on all or part of the campus

RESOURCES

Role-Play Summary

This scenario highlights ethical issues in reporting violations in a situation where extensive federal regulations and guidance apply. Specifically, the lab was using animals in ways that violated its own protocol and included making unauthorized purchases of animals.

The driving issue in this scenario is how to handle the discovery that another lab might have violated these regulations. Labs often have a great deal of autonomy and faculty members may feel uncomfortable questioning the conduct of their colleagues. Professor Prenlen appears to be violating animal care regulations, and involving students in those violations. This creates a difficult situation for the graduate student who observes these violations as well as his or her adviser. The goal of the role-play is to engage students in thinking through the choices presented, resources for addressing them and alternatives for responding to the observed problems.



Resources on Animal Research and Care

University of Illinois at Urbana-Champaign policy governing the use and care of animals in research and teaching

<http://www.fs.uiuc.edu/cam/cam/ii/ii-16.html>

Responsible Conduct of Research Resources

Columbia University

<http://ccnmtl.columbia.edu/projects/rcr/>

Committee on Science, Engineering, and Public Policy, National Academy of Sciences, National Academy of Engineering, and Institute of Medicine, *On Being a Scientist: Responsible Conduct in Research*, National Academy Press, Washington, D.C., 2nd ed., 1995.

<http://www.nap.edu/readingroom/books/obas/>

ORI Introduction to the Responsible Conduct of Research,

http://ori.dhhs.gov/publications/ori_intro_text.shtml

Online Ethics Center, National Academy of Engineering

<http://onlineethics.org>

Research Ethics Modules, North Carolina State University,

<http://www.fis.ncsu.edu/Grad/ethics/modules/index.htm>

Macrina, F. L. (2005). *Scientific Integrity: An Introductory Text with Cases* (3rd Ed.). Washington, D.C.: American Society for Microbiology Press.

Shamoo, A. E., & Resnik, D. B. (2003). *Responsible Conduct of Research*. New York: Oxford University Press.



Professor Role

What follows is an outline of your role. You will need to improvise to some extent – be creative but try to stay within the bounds of what seems realistic.

You are an assistant professor at a university doing research with animals. You run a lab with a number of graduate students working on a variety of projects. It is summertime, so things are somewhat less structured than during the school year.

You are preparing for a weekly meeting with one of your graduate students. This student has been a positive addition to your lab. The student not only does good work but also contributes to the social atmosphere in the department. This student, whom you know fairly well, has seemed somewhat distracted or worried lately. You want to ask questions to see if you can help; however you don't want to pry if it is a personal matter and therefore none of your business.

You have also noticed your student spending time with the extra-help undergraduate summer students in the lab next door. You intend to compliment this behavior because it is helpful to new people and encourages careers in research. At the same time, you want to give some advice about not seeming too interested in the research. Your department is cordial, but each lab mostly functions autonomously. You and the other professors prize this autonomy. It has helped you accomplish some excellent research quickly and efficiently. The summer students work for your colleague, Professor Prenlen. This professor has a reputation for being unreasonably touchy about whether anyone is trying to “scoop” the lab. Because Prenlen is a full professor, you don't want to create any bad feelings between the two labs.

You hope to talk to your student about professional boundaries and how to be friendly without being perceived as nosy or meddling in the operation of other labs. Your goal is to help the student develop a better understanding of the professional relationships involved in this situation while encouraging the friendly and supportive relationship between the students.

Professor Role-Playing Notes

- ✓ You appreciate what this graduate student contributes to the department
- ✓ Your department values the autonomy of each professor
- ✓ You want to protect your graduate student from any professional disputes
- ✓ Professor Prenlen is protective of research ideas

Plan for your meeting:

- ✓ Write questions that you will ask the student
- ✓ Follow-up questions that you might ask
- ✓ Questions that the student might ask you, and your answers

Starting the Role Play

Professor: *How is your lab work going today?*

Grad Student: *The lab work is going well ... I guess ...*

Professor: *That's good to hear ... It seems like you are continuing your typically good work ...*

Grad Student: *Thanks ... I try ...*

Professor: *I have noticed that you have been spending time with the summer students in Professor Prenlen's lab ... It's good to see graduate students encouraging the careers of younger students ...*

Grad Student: *They seem to be really excited about working on research with animals ... one of them did the 'name-all- the-guinea-pigs' thing that new people always do ...*

Professor: *Ah yes ... until they all die for the first time ... I remember those days ... Has Professor Prenlen said anything about your involvement with the students?*

Grad Student: *Not to me ... have you heard something?*

Professor: *No, ... the reason I asked is that Professor Prenlen has been known to be overly protective of the lab ...and you have seemed a bit distracted lately ... I just want to make sure that there aren't any misperceptions ... These kind of informal issues are actually really important in academic careers ...*

Grad Student: *Thanks for your concern ... there actually is an issue that I am wondering about*



Graduate Student Role

What follows is an outline of your role. You will need to improvise to some extent – be creative but try to stay within the bounds of what seems realistic.

