Research Paper Authorship:
Expert Comments on Vexing Questions
A Note from the Publisher

Dear Professional:

Thank you for ordering “Research Paper Authorship: Expert Comments on Vexing Questions” from the Principal Investigators Association Resource Library. This compilation is designed to help you with everything PIs need to know about authorship.

This unique assembly is a treasure chest of tips, tactics, and advice for any investigator concerned with Intellectual Property creation and protection.

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Quality Trumps Quantity of Data
Are You Ready to Publish? Factors to Help You Decide

When it comes to publishing, *when* is not nearly as important as *why*. It’s always important to publish promptly, of course, and there may be rare extenuating circumstances when it’s necessary to publish before you feel you’re fully ready. But experts generally agree that the decision on when to get your results into print should be driven by the science — not simply your desire to see your name in the high-end journals as often as possible.

The National Institutes of Health’s (NIH) Office of Extramural Research tells Principal Investigator Advisor: “The NIH wants investigators to publish their work as a means of building the scientific knowledge base for biomedical research. However, the timing and frequency is really the decision of the investigative team.”

“The NIH will want you to wait until the circle has been closed via the final report,” says Martha S. Mihaly, PhD, an independent consultant in Washington, D.C. “When you apply for your next grant, you can always cite your previous research as ‘in review,’ if you’ve submitted it for publication. The NIH will understand.”

“I have an NSF grant and served on the review panel for three years for social psychology. Both quantity and quality count,” adds Linda M. Isbell, PhD, an associate professor of psychology and graduate program director at the University of Massachusetts. “A high quantity of high-quality papers is best, of course, but if there has to be some sacrifice — and there usually is! — I still favor quality over quantity as a grant reviewer.”

Your judgment as a scientist thus comes into play. “In my department, it’s entirely up to the principal investigator,” notes Isbell. “Of course, more high-quality publications are rewarded, so there is some pressure to get work published. But the decision on how exactly to do that is up to the PI.”

Of course, things are rarely as black and white as you’d like them to be. Stories abound about PIs feeling under pressure to publish before they’re ready — because they want to be ahead of results of similar work from a competing lab, thereby establishing some ownership around the findings.

Conversely, there may be times when the private company sponsoring your research has legal paperwork work yet to be completed before you can go public with details on a product that has to be patented.

Factors influencing your decision

But for the most part, the “when to publish” call is yours — and it requires striking a balance among a number of factors.

“First, a PI should have reasonable confidence in the findings,” Isbell stresses. “If you doubt whether they’ll replicate, it’s better to conduct the replication first. If the work is published and then not replicated by others later, that could negatively impact your career.”

Of course, it’s always good to get your name on papers as soon as you can to increase the speed with which you get established in your field. But if you have great data, yet need some additional time to publish in a top-tier journal,
“it’s usually better to wait rather than to publish in a lower-level journal more quickly without the extra data,” Isbell adds. “Publications in higher-level journals will have more impact on your field — and more impact on your career, such as an increase in funding opportunities.”

Addis Mihaly: “It’s more important to establish yourself as an ethical researcher than as a groundbreaking one. Very little research is truly groundbreaking, but an unethical or nonprofessional incident can haunt you throughout your career.”

Gregory Lanza, MD, PhD, a professor of medicine at Washington University Medical School in St. Louis, says he never publishes until he’s repeated an experiment two or three times. “That said, once you have a good result, you do want to publish ASAP (as soon as possible) for the recognition and for the potential impact for other people to move the results down the line,” he says. “Don’t sit on data until you prove them to the 9th degree. Ideally, you want a balance between the two.”

Her work’s fate before peer reviewers is a big consideration for Elisabet Nalvarte, PhD, in deciding when to publish. “You definitely want to publish when the research is ready,” the research associate professor at the University of Missouri says. “If I publish something when my gut feeling is ‘I’m ready,’ then getting published is practically a done deal. “But if I have the feeling that I’m not there and I push the paper on a ‘maybe,’ publishing takes a longer time and more effort.”

Reviewers can be tough on “not-ready-for-prime-time” research, too, Nalvarte adds. “The way we used to publish five to 10 years ago is no longer the case,” she says. “The standards have been raised because of the increasing complexity of knowledge.”

Nalvarte also notes that you may not get to make the when decision all by yourself, because PIs increasingly work as members of teams. “You need the blessing of the all others to publish,” she points out. “The manuscript goes through all of them to get their seal of approval. Hopefully, you won’t have one person saying, ‘I don’t want to publish yet’ when all the others do. Fortunately, that doesn’t happen very often.”
Quality Counts More Than Quantity, Experts Say

How Many Papers Should a PI Publish Each Year?

You know that published papers are the life’s blood of a career in scientific research. They feed into your funded activities, your professional reputation and the important work you’re conducting in your lab.

But don’t let the principal investigator’s imperative to publish drive you into a mad frenzy of submitting research to any journal you can as often as you can. You don’t do yourself or your science any favors by spreading yourself too thin or by compromising the impact of your discoveries by treating them like a means to an end.

Focus instead, experts suggest, on producing just the right amount of published research each year in appropriate journals only. Just as too few published papers in a year can raise eyebrows — leading granting organizations and other funders to wonder just how you’re spending their money — too many published papers can mean you’re more intent on getting into print than on making important discoveries.

Neither reflects well on you, your lab or your work. You’ll make the biggest impact if your publishing activities are a function of your research — not the other way around.

The raw number of papers you publish in a year isn’t a relevant metric of your productivity, reports Toranj Marphetia, spokesperson for the Medical College of Wisconsin. Marphetia quotes the school’s senior associate dean for research, David D. Gutterman, MD, as saying that “other criteria for reviewing productivity by an investigator’s publications include the type of article published, whether a review article, a case report, or an original discovery; the quality of the journal it is published in, also known as its ‘impact factor;’ and whether it’s peer-reviewed.”

That means, according to Gutterman, that “someone publishing two papers a year in Nature could be considered as productive as someone publishing 10 papers in a low-impact journal.” And, of course, it also means that “the more original articles you publish in good journals — those with an impact factor greater than, say, 3 or 4 — the better. But if most of your pubs are reviews and editorials,” Guggerman adds, “that is not helpful.”

