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The New Academic Environment and Faculty Misconduct

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Abstract

Faculty members are expected to abide by codes of conduct that are delineated in institutional policies and to behave ethically when engaging in scientific pursuits. As federal funds for research decrease, faculty members face increasing pressure to sustain their research activities, and many have developed new collaborations and pursued new entrepreneurial opportunities. As research collaborations increase, however, there may be competition to get credit as the first person to develop ideas, make new discoveries, and/or publish new findings. This increasingly competitive academic environment may contribute to intentional or unintentional faculty misconduct. The authors, who work in the Dean's Office at a large U.S. medical school (University of California, San Francisco), investigate one to two cases of alleged misconduct each month. These investigations, which are stressful and unpleasant, may culminate in serious disciplinary action for the faculty member. Further, these allegations sometimes result in lengthy and acrimonious civil litigation. This Perspective provides three examples of academic misconduct: violations of institutional conflict-of-interest policies, disputes about intellectual property, and authorship conflicts. The authors also describe prevention and mitigation strategies that their medical school employs, which may be helpful to other institutions. Prevention strategies include training campus leaders, using attestations to reduce violations of institutional policies, encouraging open discussion and written agreements about individuals' roles and responsibilities, and defining expectations regarding authorship and intellectual property at the outset. Mitigation strategies include using mediation by third parties who do not have a vested academic, personal, or financial interest in the outcome.

A career in academic medicine can be rewarding, but it has become more complicated in recent decades. Faculty members experience significant pressure to maintain clinical excellence, to teach and train the next generation of physicians and scientists, to conduct scientific research, and to generate clinical and research funds to support their salary—all while complying with a growing number of fiscal and regulatory requirements. As federal funds for research decrease, many faculty members have diversified their scholarly collaborations and created new interdisciplinary and institutional collaborations; however, these collaborations may increase the complexity of professional relationships, and the increased competition for funding may lead to pressure to get credit as the first person to develop new ideas, make new discoveries, and/or publish new findings, so as to achieve tenure and academic promotion.[1,2] At the organizational level, academic institutions are increasingly pursuing new relationships with industry and other health care institutions to achieve their research, clinical, and educational goals. These dizzying changes in academic medicine can produce confusion about the rules of engagement, and they may create difficulties not only for faculty members trying to understand the new regulations but also for academic institutions attempting to promulgate new standards. This new academic environment may lead to either intentional or unintentional faculty misconduct.[1,2]

As vice dean (E.F.-A.) and associate dean (R.B.) at a large U.S. medical school (the University of California, San Francisco [UCSF]), we investigate one to two cases of alleged faculty misconduct each month, wherein faculty members are accused of not complying with university policies or engaging in unethical behavior. Investigations of faculty misconduct are stressful and unpleasant.[3] In addition to the sense of distress they create, investigations may culminate in serious disciplinary action (including dismissal) for the faculty member.[3] In addition, some allegations of misconduct end in civil litigation, which is expensive and difficult for everyone involved. Thus, to support their faculty, staff, and students, universities should develop strategies to mitigate or prevent situations that culminate in allegations of misconduct.

Some types of faculty misconduct are related to professionalism issues.[4] In this Perspective, we describe three types of misbehavior that relate to academic issues: conflicts of interest (COIs) in research, intellectual property disputes, and authorship disputes. We use examples from case law and from our experience to help faculty members and others learn about the types of behavior that should be avoided, especially in this new era of entrepreneurship, mergers, and collaborative ventures. We also present strategies for prevention and intervention that may be helpful to academic leaders who manage these issues. The case law we cite is part of the public record and the names are not disguised, whereas the examples from our institution have been aggregated,

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modified, and disguised to protect confidentiality.

Violation of Institutional COI Policies

Most, if not all, universities and academic medical institutions have COI policies that prohibit faculty members, especially those in their medical schools, from holding executive or managerial positions in for-profit, health-related businesses (these policies may be part of the overall guidelines and rules governing faculty experience).[5,6] The term "conflict of interest in research" refers to situations in which financial or other personal considerations may compromise, or have the appearance of compromising, a researcher's professional judgment in conducting or reporting research.[7] The rationale underlying such policies is that COIs may influence professional judgments, jeopardize scientific integrity, and ultimately erode the public's trust in medical research and even clinical care.[8–11]

At our medical school, when a faculty member is offered a managerial or executive position at an outside company, the faculty member is required to submit a formal request to an independent committee called the Chancellor's Conflict of Interest Advisory Committee.[7] This committee reviews the request and issues a binding course of action. This process allows the faculty member to explain the details of the position and to describe the potential effect on his or her responsibilities to the university. The intent of requiring disclosure is to ensure that profit-seeking motives do not unduly influence an academic faculty member's primary responsibilities.[11]

For example, in one COI case, a faculty member failed to disclose financial relationships to an outside company on the standard forms. A colleague, who heard the faculty member discuss his financial interests at a social event, brought the information to the attention of the division chief. The accused faculty member stated that he disclosed his *administrative positions* in outside companies but did not disclose his *financial interests* because he did not believe that the financial interests represented a conflict. The faculty member believed that he would recognize a potential conflict if it arose, and stated that he was not aware of the financial disclosure requirement.

