

Case B2: Fragmented Publication

Esther Brezinska is an assistant professor at a medical school where she has been employed in a tenure-track appointment since completing a productive postdoctoral research fellowship five years ago. Two years ago, she was awarded her first investigator-initiated grant from the National Institutes of Health and is now anticipating preparation of a competitive renewal application for submission next year. Next year, she also will be evaluated for promotion to associate professor and award of tenure. Dr. Brezinska has developed a successful technique for culturing prostatic epithelial cells. Her NIH grant was awarded on the basis of that success and the promise that the technique holds for testing a variety of growth promoting and inhibitory substances. Her work has important implications for the diagnosis and treatment of prostatic cancer. At this juncture, Dr. Brezinska has tested two hormones and two growth factors with positive and potentially exciting results. Experiments utilizing five more substances are in various stages of progress, and she has plans to test at least five additional agents. She believes that it is time to publish these results beyond the abstracts and poster presentations that she has regularly presented at meetings as the work progressed. Now she faces a dilemma. The most prestigious journal in her field requests authors “not to separate fragments of a study into individual reports, but rather to strive for full development of a topic.” On the other hand, she suspects that the medical school’s promotion committee emphasizes numbers of publications over the quality of content when reviewing bibliographies of candidates for tenure. She wonders if the NIH study section that will review her renewal application will be similarly disposed. It would be easy to write up the results of the first four experiments as a single report, since they are closely related, but it might be of strategic value to have four separate references in her curriculum vitae.

1. What should be Dr. Brezinska’s primary considerations as she evaluates how to publish her research findings in the scientific literature?
2. If she opts for publishing a few comprehensive reports, rather than a greater number of less substantive papers, by what mechanism can her various evaluators know that she is attempting to make a more scholarly contribution?
3. A Japanese scientist whom she knew as a postdoctoral fellow has offered to translate Dr. Brezinska’s publications into Japanese and to submit them to a Japanese language journal that appears to be anxious to publish her work. Dr. Brezinska rationalizes that this will increase readership of her work in Japan, enhance her international reputation, and at the same time provide additional titles (in Japanese) in her curriculum vitae. Would she violate any fundamental principles in doing so?

Source: www.research.umn.edu/ethics/curriculum/authorship.html

B3: Criteria for Authorship and Attribution

Bob Powell, a postdoctoral fellow in biochemistry, has just completed a manuscript detailing the results from the first project in which he has taken a leading role. The focus of his project has been to discern the ways in which humans metabolize sulfites, a class of chemicals commonly used to preserve wines and dried fruits. Although he had developed the rough outlines of the project on his own, he owes much to individuals both inside and outside his lab. The assistance he received from others includes the following:

- A colleague at another university, a toxicologist specializing in food additives, shared with Bob his previous work on the *in vivo* activity of sulfites, information that allowed Bob to choose the ideal animal model for the experiment—the Abyssinian field mouse.
- A friend of his, who happened to be a wildlife specialist, provided Bob with much advice on rearing and maintaining a colony of Abyssinian field mice such that he would have a stable pool of animal subjects.
- A highly experienced technician in the lab gave Bob advice on modifying an assay he had been using, which finally allowed him to measure successfully sulfite metabolites in mouse urine. This technician also assisted in writing up the methods section of the paper.
- The number of assays that Bob had to conduct was quite sizable and more than he could manage on his own, given other demands of the project. Thus, an undergraduate college student collected most of the urine samples and conducted the assays yielding the data.
- Finally, a senior researcher in a neighboring lab who took an interest in Bob’s career offered to review the initial drafts of Bob’s paper. By the end of the writing process, this researcher had helped Bob outline the paper, suggested a few additional experiments that strengthened the paper’s conclusions, and made a number of editing changes in the penultimate draft that enhanced the paper’s clarity.

Questions:

1. What kind of attribution should be given to each of these individuals who contributed in one way or another to Bob’s project? For example, who should be recognized as an author and who should receive an acknowledgment in the paper? Who does not merit formal recognition? What criteria should be applied when determining whether to list someone as an author? to note someone’s contributions in the acknowledgments?
2. What are the responsibilities of authors in representing the contributions of others?
3. At what point in the process of conducting and reporting on one’s research should decisions concerning authorship and acknowledgments be made?
4. Are decisions concerning attribution entirely Bob’s responsibility? Should he consult with others? Why or why not?