Everett E. Carpenter, PhD, a principal investigator, associate professor of inorganic and materials chemistry and affiliate professor of chemical and life science engineering at Richmond’s Virginia Commonwealth University, agrees, noting that “the number of papers depends on the quality of the journal that you publish in.”

That said, he adds, a good number to shoot for is two to six published papers a year — although he notes that his personal average is 11 such publications a year. “The number really depends on the journals in question and on the size of the group you’re working with,” Carpenter says. “You cannot compare the number of papers in print from a lab that has only four people to the number from a group of 14. That’s why I would say two to six is a good ballpark figure. That’s a good number for the majority of labs.”

A broader focus on your lab’s published-paper productivity is important, Carpenter adds, rather than a narrow focus on your solo efforts.
“I don’t think the number of papers published each year reflects a PI’s ability to come up with ideas,” he notes, “because most of the papers are initially written by members of their groups.” The number of papers published each year may reflect, however, your lab’s focus and priorities. Two few and, absolutely, the grantors start wondering what you have been doing,” he tells Principal Investigator Advisor. “I don’t think reviewers really care, but the funding agencies certainly do.”

But don’t think you can snow the funders with a flurry of published papers.

“If the person is publishing an excessive number of papers,” Carpenter says, “then the quality of the work invariably will go down. I knew a professor who would publish 52 papers a year. They were in (lowly regarded) journals and never got cited.”

That’s the last thing you want people saying about you.
Influences of Author Order, Cited Works

Jonathan Wren and colleagues at the Oklahoma Medical Research Foundation analyzed author name placement in the bylines of scientific papers and found that if an author’s name appears in middle rather than the beginning or end, the perception of his or her role diminishes in the eyes of medical-school tenure review committees in the United States and Canada. The more authors, the less likely the contributions of those in third, fourth or fifth position are to be recognized. The conclusions are based on surveys sent to 142 schools, with a 66 percent U.S. and 28 percent Canadian response rate. Take-home message: Aim to be listed first, second, or last (e.g., lab director).

Lutz Bormann and colleagues at the Max Planck Society analyzed some 870,000 articles published in 2003, spanning the life, health, and physical sciences, arguing that citations may be viewed as a proxy for scientific impact. They found that the top one percent—those papers that went on to receive the most citations—were more likely to reference other highly cited papers, and the fewer citations a paper received, the less likely it was to cite a highly cited paper. This finding was strongest in the life and health sciences and weakest in the social sciences. Take home message: Make sure you know and cite a few science giants.

Gregory Webster of the University of Florida analyzed more than 50,000 papers published in the journal Science from 1901 to 2001. In a presentation before the International Society for the Psychology of Science & Technology in August 2010, Webster concluded scientists who reference the work of their peers are more likely to find their own work referenced by their peers, and that trend has strengthened more than threefold over the 100-year period studied. Take-home message: The more you cite, the more you are cited.

References:
Scientists Who Cite More Are Cited More: Evidence from over 50,000 Science Articles
Gregory D. Webster, University of Florida. ISPST 2010, Berkeley
Your Name’s Not on the Paper?
Avoiding Disputes Over Authorship

You know that publication is the lifeblood of an academic career and that the names on the paper represent credibility (and thus opportunities) to continue that career. Failure to be listed when one deserves to be can threaten careers and trigger long-lasting disputes and ill will.

“Aside from copyright laws and federal definitions of research conduct as they pertain to plagiarism, nearly all aspects of authorship and publication are covered only by written guidelines and often unspoken custom,” says Dena Plemmons, PhD, research ethics program director, University of California-San Diego. Plemmons spoke at a recent Principal Investigator Association audio conference.

How it’s supposed to work

The standard guidelines come from the International Committee of Medical Journal Editors (ICMJE), says Plemmons. ICMJE offered a set of guidelines in 1979 that have been accepted by many medical journals. IMCJE recommends the following criteria for authorship:

• Substantial contributions to conception and design, or acquisition of data, or analysis or interpretation of data
• Drafting the article or revising it critically for important intellectual content, and
• Final approval of the version to be published.

Key: All three of these criteria should be met. Individually, they are not sufficient. Neither is acquisition of funding or being general supervisor of a research group.

Why it gets murky

Here’s the catch: Even though scientific-journal editors subscribe to these guidelines, many PIs have different ideas.

“Many scientists aren’t aware of these guidelines, and many who are don’t subscribe to them,” says Plemmons. Studies show that for 21 percent of basic science papers and for 30 percent of clinical studies, the above three criteria for authorship were not met, Plemmons says. “Co-authors may have had no involvement in the conception or design of a project, the design of the study, the analysis or interpretation of data, or the writing of the revisions.”

Also, in a 1992 research study of 1,000 post-docs in the University of California system, about 50 percent of PIs wrongly believed that either their general supervision of the research lab or their obtaining funding (in the absence of any other contributions) was sufficient for co-authorship.
Further complicating matters: How should you define “substantial contribution?” Who defines it, and who meets the definition?

“In most authorship disputes, in my experience, all those involved thought they made substantial contributions,” says Plemmons. “There is also disagreement about whether authorship should be remitted for individuals who contribute to all phases of the publication, or whether individuals who made more limited contributions deserve credit — in the form of authorship rather than another way of acknowledging contribution.”

**Real-life scenarios**

Because authorship guidelines turn on interpretations of key phrases and standards not known or accepted by all PIs, preventing authorship disputes often becomes a managerial matter — specifically, managing authorship of papers to avoid surprises. Here are three recent, real-life, examples:

1. “My name was on the first submission. Why didn’t it get on the revision?” An author discussed research with a student and had her draw two figures for a paper; that was the extent of her contributions. He wrote the paper, listed her as co-author and submitted the paper. It was rejected. He then extensively revised and re-submitted it to a different journal, this time without listing the student as co-author. The paper was accepted. It required extensive phone calls between the institution and editor and several meetings to hammer out an agreement.

   **Note:** Revisions after rejection may require extensive rethinking and even more time back in the lab. That could be an opportunity to increase the co-author’s (i.e., the student in this case) role; however, if that’s not possible or appropriate, you need to have a difficult conversation with the former co-author about what the guidelines are and why their contributions may no longer warrant inclusion.

