

## Case Studies for “COI” Panel

### Case Study 1: Intellectual Property

Sal is a graduate research assistant in a laboratory involved in developing an innovative technology that is of significant commercial interest and is working on this cutting-edge research with two other graduate students, Hal and Val. They are working under the guidance of Professor Love, who has funding from the [National Science Foundation](#) (NSF) and an industrial sponsor. Although the research has yet to reach a stage where it might be commercially viable, the industrial sponsor wishes to be the first company to capitalize on this technology when the research has reached such a stage. The National Science Foundation's interest in sponsoring this project is based on the fact that the project offers a rare opportunity to advance scientific knowledge in an entirely new area.

Sal and his fellow students, Hal and Val, were originally attracted to this project because of the opportunity to be at the forefront of research. Each of them are especially enthusiastic about their work in the laboratory as new discoveries are being made. Professor Love has been very supportive and has provided good guidance on the project. Professor Love stresses the educational value of such an opportunity and is especially pleased with the enthusiasm that the graduate students exhibit.

Sal, Hal, and Val are close friends and they each work on areas of the research that complement one another. They are nearing graduation (to within a semester or two of each other). One Friday evening when they were having their weekly after-work get-together, the topic of discussion turned to matters concerning their professional goals. They decided that they would like to work together and set up a company of their own. What could be a better opportunity for a group of graduate students who work well together than to stay together, and go on in business?

Being engrossed with their research, they can only think of setting up a business that would bring their present research to fruition and into the commercial realm. After all, this is where their expertise lies.

- 1 What must these students consider in order to respect the intellectual property rights of the industrial sponsor? Of Professor Love?
- 2 How is NSF's requirement for public disclosure balanced against the industrial sponsor's need for confidentiality?
- 3 What are the criteria for determining how much of what is learned in the laboratory is considered confidential intellectual property and how much of it is considered reasonable to be made use of by this group of students? Are there any skills that a graduate student acquires from research that the industrial sponsor or Professor Love has a right to prevent the student from using?
- 4 What are the rights and responsibilities of Sal, Val, and Hal?
- 5 What are the rights and responsibilities of Professor Love?
- 6 How would the scenario, as outlined, be treated differently if Sal, Val, and Hal were working in a commercial company doing the same research and development work?

Source: "Whose Intellectual Property?" Online Ethics Center for Engineering 9/10/2006 National Academy of Engineering Accessed: Tuesday, February 11, 2014 <[www.onlineethics.org/Resources/Cases/prop.aspx](http://www.onlineethics.org/Resources/Cases/prop.aspx)>

### **Case Study 2: Maintaining Confidentiality of Research Results**

Julia, a graduate student of Dr. Bond, has been conducting physicochemical studies on the properties of a new polymer. Chemical Industries, Inc., sponsors the research and Julia and Dr. Bond understand that the results are proprietary, confidential, and cannot be used in Julia's thesis. Mr. Cash, the technical liaison from Chemical Industries, Inc., meets with Julia and Dr. Bond and expresses his pleasure with the outcome of the recent studies and observes that the new results are the last data required to market a new generation of fire-resistant electrical insulating material. Mr. Cash further comments that this is the product that Chemical Industries, Inc. needed to regain its market share, and the stock of Chemical Industries, Inc. would soar once investors knew of the new product. That evening at dinner with her husband and brother-in-law, an investment banker, Julia tells them about Mr. Cash's enthusiasm about their recent research results and Mr. Cash's expectations that Chemical Industries' stock would greatly increase in value as soon as the new product was announced. The next day Julia's brother-in-law advises several of his clients to purchase Chemical Industries' stock.

1. Did Julia breach her confidentiality agreement by discussing her research results with her husband and brother-in-law?
2. Does Julia profit by the disclosure of the research results that will increase the value of the stock of Chemical Industries, Inc.?
3. Discuss a scientist's responsibility for maintaining the confidentiality of research results.

### **Case Study 3: Industry-sponsored Research**

Dr. Conrad has received a grant from an industrial source to do basic research that has long-term implications for commercialization. A new graduate student, Michelle has just joined his lab following the completion of one semester of graduate coursework. Dr. Conrad outlines several projects that can be pursued by Michelle under this industry-sponsored research program. Dr. Conrad indicates that there is a proviso listed in the industrial grant agreement that says that all material to be submitted for publication must first be reviewed by the company. This review must always be completed within 120 days. Dr. Conrad points out that this presents only a minimal disruption to the normal publication process as compared to the unrestricted publication of material gathered under federal research grants. He also mentions that the positive aspects of working on this proposal include the fact that there is money in the grant for Michelle to travel to at least two meetings per year. Also the grant application provides money for a personal computer that will be placed at Michelle's lab station while she is working on the project. Dr. Conrad emphasizes that working on the project will likely give Michelle an "inside track" with the company should she want to pursue job possibilities there following graduation. Michelle agrees to work on the project. Comment on the ethical and conflict of interest implications of this scenario.

#### **Case Study 4: Conflicts of Interest**

Dr. Wilkins has a modest research program supported by a grant from a local foundation. Wilkins brings a personal check for \$3,000 into the office of Mr. Cole, the departmental administrator, and says that it is a gift, which may be used by the department at the discretion of the chair. When Mr. Cole consults with Dr. Vaughn, he learns that Dr. Vaughn and Dr. Wilkins have already discussed this arrangement. Dr. Vaughn says she has agreed to let Dr. Wilkins spend this money as it will help him strengthen his research program to the point where he'll be able to successfully compete for federal grants. Over the course of the next several months Dr. Wilkins uses some of the money to purchase a new computer and printer, which he installs in his home. He uses the remainder of the money to attend a meeting in his research field. At the end of the year Dr. Wilkins donates \$5,000 to the department. Over the next several months he uses this money to attend two other meetings, and to pay for several subscriptions to scientific journals, and to an electronic database subscription. Comment on any conflict of interest considerations of this scenario.

Source: UCSD Resources for Research Ethics Education

<http://www.research-ethics.net/topics/conflicts-of-interest/#discussion>