It is summertime, and a faculty member in your building, Professor Prenlen, has extra undergraduate student help for the summer through a special funding arrangement. You work in the lab next door to Professor Prenlen's lab. The labs share a common break room which has allowed you to meet these students. Over the course of the summer, you have become friends with some of them. Through your interactions with the students you have learned that Professor Prenlen took these extra-help students with him to a local pet store where they purchased some guinea pigs. Professor Prenlen did this because of the short period of time provided by the special funding for the summer. The animals were put in unused cages in his lab. You have seen the guinea pigs in the lab while meeting the other students for lunch.

The summer students told you about the work they were doing in the lab, and how they care for the animals. One of them had named all the guinea pigs. You advised them that naming lab animals wasn't a good idea, based on your own experience, even though you know guinea pigs can be endearing. As far as you can tell, the animals are well cared for.

From your own animal research orientation and training you know that animals are not supposed to be in this part of the building. Even though there are leftover animal cages in Professor Prenlen's lab, animals should be kept in the approved animal facility on another floor in the building. It's also becoming clear to you that the summer students don't seem to be familiar with the approved protocol for working with these animals.

Your brother is a post-doc at another university, and he told you how someone across campus from him recently used animals without an approved protocol. As a consequence, every researcher at his university had to take new (boring and long) training for working with animals.

You are sure these extra-help students don't know the rules or protocols for working with these guinea pigs. This isn't really your business, and you certainly don't want to get anyone in trouble, but you are getting increasingly worried about this situation. What if people find out you knew about this and didn't do anything? What if someone finds out and all the people in your building have to be retrained, and people blame you for their wasted time? What if people become angry at you for being a tattle-tale, when this is none of your business?

You are having a difficult time coping with the anxiety and uncertainty from this situation. You have a routine meeting coming up with your adviser. You trust your adviser's judgment, but know that the preference in the department is to not interfere with another lab's work. If your adviser tells you not to worry about it, the situation might become worse for you.

Graduate Student Role Playing Notes

- ✓ You are concerned about how to handle the animal situation
- ✓ The animals are well cared for, but you're pretty sure the animals should be in the central facility, not unused cages in the lab
- ✓ You don't want to get your new friends in trouble
- ✓ You don't want to cause trouble in the department
- ✓ You care about the regulations and possible sanctions for the department

Plan for your meeting:

- ✓ Write questions that you will ask your adviser
- ✓ Follow-up questions that you might ask
- ✓ Questions that your adviser might ask you, and your answers

Starting the Role Play

Professor: *How is your lab work going today?*

Grad Student: *The lab work is going well ... I guess ...*

Professor: *That's good to hear ... It seems like you are continuing your typically good work ...*

Grad Student: *Thanks ... I try ...*

Professor: *I have noticed that you have been spending time with the summer students in Professor Prenlen's lab ... It's good to see graduate students encouraging the careers of younger students ...*

Grad Student: *They seem to be really excited about working on research with animals ... one of them did the 'name all the guinea pigs' thing that new people always do ...*

Professor: *Ah yes ... until they all die for the first time ... I remember those days ... Has Professor Prenlen said anything about your involvement with the students?*

Grad Student: *Not to me ... have you heard something?*

Professor: *No, ... the reason I asked is that Professor Prenlen has been known to be overly protective of the lab ...and you have seemed a bit distracted lately ... I just want to make sure that there aren't any misperceptions ... These kind of informal issues are actually really important in academic careers ...*

Grad Student: *Thanks for your concern ... there actually is an issue that I am wondering about*

Observer Role

- *Read both roles on the following pages.*
- *Watch the interview and take notes.*
- *If the conversation appears to be stopping early, encourage discussion on topics that still haven't been addressed.*

What is the student trying to convey?



What is the professor trying to achieve in this meeting?

Did the student “read” the signals from the adviser well? What cues did you see?

Did the professor “hear” the student well? What signals of this were there?

What questions do you think could/should have been asked that were not? What do you think could have been said that was not?

role one