   **Also:** It is tempting to be generous with co-authorship, but, as this case shows, it can come back to haunt you. It’s easier to say “No” upfront than to exclude someone later.

2. “My co-PI promised a post-doc that if she did extra work acquiring data, she’d get an authorship listing. Then others who made similar contributions didn’t get listed.” Two PIs didn’t realize they had a potential dispute until it came time to list the co-authors. One had promised a post-doc co-authorship if she’d do some extra work on data acquisition. The co-PI said that data acquisition by itself fell short of the requirements for authorship. Now there was a conflict.

   **Note:** Acquisition of data is an insufficient contribution according to ICMJE; however, some institutions and some PIs might have different guidelines. These need to be hammered out among PIs on a project ahead of time. Find another way to “motivate” post-docs, and make sure people are treated equitably.

3. “I did most of the work on the first draft, then changed institutions.” At Temple University, a PI asked a research assistant and assistant professor of biochemistry and microbiology to write an NIH status update that would also serve as a summary manuscript suitable for publication. He wrote and submitted the status update and
then left for another university. Later, a post-doc was asked to complete the article — and the departed professor assisted the post-doc in completing the project, only to discover his name was not listed among the authors.

**Note:** This led to an appeal to the university board, which unanimously agreed the departed professor should have received credit, but the PI refused to act on it. That led to a lawsuit in which the departed professor won the initial rounds — and the case will go to trial. (Cite: *Giordano v. Claudio, et al.*, No. 09-1456, E.D. Pa, 5/24/10).

What to do: Decide at project conception, not project completion, who the co-authors will be. A 1996 study at Florida State University showed that when this was done there were fewer co-authors per study, fewer “undeserved” authors and fewer authorship disputes.

You can add people later if the situation warrants, but only if you clearly decide the standards ahead of time, including why someone new deserves inclusion.

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**Intellectual Property**  
**What to Do About Unwanted Inclusion as a Co-Author?**  
**Expert Comments by Suzanne K. Ketler, JD, PhD**

**Reader Question**

Because of some of our recent scientific papers, we have achieved a bit of prominence in our field. At the institute lunch table, I have freely shared ideas and thoughts with a colleague whose lab is down the hall. But they were just collegial, rambling discussions, nothing more. Now, he has published a paper in a major journal and listed me as a co-author. This is without my permission and without there having been any real input or review from me. I do not want my widespread colleagues to feel I have endorsed this research — let alone contributed to it. He claims he was just being gracious, but I feel he might be trying to ride on my coattails. At this point, how can I set the record straight and prevent him from doing this again?

**EXPERT COMMENTS**

As you already realize, your colleague had no right to use your name on his paper without your permission. It was possibly a bad move legally, and was certainly one ethically. As a professional and a scholar, your name is more than just its letters; it communicates to the reader your expertise, knowledge, and reputation.

As such, you may have “publicity rights” in it. These vary from state to state, but typically they involve the right of an individual to control and profit from the commercial use of his or her name or likeness. Under most states’ right of publicity laws, the individual is protected from the loss of commercial value that results from the unauthorized use of his or her name for commercial purposes. In some states, only celebrities and public personalities are protected.

Given that you have, most likely, used your name for a variety of papers, presentations, journal articles, books, and other publications, and have applied for and received significant research grants and awards under your name throughout your professional career, your name, by now, communicates your reputation as a scholar and it carries with it some goodwill. Readers will expect a piece of work bearing your name to be yours, at least in part, and to have a certain quality, standard, or integrity to it.

You are also correct in your assessment that the inclusion of your name on a paper or publication communicates at least your endorsement of the content, if not your active participation in the creation or development of it. As such, it would seem that your colleague, even inadvertently, was seeking to use your name for the “commercial purpose” of enhancing his paper for acceptance by the journal as well as the scientific community.
Without knowing more about the specific laws of your state, I cannot say for sure whether he has legally violated your right of publicity. However, even if your state protects the rights of publicity of celebrities and public personalities only, and even if the paper on which your name was used was not deemed to be used for a commercial purpose, it would seem, nonetheless, that he has infringed the spirit, if not the letter, of your right of publicity.

You mention that your colleague may simply have been “trying to be gracious.” It is possible that in this, he may have been attempting to comply with what he believed to be your copyrights, and thereby inadvertently made this unauthorized use of your name. In fact, he may have believed that the copyright law required him to attribute to you what he believed to be your proprietary material that you had shared with him over lunch. Although well-intentioned, this belief is incorrect. The copyright law does not protect ideas, thoughts, or concepts alone, but rather protects how ideas, thoughts, and concepts (among other things) are expressed in fixed form. In other words, if you had written down your ideas and thoughts, the substantial form of the expression of them as written would have been protected through copyright. If your colleague believed attribution of your “unfixed” ideas and thoughts to you was required, however, it was not.

You could mention that you might be happy to be mentioned in his paper if such is not citation as an author, but instead is a credit or acknowledgement for ideas that you legitimately provided. However, in that case, you should require that he add a disclaimer indicating that the content and conclusions of the article are his alone.

It is also possible that he has run afoul of institution-specific policies and guidelines in his unauthorized use of your name. Most institutions have a committee to resolve questions and disputes about intellectual property. If your colleague’s unauthorized use of your name were to happen again, your next line of defense might be this group. Perhaps even without another incident, the committee could be asked to reaffirm or issue guidelines setting forth proper acknowledgement, crediting, attribution of authorship, and uses of the names of others.

You may also want to seek redress through the journal that published your colleague’s paper. Most periodicals readily publish corrections and retractions. Presumably, when your colleague’s paper was accepted for publication, he had to sign a release form provided by the journal indicating that he either owns or has legitimately obtained all necessary rights, consents, and releases to the piece. Since the use of your name was not authorized, it is likely that the journal would be happy to publish a correction or retraction indicating that you are not one of the authors of the paper.

In conclusion, fair warning: In today’s Google world of digital search and storage forever, it is possible that your erroneously attached name will never be completely expunged and will confuse scholars for decades to come. But you will have done all you can.

Comments by Suzanne K. Ketler, JD, PhD, Roetzel & Andress, Akron, Ohio, whose practice focuses on intellectual property.