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Case B4: Courtesy Authorship

Dr. Jonathan Perry, a tenured professor, used his sabbatical to visit the laboratory of Dr. Brian Chandler, a widely published and respected senior scientist. During his stay in Dr. Chandler's lab, Dr. Perry hoped to learn certain techniques of molecular biology that he would employ in his own research. To afford Dr. Perry this opportunity, Dr. Chandler assigned him a leading role in a new project that the lab was undertaking. After seven months, laboratory work on the project was completed, and Dr. Perry returned to his own institution to begin work on a paper to report the final results. Ultimately, many drafts of the paper were faxed back and forth between laboratories until Dr. Perry received the penultimate version from Dr. Chandler's lab. On this version, a new name, J. B. Martin, Ph.D., appeared among the authors listed. Dr. Perry had never met Dr. Martin, never worked with him on any technical aspect of the project, and had never heard his name or ideas mentioned in the laboratory meetings in which the project was planned or the results discussed. Dr. Perry called Dr. Chandler and questioned the addition of Dr. Martin as an author on the manuscript. Dr. Chandler stated that, due to prior collaborations, it was a longstanding policy to include Dr. Martin on all publications coming out of Dr. Chandler's laboratory. Dr. Martin's laboratory had a reciprocal agreement, he added. Dr. Perry stated that he did not feel that Dr. Martin was a qualified author on this particular paper since he had not made a significant contribution to the work being published. Dr. Chandler replied that Dr. Perry did not have the right to question the policy of a laboratory in which he had worked as an invited guest. Dr. Perry maintained his position that Dr. Martin did not belong as an author on the paper and further stated that if Dr. Chandler insisted on including Dr. Martin's name, then, as first author, Dr. Perry would not allow the paper to be submitted. Dr. Chandler responded, "Well, you can withdraw your name, but the work was done here in my laboratory and we plan to submit the paper for publication."

1. What do you think of the reciprocal agreement between Dr. Martin's and Dr. Chandler's laboratories? Were Dr. Perry's concerns legitimate?
2. Dr. Perry was a tenured professor at a different institution from Dr. Chandler's. Under these circumstances it may have been relatively easy for him to voice his concerns to Dr. Chandler. What difficulties might a postdoctoral or graduate student in Dr. Chandler's lab have in handling this situation? How might those difficulties be overcome?
3. The results of this project are significant and provide a novel insight into the field that could prove beneficial to many investigators in the area. Therefore, should Dr. Perry compromise with Dr. Chandler so that the paper can be promptly published? Which consideration—authorship or publication—is more important in the advancement of science?
4. What do you think of Dr. Chandler's statement in the concluding sentence of the case? Would it be appropriate for Dr. Chandler to proceed with publishing the paper? What are Dr. Perry's and Dr. Chandler's rights with respect to the data and the publication of the data?
5. Assume that Dr. Martin in fact reviewed and commented on all drafts of the paper in question. Could this contribution to the effort be significant enough to merit authorship?

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Case C1: Reviewing Research Grant Applications

Don Fletcher is a full professor at a renowned university and has a reputation as an outstanding scientist. His work has had a number of potentially profitable practical applications, which led him to join with some venture capital partners in forming a company to commercialize his inventions. Now several years old, the company is a financial success.

Dr. Fletcher is also a member of a National Institutes of Health (NIH) study section one of the many peer review groups at the NIH that evaluate the scientific merit of grant applications. Despite the long hours, he is pleased to serve since he recognizes the importance of his contributions to the peer review system. In addition, he believes it is an excellent way of keeping absolutely current with the work done in his and related fields. He is very aware of the importance of confidentiality as reiterated in the statement read before each study section meeting.

Dr. Fletcher just returned from reviewing a fascinating grant application from a scientist working in a closely related area of research. After evaluating the application's preliminary work report, Dr. Fletcher came to realize that much of his own current NIH-funded and corporate research was proceeding down a blind alley. A meeting to review his research team's progress is fast approaching, and he is due at corporate headquarters tomorrow to discuss his company's research and development projects.

1. What could Dr. Fletcher report to his research team? To his company?
2. Should Dr. Fletcher have proceeded differently in the case of this grant review?
3. Some people may have difficulty in segregating ideas that they gain in the course of reviewing grant applications from ideas they develop on their own or glean from nonconfidential sources. If you were in Dr. Fletcher's situation, how would you ensure that you did not benefit inappropriately from information or ideas acquired during the course of your duties as a study section member?

