## IPRO 308 Ethics Module Based on Discussions in Class

During a lecture on September 4, 2008, Dr. Opara initiated a discussion in class about the various ethical issues that are relevant to this IPRO. These are explained below.

- 1. Fiddling with experimental results: When performing an experiment, show the true result that was achieved during the experiment, not the result we want to achieve. A researcher's aim is to be able to explain the results of an experiment.
- 2. Animal welfare: We have a well documented animal protocol which was reviewed and approved by the IIT IACUC (Institutional Animal Care and Use Committee). This protocol had explained what procedure will be done on the animal. This document has also been reviewed and approved by the IITRI IACUC.
- 3. Incorporating a fail/safe control system into the prototype device: Electricity is involved in the instrument, so if the machine fails due to failure of power, will the person using the instrument be aware of that? The solution is to incorporate a fail/safe control system in the device.
- 4. Specifications of the device: During the design of the product, the life cycle of all the parts should be determined and well displayed on the product.
- 5. Follow directions: Safety procedures should be strictly followed in the lab.
- 6. Diversity issues: Respect each other's view and opinions. Students should not be biased on the basis of student's major or race or anything that appears to be discriminatory. If someone is offended in a group, that affects his/her productivity and they will not express their opinion anymore.
- 7. Perceptions/Misconceptions: It is desirable to have appropriate discussions to dispense with all issues that could be misconstrued by team members.
- 8. Plagiarism: Unauthorized use of existing technology or information is not encouraged and that is viewed as infringement of intellectual property.
- 9. Unsafe and inappropriate use of chemicals: Abuse of anesthesia is one issue. But in our proposed experiment, the anesthetic to be used is 2% Isoflurane. The correct procedure is to use a cotton ball soaked with the chemical and make the animal inhale it as a gas under a hood. By following the correct procedure in the lab, any substance abuse can be avoided.
- 10. Unauthorized disclosure of information: this can occur due to conflict of interest. The members of the IPRO are to use the information about the various technologies developed in the IPRO for the purpose of the project itself.
- 11. Acknowledgment of any help or support: Upon successful completion of the project, the group should acknowledge any help or support that was used during the course of the project.
- 12. Unnecessary competition within the team: This is unhealthy for the team and should be avoided.