The foregoing is basic information only and should not be considered legal advice on a specific issue. For legal advice, the reader should contact legal counsel.
Written by Victor

Not sure how to handle this, but the fact that YOU are a co-author on HIS paper without your explicit consent is a serious violation on his side. It is not just a matter of "gracious"/embarrassing anymore. Nowadays all research institutions and journals have formal authorship policies in place, and if this event comes to light your colleague might end up in serious trouble. As a very minimum, most probably, he had to click "Yes" somewhere certifying that all authors agree with submission, and to fake your signature on a copyright transfer form, which is a fraud.

Written by Anonymous

We all know that some journals will review a paper merely based on the names of the authors. Regardless, including someone without their knowledge is unethical, as all authors must agree to a submission. It needs to be made clear to this individual that names cannot be included on a paper without the consent of those listed. Perhaps the department chair should send out a general reminder of this practice.

Written by anon

It is a form of fraud to sign for all authors, without having sent them the manuscript for review. Being that you did not see the manuscript prior to submission, you should be concerned about the quality of work that is going out with your name on it. I would read the paper carefully. If it is a good paper, then I would recommend going to your colleague (that you know well enough to have lunch with) and start by thanking him for the inclusion but then let him know that you are uncomfortable with being an author on a paper that you did not see first. Ask that next time he feels so inclined to please show you the manuscript first. If it is a bad paper you can report him to the journal and ask them to retract. As for your coattails, please, get over it. I highly doubt your coattails are as valuable as you seem to think. No one’s really are. Authorship with other labs shows that you can “play well with others.” While he should have shown you the manuscript, the addition of you as an author only adds to your CV.

Written by Victor

To anon: I agree that most coattails have no real value, but still there are quite many people who are willing to ride them. The practice is not as benign as you think: when they include you in their papers, they implicitly and quite often even explicitly expect you to do the same, and with exactly the same reasoning, that it only adds to
both our CVs. Oftentimes, though, your CV would be better off without such a “free” addition if the paper is crap, or especially if you disagree with it, or even because you just don’t want to publish with that person. Such people (and I personally met several of them) are a very invasive species. They often can navigate their “profession” for decades in the middleman role: hearing something here and something there; not doing actual research/thinking themselves, but just brokering contacts between the labs which have some new compounds or cells and other labs which have access to “hot” experimental techniques; eventually writing up something and adding a bunch of unrelated high-profile co-authors to “thank” and to “oblige” for the future, and also hoping their names will help the paper to be published and to be taken seriously after publication.

written by GWSW

Step 1. Gently, but firmly, inform the colleague that including you as a co-author without asking first is not compatible with your publication philosophy, nor is it an accepted practice endorsed by most peer-reviewed journals
Step 2. Insist that your name be removed as a co-author. Step 3. If #2 occurs, great. If #2 does not occur, send a letter to the editor of the journal with a copy to the colleague’s department chair (and perhaps to the dean as well) indicating that the manuscript submitted was not reviewed by you prior to submission and that you are unwilling to assume responsibility for the content. That should do it.

written by Mick

GWSW is right, as far as it goes. Your story sounds very plausible in the context of this site. But a couple of years from now, it will look like, at the minimum, the printed text has you claiming credit for work you did not do. If you let the situation go, YOU are now committing scientific fraud since it is your duty to let an editor know that the paper has this misrepresentation. Now that you know there is a problem, it is your problem and it is not just between you and your colleague. The editor may judge that there is no issue and let the publication stand without correction. His judgment, not just yours. Keep the correspondence. Down the road, it would otherwise be difficult to convince a misconduct committee that your role is entirely innocent. After all, who wants to share the credit for a publication? Bottom line is that your colleague deserves whatever fallout occurs, and you should get as far from this as you can as soon as you can. So I’d stick with GWSW’s idea to be firm, but I would not be so committed to gentle.

written by Yehudah Werner

Something somewhat similar has happened to me and I have learned: 1) Strict rules as to who may be listed as author have been declared by many scientific journals and federations of editors. 2) Actually, unlike the expert’s
opinion, most editors resist and refuse to publish corrections, critical responses, and retractions, as these show their weakness of editing. (But some journals include all co-authors in communications and check with them). 3) One address for complaints, at least theoretically, is the funding agency (if any) mentioned in the culprit’s paper. Some of the major ones, e.g., U.S. Gov & NSF, investigate the ethics and misconduct of their authors. Hoping to have helped, Yehudah L Werner, Hebrew University,

written by bittner

This happened to me, but I caught it before it went to press. I was extremely miffed to say the least...especially since I considered the paper to have some serious problems (that the referees AMAZINGLY missed!). I contacted the journal editor directly and informed my co-author that I wished to have my name removed from the paper. Even though we work in similar fields, I have avoided sharing students, being on proposals, etc...

written by AZ

I would emphasize that (as noted by a couple of previous commenters) your ultimate line of defense is the journal itself. Any well-run journal these days requires a copyright form which certifies the authors’ willingness to be listed as such; in fact, some require this for acknowledgments as well. If your name was submitted without your consent then a fraud was committed against the journal (ethically, if not legally). In a journal that follows this procedure there is no informality about inclusion of authors. Of course if your relationship with the person involved is basically collegial, you should discuss it with him/her (perhaps with mediation by a department chair or other authority figure).

written by George

I also had this happen to me, but I fortunately caught it during the review process. I asked about what happened to a paper a colleague was writing, and he wrote back, “here are the reviews!” I was shocked. I expressed my displeasure, and when I didn’t receive an explanation or apology, I wrote to the editor of the journal and asked that my name be removed from the paper. The paper was eventually published without my name, and the senior author that did this to me did not, as far as I can tell, even receive a slap on the wrist. Turns out, the senior author was an associate editor for the journal. Needless to say, the senior author and I are no longer friends, and I will never submit to the journal.
written by Tim

I think you should talk to the person privately and explain that what they did was wrong. By making the primary author’s actions known publically, you run the risk of destroying his/her career. If this was a one-time event, I’d think twice before taking public action.