In another case, a faculty member with technological expertise was named an officer of an outside company. This COI came to light when an anonymous person reported through the whistleblower hotline that the faculty member was violating the university's policy by serving as an officer of the company. This type of dual appointment is prohibited because the faculty member would be occupying two roles, and what was good for the company might not be good for the university, or vice versa. The whistleblower reported learning about the faculty member's position while reviewing the company's Web site. When we investigated the complaint, the faculty member acknowledged that she was an officer of the company, but she assumed that the university would support her entrepreneurial endeavors because the company's work was an innovative extension of her scholarly, university-based work. She stated that she did not realize that her leadership role within the company could represent a COI and thus did not consult with her division chief or submit a request to the Chancellor's Conflict of Interest Advisory Committee.

Both of the above cases involved faculty members who reported being unaware that they were violating the university's COI policies. During our investigations, we uncovered evidence suggesting that faculty misconduct had indeed occurred because the university's policies were breached and ignorance is not a defense. We do not know why these faculty members were unaware of the institutional policies; possibly communication was insufficient, or, possibly, the policies were appropriately disseminated but ignored. At our institution, the range of penalties for violating the COI policies includes written censure, salary reduction, demotion, suspension, denial or curtailment of emeritus status, and even dismissal.[12] Both of the cases described above resulted in written censure for the two faculty members involved (a letter of censure was placed in the personnel file of each) and a requirement for increased education regarding UCSF's COI policies and reporting requirements. The faculty members in question were also required to withdraw from their positions in the outside companies until the Chancellor's Conflict of Interest Advisory Committee could conduct the requisite review.

At UCSF, COI policies are distributed to faculty members via e-mail and are included in courses about becoming an entrepreneur; however, when outside speakers give such courses or lecture on entrepreneurship, they may not include UCSF COI policies in their presentations. Therefore, we encourage the use of multiple venues (faculty meetings, annual performance evaluations) and diverse media formats (e-mail, listserves, Webinars, fliers) for dissemination of policies and other essential information.

As the above examples demonstrate, ensuring that policies and procedures are communicated to all faculty members in an effective and timely fashion is challenging for academic leaders and administrators. At our institution, we rely primarily on department chairs to disseminate vital information to faculty, which allows each chair to tailor the information and address specific concerns. We recommend the use of signed attestations as an additional strategy to reduce violations of institutional policies. The signed acknowledgment, retained in personnel files, indicates that faculty members are aware of institutional policies that relate to entrepreneurial and scholarly endeavors. We recommend that these attestations be signed when a new faculty member is hired and every five years, or sooner if a change in policy occurs.

Other effective tools to help prevent COIs include Internet-based training modules on the responsible conduct of research, such as those provided through the Collaborative Institutional Training Initiative at the University of Miami.[13] Such training modules incorporate best practices in education and feature cases and quizzes that test participants about their knowledge of research conduct.

In addition to disseminating policies to new and existing faculty, academic institutions have an obligation to ensure fair and equitable implementation of policies. Boyd and colleagues[14] reviewed the implementation of policies related to COIs at seven University of California campuses. These investigators found that even though all seven institutions have the same disclosure requirements, the seven varied in the structure of the

committees that review the disclosure forms as well as the types of activities each identified as conflicts. Boyd and colleagues[14] recommended that institutions develop standard decision-making protocols that reflect the values of each individual campus while upholding national, statewide, and professional standards of research behavior.

Intellectual Property Disputes

Interdisciplinary training and collaborative research are increasingly common in academia and are expected to become even more prevalent.[15] Although new types of colleagues and collaborative research offer opportunities for intellectual engagement and funding, determining who developed an idea or technique and who, therefore, deserves the appropriate academic "credit" can be very difficult. Environments that emphasize discovery, such as academic medicine, often cultivate intense competition to be the first person to identify and publish a scientific finding. For example, a junior faculty member at our institution believed that he had developed a novel set of diagnostic criteria for a rare medical condition, and when he presented the criteria at a professional meeting, he identified himself as the person who developed the criteria. His senior faculty collaborator did not agree that the criteria were developed by the junior investigator. The ensuing disagreement resulted in a formal complaint to the Office of Academic Affairs (i.e., the Dean's Office) against the senior faculty member. We recommended mediation, and the mediator was able to resolve the conflict. After considering the case, the mediator opined that the senior collaborator deserved most of the credit but that the junior faculty member also deserved recognition through a first-authored paper and letters of reference acknowledging his contribution. Both parties reluctantly agreed that this was an adequate resolution, and the junior faculty member was indeed listed as the first author on a relevant paper.