Source: www.research.umn.edu/ethics/curriculum/peer_review.html

Case C2: Reviewing Submissions to Journals

Anne Baldwin is a postdoctoral fellow working in a highly specialized area of research on lentiviruses and prions. Her boss, Dr. Sam Richardson, recognizes Anne's talents and believes that she is the most promising postdoctoral fellow in his lab.

Anne's contributions have included aiding Dr. Richardson in identifying a rather obscure pathway by which the prion responsible for Cruetzfeldt-Jacob disease, a degenerative brain disorder, emerges from years of latency to initiate active infection.

When Dr. Richardson is asked by a leading neurobiology journal to review an article on the pathology of Creutzfeldt-Jacob disease, he decides to involve Anne because of her skills and specialized experience. He makes a copy of the manuscript and asks Anne to write her own critical review of the piece, just as if she were the actual reviewer. This exercise, he reasons, would afford Anne a good opportunity for exposure to the process of peer review, while putting her in touch with the latest literature on her primary field of research.

1. Is Dr. Richardson's idea a good one? Why or why not? Are there other ways for him to involve Anne in reviewing the article?
2. Dr. Richardson's motives for having Anne participate in this manner seem well-intended. What might be some negative reasons for involving Anne in this way?
3. What concerns might Dr. Richardson's approach pose for the author of the article? What issues are posed for the journal in which the article may appear?
4. If Anne feels uncomfortable about Dr. Richardson's request, how might she respond?
5. Assume that rather than sharing the paper with Anne, Dr. Richardson distributed it to the laboratory's "journal club" for discussion. What kind of problems does this scenario pose?

Source: www.research.umn.edu/ethics/curriculum/peer_review.html

Case B6

Dr. Alice Charles, a mid-career scientist, was revising and updating a book chapter. This led her to review other articles on the same subject to help determine what new material to cover. During the course of her reading, she came upon a chapter in a major text by Dr. Chris Long, a departmental chair at a leading medical school that contained long passages from her previous chapter without attribution. Dr. Charles called Dr. Long and confronted him with her finding. At first, he vehemently denied having used any of Dr. Charles's text inappropriately. Dr. Charles then faxed Dr. Long copies of the offending passages. After some delay, Dr. Long finally responded, acknowledging that the language was indeed remarkably similar. Dr. Long noted that he had engaged younger members of his research group to write portions of the chapter because he was very busy at the time that the deadline was approaching. Furthermore, to defend himself, he pointed out that much of the original research on which her chapter was based was derived from the work of his laboratory. He admitted only to negligence in not adequately monitoring the activities of his subordinates. Dr. Charles replied that the subordinates were not acknowledged in Dr. Long's chapter either, and that admission of plagiarism required more than a apology. She indicated her intention to report the matter to Dr. Long's dean and the editor of the text.

1. Did Dr. Charles act appropriately? Would you have done anything differently? Considering the difference in status between herself and Dr. Long, was she taking a professional risk?
2. Did Dr. Long do anything wrong? What if he were copying his own previous writings?
3. How would you have handled this matter if you were Dr. Long and were confronted with Dr. Charles's revelations?
4. If you were Dr. Long's dean, how would you handle Dr. Charles's letter, which contained copies of the plagiarized texts?
5. Upon hearing Dr. Charles's complaint, what would you do as editor of Dr. Long's textbook?

Source: www.research.umn.edu/ethics/curriculum/plagiarism.html

Case B7

Maurice LaCroix, a postdoctoral fellow at a research-intensive medical school, was asked by faculty member Dr. Frank Hardy to co-author an in-depth review article on hemolytic anemias for a leading medical journal. Publishing this chapter was important for Maurice because it would establish his credibility in the field and give him professional exposure. Maurice felt that preparation of this chapter would be easy because he would be referring substantially to his own recent research and to that of Dr. Hardy's laboratory. He had all the data and papers on disk. Shortly after the issue appeared, Dr. Hardy was called by Dr. John Barrett, a colleague and co-author on many papers that Maurice and Dr. Hardy previously published jointly. "You plagiarized me," he said. "You have no right to extract whole passages from our papers without quotation marks, even if you did reference the papers in the text. It's as though my contribution never existed. You should have specifically acknowledged the directly quoted text or made me a co-author of the review. Besides, you need permission from the publisher to reprint material verbatim." Maurice was shocked when he heard this. He looked back at the review and papers and found that he indeed had utilized whole sentences from the papers and one whole paragraph describing the methods. However, although the three individuals had collaborated, it was Maurice who actually wrote the sections in question and who submitted the papers in which they were contained. In addition, he had been the senior author on two of the key papers. Maurice called Dr. Barrett to apologize and indicated that there are only so many ways to say the same thing. Unmollified, Dr. Barrett said that he planned to call the editor of the journal and inform him of the plagiarism.