written by DL

When submitting a paper for publication, the journal requires that ALL authors approve the manuscript. This requirement should have let this person know that you needed to review and approve the manuscript before submission. This demonstrates that the addition of your name was not a benign act of kindness, but rather a benefit on his part. If he truly thought that you would see authorship on his paper as a positive thing, there would be no reason to keep it secret until after the paper was published. As such, I would contact the journal and let them know that you did not approve the manuscript before submission and want your name removed from the paper.

written by dbh

You have to get your name off that paper. The author has committed a series of ethical lapses that should tell you that you want nothing to do with him. He has violated rules about who is an author (completely ignored). He has violated requirements that all authors declare their contributions and accept responsibility for the work (completely ignored). He appears to have forged your author acknowledgment. And he has shown astonishing contempt for the simple ethical principle that you have a right to participate in anything with your name on it. Someone who is prepared to behave like this should not be trusted. You do not want your reputation attached to his work. Finally, you are NOT an author. So you should not be listed as such. If you leave your name on this paper, then you are accepting all of this. It matters not at all whether this is a good or bad paper. Get your name off. How to go about it? First ask the author to join you in writing to the editor to have your name removed. Once the erratum has been published, bring this to the attention of the authorities at your institution. If he refuses to write the editor, or the editor refuses to issue the erratum, then you must work through your institution to force these actions. Even if you cannot get the journal to take your name off, the fact that you asked protects you if the paper later turns out to be fraudulent not only on the author list, but also in the data.

written by Larry

The Journal of Physical Chemistry now prevents this situation by e-mailing each author to confirm that they approve the submission. If the author approves he/she needs to do nothing. Perhaps more journals should adopt this approach.
RE “When submitting a paper for publication, the journal requires that ALL authors approve the manuscript.” This is definitely NOT the case for all or even most journals. I recently submitted a manuscript after distributing it to my three co-authors and asking for feedback and approval. Two approved, but one author, who provided some funding for the project but was otherwise uninvolved, simply never replied to numerous contacts. After the paper was accepted, I told the editor that I did not have confirmation of approval of this author. He published the article with that author’s name anyway. I also published a paper with a deserving co-author who died unexpectedly before it was submitted. No approval obviously, but no problem putting the name on the paper.

Agreeing with many above: I would go for an “escalation of force” approach. If you believe him that it was a well-intentioned move, and the paper is not embarrassing, I would simply tell him that in the future you do not want your name on any manuscript you have not seen or approved, but you would be happy to find a place in the acknowledgments section. There is nothing horrible about having your name on a paper you only partially agree with. If asked you can just pass it off as a combination of your and his ideas... which it is. If the paper is embarrassing, you need to get the journal to issue a retraction. If you do not believe he was well-intentioned, you need to report it as an ethical violation to whatever board (local or professional) would be relevant. If it is embarrassing and your name was on it for unethical reasons, be more aggressive. In any case, if you like the guy and believe he was not acting maliciously, don’t do anything that will tarnish his professional reputation too badly, but still make sure it is clear to him that he made a serious professional mistake — i.e., be a mentor, not the police.

The opposite happens too, and that’s sometimes worse. Someone gives you a rambling opinion with no real content, and expects you to include him/her as co-author. These are ‘gray areas’... sometimes people include the others as co-authors to avoid fighting over murky issues with no clear resolution. The flip side is this ‘graciousness’ factor, where some people bend over to include others if they are contributing even through discussions, so you cannot blame them for this. The best option is to usually do everything openly above the table, i.e., offer an authorship rather than assuming it. In one case where someone just sat in discussions and expected co-authorship, I sent an e-mail asking him to list his concrete contributions to the paper if he wanted to be a co-author, and he backed out... so again, these are very murky situations where the only resolution is on a case-by-case basis.
written by badcafe

I’ve had much worse happen... a post-doc I know had a habit of sending papers off for publication without letting me know, with data from our group on them (a clear case of plagiarism!). I got him to retract the paper and warned him against future such events, but he feigned ignorance and I let him off the hook. When I sensed later a similar tendency, I found a way to let him go. He joined another group, and a few weeks later his supervisor called me to inform that he had submitted a paper as single author with data that did not seem to be his. I confronted him and found out that he had pulled this stunt again (this time with my students’ results and some of my unpublished work that he was privy to). I approached the legal division in our department, but they scared me, saying that if my complaints lead to his dismissal he can sue me for something called “libel by tortuous interference with contractual obligations” (!!) and that it wasn’t worth my time to fight that even if I would go on to win it. So I had to (unhappily) confront him alone and ask him to retract the paper, without being able to spell out everything to his supervisor (who seems to have gotten the hint, but has no idea how deep it runs).... so there are clear cases of willful violation of rights... but the example you mention could be one of bad things done with good intention.

written by Morris

I am sorry for the difficult situation this person has put you in. He needs to know your thoughts immediately so this does not happen again. It is most likely that they did this so that you would not be offended when they published a paper using some of your ideas. They probably thought this was appropriate, and this thought may be based on how their previous mentors dealt with authorship. Based on these previous posts it is sad that many scientists have such a negative view of their fellow colleagues. It is certainly difficult to navigate the intricate boundaries of many times awkward social encounters. This person most likely respects you. If indeed you feel you are good enough to support others on your coattails, he will feel rather miserable from your reprimand and will never do this again. There is no worry about frauding due to the fact these were your ideas, and authorship is a concept which is not easy to define. Whether embarrassed or proud, it is difficult to pay the rent without publications. Unfortunately we have to play this game that some understand better than others. Let’s try to remember why we went into research. Science is about the progression and dissemination of ideas for the betterment of mankind, not about individual glory.

written by Raj

The deed is now done and so basically one needs to address whether correcting the record only adds to the harm already done. While it’s easy to follow the moral high road, there are careers, reputations, collegiality, etc. to also consider here. Hence, I would suggest reading the paper extremely carefully and concluding whether you’re comfortable with the contents. As long as you have no reasonable doubt (i.e., to the extent capable) about
the integrity of the bench work, I would simply end the matter with a brief chat with the culprit to inform him/her politely that next time you’d like to be involved in the writing of a paper that bears your name. It’s important to feel comfortable that there is little chance that the work is not reliable, and that can be ascertained in part by looking at the quality of publications from this individual from the past. If there is any hesitation on your part in any of these matters, I suggest requesting the alleged culprit to write to the editor and not do it yourself unless absolutely necessary. This way you do the least harm while rectifying the situation, i.e., you let the alleged culprit appear to be in control of rectifying a problem created perhaps by mistake on their part rather than an intended act...which is a totally different and much bigger crime.