Although the medical literature contains few reports of intellectual property disputes, case law offers insight into disputes that have culminated in litigation. In *Demas v. Levitsky*, for example, a graduate student in the College of Agriculture and Life Sciences at Cornell University (Demas) alleged that a professor of nutritional science (Levitsky) had stolen her ideas and intellectual property, including techniques, methodology, and research protocols.[16] Demas alleged that Professor Levitsky submitted a grant application which plagiarized her dissertation and that he took full credit for her research. Characteristic of these types of cases, the parties disagreed on the facts, including whether Demas's research and methodology were original. Ultimately, some of Demas's allegations were dismissed on technical grounds related to an expired statute of limitations, but the court upheld other charges of fraud and breach of contract.[16]

In another case, *Kauffman v. University of Michigan Regents*, Professor Kauffman, the former chair of aerospace engineering, alleged that he prepared a proposal for a design center. The proposal was allegedly revised and then funded by a foundation. In the lawsuit, Professor Kaufmann alleged that his intellectual property had been unlawfully stolen and expropriated by the university. A lower court dismissed the allegations, and that court's decision, in favor of the University of Michigan, was affirmed by the court of appeals.[17] Although the university prevailed, it devoted a significant amount of time and resources to this matter.

At UCSF, we encourage the use of mediation as an initial strategy to resolve disputes about intellectual property. Specifically, we ask each party to present his or her perspective to a third party, usually a senior faculty member who is respected and endorsed by both parties involved but does not have a vested interest (academic or financial) in the outcome. These disputes are difficult to resolve because there is almost always a subjective aspect to the assignment of ideas or technical developments, particularly among large research groups or collaborative teams. Although we have found that mediation can be successful, disputes about intellectual property often end in acrimony and/or litigation despite earnest attempts at mediation.

Communication is the key preventive strategy. We strongly encourage researchers, at the *beginning* of each project, to explicitly define individuals' roles and responsibilities and to outline the process for adjudicating disputes. Members of a research team should have a *written* agreement regarding these roles, responsibilities, and processes because interpersonal discussions can result in different perceptions of what was discussed or decided. When coinvestigators have a disagreement or dispute, a written document serves as a helpful common reference. The principal investigator should take the lead in the initial phase of disputes; when the principal investigator is involved in the dispute, the first attempts at mediation should be undertaken by a senior colleague within the department.

Authorship Disputes

Authorship, especially being first author or senior author, is important for academic advancement.[18,19] Although authorship and intellectual property have always been areas prone to disagreement, we believe that the new emphasis on collaborative research may increase the likelihood of authorship disputes. In fact, in 2002, Woolston[20] reported that many graduate students and postdoctoral researchers believe that they have been denied rightful authorship by more senior faculty members, noting that "junior scientists accept academic theft as a way of life." The International Committee of Medical Journal Editors defines an "author" as someone who meets four criteria:

- "substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
- drafting the work or revising it critically for important intellectual content; AND
- final approval of the version to be published; AND
- agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved."[21]

However, applying abstract terms such as "conception," "design," "acquisition," "analysis," and "interpretation" to real-world disputes can be difficult.

To illustrate, we handled a complex authorship dispute at UCSF in which a resident submitted a manuscript to a journal, left the university, and was not aware that the journal requested

extensive revisions. A second resident collected additional data and undertook the revisions. The faculty member who mentored both residents named the second resident as the first author of the revised manuscript. After the manuscript was published, the original resident filed allegations of misconduct against the faculty member because she had not been informed of the journal's request for additional information or offered the opportunity for further involvement. She had left the university to travel abroad, and the faculty member assumed she was not available to make the revisions. During our investigation, we determined that the faculty member appropriately handled the issue because the principal investigator has the right to reassign the first author on the basis of intellectual contributions. This approach is consistent with the view of legal scholars: that the faculty advisor or principal investigator controls every aspect of the research process, including determining project focus, selecting students, hiring staff, allocating funds, and making publication decisions.[18] However, we also determined that the faculty member should have informed the original resident of the journal's request for extensive revisions and his decision to change the first author designation. Again, communication is an important tool to mitigate the risk of an authorship dispute.

Authorship disputes have the potential to be highly contentious. Disgruntled would-be authors may choose to bypass the difficult conversation with their co-authors and, instead, express their displeasure about authorship decisions by writing directly to the journal considering the work. In our experience, the journal editor usually suspends the manuscript review or publication until the authors have resolved the dispute and communicated the outcome to the journal, which ultimately prolongs the entire route to publication.