- Was Dr. Barrett's complaint legitimate?
- Do you believe Maurice's actions constituted plagiarism?
- To what extent were Maurice and Dr. Hardy each responsible for the contents of the chapter? Could Dr. Hardy be partly responsible for the situation that developed?
- Assume that Dr. Hardy brought the matter to the attention of the medical school dean. If you were the dean how would you handle it? If Maurice admitted to inadvertent plagiarism, what kind of sanctions would you, as dean, be inclined to consider?
- If you were the journal editor and received a letter from Dr. Barrett describing the situation given in the case, what would you do?
- Dr. Barrett asked Dr. Hardy to rectify the situation. What would you suggest?

Source: www.research.umn.edu/ethics/curriculum/plagiarism.html

The Diane Archer Case

Professor Diane Archer is a tenured member of a biology department at a major Midwestern university. She has been in the department for 15 years, and during that time she has supervised the work of 20 Ph.D. students. As part of the mentoring process, she has worked closely with her students, teaching them the ropes of writing grant proposals and on occasion inviting students to assist her in reviewing NIH grant applications.

Professor Archer is currently in her last year on an NIH study section. As she is reviewing a group of proposals, she comes upon one written by Charlie West, a former graduate student of one of her close departmental colleagues. Archer knows and remembers Charlie West because she had solicited his help two years earlier in reviewing a proposal closely related to West's own area of research. As she now reads West's proposal, Archer is impressed with the scientific soundness and fine writing style in the Background section. She notes, however, the extremely terse and awkward phrasing in the Research Design and Methods.

Perplexed by this shift in style, Archer retrieves from her files a grant proposal West had reviewed with her two years earlier. She is dismayed to see that West has used verbatim virtually the entire Background section of the earlier proposal for his own current proposal.

She decides to contact West directly, and confront him with her finding. She plans to advise West that what he has done constitutes plagiarism and suggest to him that he withdraw the proposal. If West agrees, and withdraws the grant application, Archer feels she need take this incident no further.

1. Should Archer proceed with her plan to contact West? Why or why not?
2. What are some other alternatives and their pros and cons?

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Intellectual Property Case 3

A faculty member has taught a senior-level course in quantum mechanics for several years and has developed an extensive set of notes that she plans to convert into a new textbook as soon as she can find the time. She is close to the end of the term for this year's course when she makes a rather alarming discovery—a student in her class has been selling the notes for her class at a small profit to the other students. The notes are an expanded version of her lectures and contain material from her visual aids, as well as diagrams copied from the textbook.

The student claims that he is only helping the other students learn a very difficult subject and that the profit barely covers his expenses. However, it soon comes to light that he has been doing the same thing for several other courses and actually hires students to take notes in other classes, which he then develops into a sellable form.

The faculty member is very upset. Not only is her lecture material being sold without her permission, but the student has also copyrighted it.

1. What kinds of intellectual property are involved here?
2. Who owns the intellectual property described here?
3. What principles lead you to that conclusion?

Source: http://www.research.umn.edu/ethics/curriculum/intellectual_property.html

Intellectual Property Case 5

The University of Northern South Dakota at Hoople (UNSD) commissioned a sculpture to honor the renowned composer P.D.Q. Bach. A well known faculty member from UNSD's Art Department produced the sculpture and was paid a handsome sum for the statue. The faculty member felt more than adequately rewarded for his work and thought no more about the statue after it was dedicated.

However, some years later, the faculty member was in a music store and noticed a display for the latest recording of P.D.Q. Bach's Ephygenia in Brooklyn which featured a picture of his statue. The same picture was on the front of every CD. Upon inquiry at the Office of the Vice President for Research, he learned that UNSD receives a royalty for every copy of the CD sold and has collected a sizeable sum from the recording company for the use of the picture of the statue.

The professor is upset because he believes he should have received a part of the royalties.

1. What kinds of intellectual property are involved here?
2. Who owns the intellectual property described here?
3. What principles lead you to that conclusion?

Source: http://www.research.umn.edu/ethics/curriculum/intellectual_property.html