written by Bethesda

I suggest you write up these fraudsters and send the account to the Office of Research Integrity at NIH (if that institution funded the grant). They may be willing to carry the ball for you and pursue the culprit.

written by Robin

Don’t let this pass. And don’t put off correcting it fully. (I can’t believe some of the posters here advise that it’s too late to change the error. It isn’t.) Keep it polite but firm. To what GWSW advised, I would add: Inform your colleague that you will need to raise the matter to a higher level if he doesn’t take care of it fully, and that it’s therefore much better for him if he rectifies the error himself. Don’t assume the worst from your colleague. Give him the benefit of the doubt, but make sure the error is 100 percent fixed. The journal editor WILL correct the error. Again, I can’t believe some folks think it’s too late. Journals are aware of their legal obligations and publish retractions when needed. Make sure they do. Make sure, too, that any online listings are updated to remove your name. That includes all journal references (TOC, abstract lists, etc.) and your colleague’s pubs page on his website. Good luck.

written by Anonymous

Most journals ask the author to sign a statement saying that all co-authors have contributed to the work. I think this irons out some of the concerns and gives the journals (as well as you the wronged party) grounds to say that fraud/misuse was committed.

written by DS66

Immediately write a letter to the editor. I had this problem when somebody put my name on a paper that was accepted for publication at Physical Review. Unfortunately, I noticed that after his paper appeared online. I called
and wrote a letter to the editor and immediately the journal removed my name. If you want to built a career, don’t risk it. Never have your name somewhere it doesn’t belong! ■
**Intellectual Property**

**What’s the Dividing Line Between ‘Fair Use’ and Plagiarism?**

**Expert Comments by Suzanne K. Ketler, JD, PhD**

**Reader Question**

One of my post-docs is preparing his first paper for a science journal. On reviewing his draft, I am concerned about the amount of direct quotation and even paraphrasing from others' publications. I am happy he has at least done a thorough search of the previous literature, but what is the dividing line between “fair use” and plagiarism?

**EXPERT COMMENTS**

Given the importance of building on previous work, it is inevitable that researchers and academicians will use in their articles a great deal of direct quotation and paraphrasing from previous literature. Thus it is important for them to understand the boundaries of fair use. Put simply, fair use is a defense to copyright infringement when an author incorporates the original, creative works of others into his or her own work. Further, the determination of what is fair use is not strictly a quantitative analysis of how much has been copied or borrowed.

The fair use doctrine, which is clearly delineated by statute, states: “The fair use of a copyrighted work .... for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—

1. the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
2. the nature of the copyrighted work;
3. the amount and substantiality of the portion used in relation to the copyrighted work as a whole; (4) the effect of the use upon the potential market for or value of the copyrighted work.” (17 U.S.C. Section 107.)

While the statutory language includes “scholarship” and “research” as likely purposes for “fair use,” an author should not conclude that use of the work for these purposes will always constitute fair use, for it may not. Rather, determination is made on a case-by-case, fact-intensive inquiry balancing the four listed factors (as well as any others that a court may deem relevant). As such, it is difficult to say, before the fact, what specifically will be fair use. With regard to the citation or paraphrasing of the work of others in academic work, however, there are a few things that we can say with some certainty:

With respect to the first factor — the purpose and character of the use — the key issue is whether the prior material has been used in a transformative way. Has the material merely been copied verbatim, or has it been
changed (i.e., transformed) into something new by the author's addition of new material, expression, information, or meaning? With regard to new scholarship, if the author cited portions of previous works in order to review, comment on, or critique them, such use would probably be transformative and would weigh in favor of a finding of fair use.

Concerning the second factor — the nature of the copyrighted work — a key issue is whether the work being quoted or copied is factual or fiction. Because dissemination of factual information in various forms benefits the public, courts give more leeway to the use of factual materials than they do for the use of fictional materials. This, likewise, would weigh in favor of the fair use finding.

The third factor — the amount and substantiality of the portion of the work used — a rule of thumb is that the less of the original work used, the more likely it is that the use will be deemed fair. However, if even a small portion used is the “heart” of the work, then this factor may weigh against a fair-use finding.

The fourth factor — the effect of the use on the potential market for the copyrighted work — refers to whether an author's use of material created by another cuts into new or potential markets for the copied or borrowed material. This is likely a less important factor for science journal papers.

In summary, given their factual nature, scholarly and scientific works generally are ones for which fair use is given wide latitude; however, fair use should never be assumed. Nor should it be thought to allow blanket use or wholesale copying.

In short, only necessary portions of the work of others should be quoted or copied, and proper citation and attribution (though it will not protect from copyright-infringement claims) is a must. Fortunately, many universities, libraries, and other institutions have established guidelines for fair use, and although these guidelines do not have the weight of law they can provide examples and assistance. As such, they should be consulted whenever an author or investigator is uncertain about whether use of others' work constitutes fair use or whether it crosses the boundary into plagiarism.

Comments by Suzanne K. Ketler, JD, PhD, Roetzel & Andress, Akron, Ohio. She concentrates her practice on intellectual property.

The foregoing is general information only and should not be considered legal advice on a specific issue. For specific advice, the reader should contact legal counsel.