Some authorship disputes result in civil litigation. In *Weissmann v Freeman*, two faculty members at Albert Einstein College of Medicine collaborated on multiple nuclear medicine papers.[22] Subsequently, Dr. Heidi Weissmann wrote a single-authored chapter for a published book; the chapter contained some new data but was based on previous papers that she had jointly authored with Dr. Leonard Freeman. Later, Dr. Freeman included Dr. Weissmann's published chapter as part of his syllabus in a review course. Freeman made two changes to Dr. Weissmann's chapter; he added three words to the title and deleted Dr. Weissmann's name, replacing it with his own name. When she learned Dr. Freeman had copied her chapter, Dr. Weissmann sued Dr. Freeman for copyright infringement and sought damages. The lower court ruled that Dr. Freeman had the right to use the chapter because it was derived from collaborative work; however, an appeals court reversed the lower court's decision on the basis of the rationale that the chapter by Dr. Weissmann was copyrighted.[22] The chapter was copied by Dr. Freeman in 1987, and the appeals court did not hand down its decision until 1989. This case, like both the *Kauffman v. University of Michigan Regents* case[17] and the case below, illustrates how far these disputes can go, resulting in great expenditures of time, effort, frustration, and, no doubt, expense for the parties.

In another case, *Weinstein v. University of Illinois*, Dr. Weinstein, an assistant professor of pharmacy administration, sued his colleagues and the university over a disagreement regarding authorship order. Dr. Weinstein and his coauthors published a clinical program for practicing pharmacists in the *American Journal of Pharmaceutical Education*. In the lawsuit, Dr. Weinstein alleged that he supplied most of the ideas, did most of the work, and had a verbal agreement under which he would be first author. Weinstein wrote two drafts of the paper which his coauthors then revised extensively; in the published version Dr. Weinstein was listed as the third author. He sued his co-authors as well as the university because he felt that his co-authors misappropriated his work and that he deserved to be first author. Furthermore, Dr. Weinstein was searching for employment, and he believed that the appearance of his name in third place would diminish his accomplishments in the eyes of other, hiring institutions. Dr. Weinstein's claim was eventually rejected by the court, partially on the grounds that this was an issue for coauthors and the university to resolve.[23] Dr. Weinstein submitted the first two drafts of the paper in, respectively, January 1984 and January 1985; the article was submitted to the journal in July 1985 and published in summer 1986; and the court did not hand down its final decision until March 1987. The case, once again, illustrates how acrimonious—and protracted—authorship disputes can become if they are not resolved informally.

At UCSF, we have successfully applied an informal resolution process for authorship disputes. As with intellectual property disputes, we ask a senior faculty member with no vested interest in the matter to consider the facts, to render an opinion about whether an individual meets the criteria for "substantial intellectual contributions," and then to provide a recommendation regarding authorship. On occasion, two first coauthors have been designated. An increasing number of journals allow co–first authors in recognition of circumstances in which two or more authors have "contributed equally" to a study.[19]

Although education and clear written expectations may not eliminate all authorship disputes, we believe that many disputes are based on misinformation or misinterpretation. Trainees, in particular, may not understand the principal investigator's role in assigning authorship. Thus, the prevention of authorship disputes requires that all parties—be they students, residents, postdoctoral scholars, or faculty members—receive clear information about authorship expectations during their orientation and in their mandated responsible conduct of research courses. A discussion among all potential authors regarding authorship should occur *before* the research begins, and this discussion should be documented. The discussion should include designations of first, senior, and corresponding authorship as well as the criteria for changing these designations. In addition, the discussion and any documentation should include the protocol if someone does not complete his or her assigned tasks and/or leaves the institution.

Summary

No national databases track faculty misconduct in academic medicine, so the actual number of allegations levied against faculty members in the United States is unknown. The modern academic faculty member faces intense competition to succeed in a resource-

constrained environment, and academic pressure may compromise scientific integrity.[1,2] In addition, faculty members work in an environment of numerous, evolving, and potentially confusing strict regulatory demands and guidelines that govern oversight and mandate the reporting of COIs. For example, the recently implemented "Sunshine Act" requires pharmaceutical and medical device companies to disclose payments to faculty.[5] Such increased and changing regulations may result in a greater number of allegations of COIs, and new prevention strategies (in addition to those already in place) may, therefore, be needed. Of course, academic institutions and faculty members generally prefer to avoid legal action, but when junior researchers or graduate students feel that their research is misappropriated, they may turn to the legal system rather than seek institutional resolution.[24] Our institutional experiences and strategies may be helpful to faculty members who want to avoid allegations of misconduct and lawsuits, as well as to academic leaders who need to address issues related to COIs, intellectual property, and authorship.

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