



Online Ethics Center
FOR ENGINEERING AND SCIENCE

Jack Fry's Interview

Year

1997

Description

This case raises two primary issues: data sharing and recognition of the contributions of others, along with issues of collaboration, intellectual contribution and authorship.

Body

Jack Fry was a chemical engineering post-doc in Dr Hill's lab, a multidisciplinary group of engineers, biologists and medical doctors. Jack had joined Hill's lab to improve his marketability for an academic position by gaining valuable research skills in the biological sciences.

During his two year stay, Jack had collaborated with a surgeon in the group to test the utility of an experimental drug delivery system (DDS) in rats. DDS, developed by others in Hill's lab, delivered a toxic substance specifically to cancer cells, leaving non-cancerous cells intact. Jack and the surgeon were the first to test the effectiveness of DDS in living animals. They co-wrote a paper describing their initial findings; happily, a reputable journal has just accepted the paper for publication.

Jack was now close to the end of his post-doctoral fellowship, and was once again actively seeking a faculty position in a chemical engineering department. Apparently his work in Hill's lab had improved his resume, because he immediately received an invitation to interview at a prestigious university. As part of the interview process, Jack was expected to give a 45-minute presentation in which he would discuss his

research and conclude with his future research plans. Jack diligently prepared the presentation and gave a practice talk to his peers at the lab. The most common criticism was that Jack did not have enough engineering in his presentation, and that he should "find" some engineering to add to his talk to maximize his chances of getting hired.

Jack approached Bob, a graduate student in the Hill lab, who had thoroughly studied and characterized the mechanism of DDS for the past two years and reported his need for more engineering material for his interview presentation. Bob began studying DDS about one year after its initial development, and had developed a detailed mathematical model of the system, including the mass transport of the drug to the cancer cells, the kinetics of cellular uptake of the drug, and the subsequent cell death. While developing the mathematical model, Bob had, on several occasions, received helpful advice and guidance from Jack, who had extensive experience in mathematical modeling. Bob was very grateful for Jack's help, and had thanked him publicly in the acknowledgment section of the paper that had recently been accepted for publication.

Bob graciously agreed to help Jack. He spent an afternoon with Jack, discussing the mathematical model and bringing him up to speed on its details. Bob even loaned Jack some slides he had just made in preparation for an upcoming conference at which Bob would discuss his mathematical model. Jack thanked him for his help, and quickly updated his seminar presentation with Bob's mathematical model.

At the interview, Jack presented his animal model data in conjunction with Bob's mathematical model. Jack did not mention Bob or the surgeon who had helped him conduct the animal studies in his talk, but his last slide, entitled "Acknowledgments", did list Bob and the surgeon as contributors to the work. The department, very impressed with the wide range of Jack's skills and the depth of his analysis of DDS, offered him a tenure track position.

Discussion Questions

1. Does Jack have an obligation to acknowledge Bob's contribution to the mathematical model? If so, did Jack satisfy this obligation? Would Jack's acknowledgment have changed if Bob had been in the audience?

2. Are decisions concerning attribution entirely Jack's responsibility? Should he consult others? How can one ensure that the work of professional colleagues is properly identified in an oral presentation? What, if any, were Hill's responsibilities in preparing Jack for his presentation?
3. Who else does Jack have obligations to? What are these obligations? Does Jack satisfy these obligations?
4. To what extent does a presentation at an interview resemble a publication? To what extent does it differ?
5. Did Jack misrepresent his own expertise and/or his own work on the project? What if his Ph.D. work had been all experimental and involved no mathematical modeling?
6. What, if any, are the obligations of the interviewers? Should they probe Jack's level of expertise? Is the type of lab Jack comes from likely to influence their evaluation of Jack's work?
7. What about Bob? Consider these alternative scenarios:
 - a. Bob gives Jack the data with the implicit understanding that when Bob is looking for a job next year, he can use Jack's experimental data in his interview presentations.
 - b. Bob is uncomfortable giving away data he hasn't presented; he feels it is his work, not Jack's. Nevertheless, Bob feels he must let Jack use his data. If he refuses, others in the lab may see Bob as disloyal and not a team player.

Notes

Brian Schrag, ed., *Research Ethics: Cases and Commentaries, Volume 1*,
Bloomington, Indiana: Association for Practical and Professional Ethics, 1997.

Contributor(s)

Brian Schrag

Editor(s)

Brian Schrag

Rights

The Association for Practical and Professional Ethics (APPE) grants permission to use these case and commentary material with the citation indicated above.

Resource Type

Case Study / Scenario

Parent Collection

Graduate Research Ethics: Cases and Commentaries - Volume 1, 1997

Topics

Authorship

Collaboration

Data Management

Interdisciplinary Research

Plagiarism

Publication Ethics

Research Misconduct

Discipline(s)

Biochemistry

Chemical Engineering

Computer Sciences

Computer, Math, and Physical Sciences

Immunology and Infectious Diseases

Life and Environmental Sciences

Mathematics

Pharmacology

Research Ethics

Publisher

Association for Practical and Professional Ethics

Authoring Institution

Association for Practical and Professional Ethics (APPE)

Volume

1