READERS’ RESPONSES

written by Gutenberg

Apparently plagiarism is so widespread these days, especially among undergraduates, that some companies and Web sites are doing a brisk business in “anti-plagiarism” or “plagiarism-spotting” software. When these
undergrads enter post-doc programs, some may bring their bad habits with them. Ergo, should all grant sponsors run the grant submittals through such detective software?

written by prost

Perhaps you could clarify: Is it your concern that the post-doc is using too much of other people’s work (therefore not enough original research) or that the post-doc isn’t properly citing the work of others, making clear which is her work and what is the work of others?

written by Astonished

Good Lord! Doesn’t Prost know that plagiarism is different from citing too much of other people’s work? Hello?

written by Bored reader

As an educator I worry a lot about plagiarism. All students need to be referencing other work and building on it. However, I discourage using quotes and relying heavily on what others have said. You need to take the material in context of your own work and give people credit where due. I have seen papers that are full of quotes. There is nothing original or interesting about that paper. I doubt it would be terribly interesting.

written by CopyCat

I would be more concerned that your post-doc fails to understand the published literature and is using ‘copy-and-pasted’ text to hide a lack of understanding. I would expect any competent post-doc to be able to read, say, five or six papers on a topic and come up with a paragraph which contains little direct quotation (notwithstanding that there are few ways to state that ‘gene A gives rise to three splice variants’ for example).

written by Anonymous

Simply citing a source says to the reader “these are not my ideas.” It also says “these are not my words.” Simply omitting words here, or using synonyms is not adequate paraphrasing. To do this properly and to show you really understand what the author has written, write without looking at the original and write as if you are describing this to a friend, albeit a science one. Proper paraphrasing does not include a sentence for every one written. Obviously technical words will be used in the paraphrase (RT-PCR etc), but the rest need to be your own words. Learning to write is not done by simply cutting and pasting. It’s hard work and one struggles, but that’s how you learn to do it.
Citing the paper also suggests you read the article (not the abstract on PubMed). Anyone who ever has attended a journal club where the conclusions of most papers are found questionable should know better than to trust the authors’ conclusions in an abstract. We are professionals. We need to do the work and show scholarship. It’s difficult work but that is what it takes.

written by if it quacks like a duck

Reviewing and citing the work of others (with proper referencing) is proper and respected. The fact that the question is being asked is a flag that this is not the case. As a teacher I saw too many students lifting phrases and sentences either due to a lack of understanding of the science or poor English skills. Part of the problem was that such inappropriate activity was not properly taught as wrong. One student once had the nerve to argue that I had never stated that copying word-for-word another student’s report was not allowed. Thus, if you are asking, something is wrong.

written by P.D.M.

The question confuses several issues, and the answer doesn’t help untangle them. (1) How much can a journal article include from other sources before it ceases to be fair use? This is a question of intellectual property law. (2) When does including material from sources count as plagiarism? The answer is: When it’s not cited properly. So it is independent of whether the amount of material used counts as fair use or not. (3) How much should a journal article regurgitate the literature, as opposed to saying new things? This is a question about standards of scholarship. Other than the last sentence, this actually seems to be the worry of the original letter.

written by antidisestablishmentarian

CopyCat is right on the money. Someone at post-doc level should not struggle with understanding plagiarism or how to avoid it. I would be deeply worried about that person’s level of understanding (unless it is someone with a weak command of English, which may encourage them to paraphrase excessively). More importantly, the so-called expert is completely off-topic and clearly has no understanding of scientific publishing. Scientific plagiarism has nothing to do with copyright but is about giving credit where it’s due. So ‘fair use’ isn’t a concept that is even relevant here. Excessive paraphrasing and incomplete citations are not problems because they infringe on the copyright of the journal where the original article was published, but because they falsely suggest the ideas are those of the writer and not the original researcher. Please do us all a favor and abstain from mixing in the murky and unsound logic of copyright law in scientific discourse where it does not belong.
written by prost

Good Lord, Astonished! Perhaps you overlooked or otherwise didn't process the statement “I am concerned about the amount of direct quotation,” the key word here being AMOUNT. Hence my simple question about clarifying exactly what the question is: Is the questioner suggesting that there is too much referencing the work of others (thereby calling into question the originality of the research) or is the questioner suggesting citations haven’t been done properly? Is this a survey-type article, which purpose is to summarize a body of work in a particular area, or is the paper’s purpose to present a new idea or two? Clearly almost 100% of a survey paper cites the work of others, while the new-idea paper should be presenting previous works that support the new idea. And yes, I do know what ‘plagiarism’ means.

written by tfarhat@memphis.edu

Just one or a max of 2 paraphrased sentences is more than enough in a manuscript but other authors use it a lot to show off that they have done extensive literature work (which should appear in the reference section anyway).
Tarek

written by MellowFellow

A distinction needs to be made between copyright infringement and plagiarism. Copyright infringement is the use of copyrighted material without permission, and without meeting the requirements of an exemption such as the “fair use.” Plagiarism is representing another’s work (whether copyrighted or not) as your own. One might take verbatim excerpts or paraphrases of sections of another paper, and depending on the four factors outlined in the Expert Comments, this might be considered fair use (and therefore not copyright infringement). However, if the words or ideas are not clearly attributed to their source, it would be plagiarism, which is unprofessional and unethical. Conversely, one could clearly cite the source (avoiding plagiarism), but if the entirety of a work were reproduced in a way that damaged the market value for the copyright holder, it would probably be considered copyright infringement (not fair use).

written by ak

the concern from the reader as I understand it is that he/she is unsure if his/her post-doc can write. For the record, paraphrasing is different from plagiarism. The former is keeping with content, but saying it differently. The latter is STEALING! Stealing others’ work because you have no freaking clue how to write or think. I believe the line is clear.
In most academic settings, plagiarism is defined in a code of conduct as copying without attribution. If a student turns in an assignment that reads “In response to this assignment, my classmate Bob writes …..” and then proceeds to quote Bob’s entire work, this deserves an “F” but it’s not plagiarism. If a professor tries to publish an open-access review that quotes two whole pages from a three-page _Nature_ article, that’s not plagiarism either, but it’s also not fair use (it short-circuits _Nature’s_ business model by providing readers free access to pricey content). I’m shocked at the idea of some readers that relying on quotations is an indication of poor scholarship or the lack of original thought. Unless someone can provide an example (anywhere) of a scientific article that quotes too much, I’m going to continue to see the use of quotations as a sign of rigorous scholarship rather than laziness. Quotations allow points to be documented. Would you trust me if I said that Darwin thought all of evolution occurred by infinitesimal changes? No! What if I quote Chapter 6 from the Origin of Species, in which Darwin says that “If it could be demonstrated that any complex organ existed, which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down.”

Any manuscript that uses strings of text that look even reasonably similar to previously published material just makes one’s own manuscript and lab appear weak. There are an infinite number of ways to refer to other people’s work, and your text should be presented as “your interpretation” of their work, requiring a change in language anyway. I once laughed at a poster abstract presented at a meeting where the authors had swapped out a particular construct name (and substituted their own) and the rest of the text was almost exactly the same as what we’d published in a peer-reviewed journal. I recognized it immediately and almost wanted to bring it to their attention but let it go since it would serve no purpose but to embarrass the PI, who probably wasn’t aware of it. You do not want others to laugh at your work.

I agree with most of the other comments. This article is a mess because there are three issues being brought up: 1. amount of quotes used, 2. plagiarism, and 3. copyright infringement. The answer is off-base and seems to be giving advice about copyright infringement, which is not the question here. As for the post-doc with too much quotation, it shows that the post-doc does not understand what he/she is reading. Being able to summarize and paraphrase several background articles is an important scientific tool and it is not acceptable to merely quote other articles. As a PI, you should let the post-doc know that this is not the proper way to write a scientific paper and demonstrate, from your own papers, how to summarize background information. AND make sure that it is referenced properly to avoid plagiarism.
Although your paper undoubtedly makes proper reference to copyright law, it’s standard, for ‘fair use’ is too low for academia per se. When one writes an article for publication, the implication is that the data and conceptual interpretation are one’s own. When specific language is lifted from other sources without citation, that language reflects someone else’s conceptualization, and is therefore not one’s own. Period. So whether or not it would violate someone else’s rights may be arguable, but the text could not be construed as one’s own thoughts, and is therefore illicit.

Cite, cite, cite. As long as you are giving credit to the original work and not claiming it as your own, there is no problem of plagiarism. Overuse of paraphrasing and quotations will, of course, reduce the quality of the article and may affect your reputation. But at least, it is not illegal to write a bad article or one in which there are not many new ideas.

The issue seems misstated to me. Extensive quotation and paraphrasing is not a problem per se. What do you think a review paper is? The issue is that one needs to make a contribution and not waste readers’ time. If one merely quotes without adding value, lack of original contribution is what makes it a poor paper, not the quoting. If the paper is sprinkled with gratuitous quotes that don’t forward its important points, then it’s a poor paper because it rambles and needs to be tightened (focused). It’s irrelevant whether that rambling takes the form of quotations or of reminiscences from one’s childhood.

MellowFellow and Arlin have both zeroed in correctly on the issue. The bottom line is that including correctly attributed material verbatim in any amount is not plagiarism, but copyright law sets a fuzzy limit (“fair use”) on how much is permissible to include before needing permission from the copyright owner (even if properly cited). So a verbatim sentence or two is no problem if cited properly, but cutting and pasting a big diagram or figure usually crosses the fair-use line even though it is not plagiarism if cited. The irony is that I cannot even cut and paste schemes that I have drawn myself and published (clearly not plagiarism because I am “quoting” myself) because my copyright was transferred to the publisher as a condition of acceptance. The post-doc in the original question seems to have cited the quoted material properly, but the question was really one of quantity, i.e., how many quoted passages are too many? In science papers, at least, direct quotes sometimes are very useful to document a specific claim (Arlin’s example is excellent), but more than a few is almost never the most concise way of making
a point, so even if it clearly is not plagiarism, and probably not copyright infringement, it is just plain bad writing to construct and introduction or discussion section that way.

written by JimE

Arlin is absolutely correct. It is how the direct quotations are being used to discuss or critique a point that is important, not how much was quoted. Those who have contended that direct quotations (properly referenced) are a sign of bad writing, inability to understand the literature, or simple laziness might be guilty of all three.

written by Deja Vu

I agree with previous comments regarding the distinction between copyright infringement and plagiarism. As far as I know, there is no U.S. law against plagiarism per se (or other kinds of academic cheating), but that does not mean that it is not grossly unethical and grounds for failing a class (if perpetrated by a student) or losing one’s job (if perpetrated by a professional “scholar”). I would also argue that computer programs designed to detect plagiarism are a one-way test. That is, they can detect nonrandom similarity between documents, but their failure to do so due to paraphrasing, etc. does not mean that a document is not a product of plagiarism.

written by Anonymous

Plagiarism and fair use are orthogonal concepts. Suzanne Ketler’s analysis is quite beside the point, I think. “Fair use” is a concept in copyright law, not in academic integrity. The only cases I can think of that might rise to a violation of copyright law are those where figures have been lifted from other sources and reused without permission. The threshold for plagiarism is far lower than that of the doctrine of fair use. In a scholarly paper if the sources are properly acknowledged for every quote, direct or paraphrased, it is never plagiarism. PERIOD. NEVER. It is altogether another story to ask whether the literature review section of the paper is scholarly enough. That is, an overview of literature that merely quotes previous articles with providing a clear context that is relevant to some aspect of what is presumably new work, then the problem is not “fair use” or even plagiarism. The problem is lack of scholarship.

written by Dr.Dave

I include the following in term paper assignments and extend it to other writings of students and associates. In the text of your paper, direct quotations should be used very sparingly if at all. They should be reserved for those circumstances when paraphrasing would destroy the special flavor of what an author was presenting or when you are
using a quote for a special effect. There are few occasions when quoted passages are necessary or desirable. Instead use your own words to draw together information from your various sources. Credit your sources as appropriate for the information content, but use your own words.

written by dhillueub

There is a lot of gray area here, but the following can be asserted without equivocation: if an entire sentence is copied without revision, it is plagiarism, regardless of whether it is properly cited (unless placed in quotations). Minor tinkering with the words in the sentence doesn't fix the problem either. Sometimes even a uniquely constructed phrase, if used without modification or attribution (e.g., “termed [phrase here] by [whoever]”) should be considered plagiarism. Generally speaking, if you have any doubt about a sentence or phrase, you should probably rewrite it in your own words.

written by DrFred

Expert Ketler is getting a “bum rap” here. She wrote “in summary, given their factual nature, scholarly and scientific works are generally ones for which fair use is given wide latitude; however, fair use should never be assumed. Nor should it be thought to allow blanket use or wholesale copying. In short, only necessary portions of the work of others should be quoted or copied, and proper citation and attribution, though it will not protect from copyright infringement claims, is a must.” This is good advice with respect to copyright infringement, and almost all scientific journals and books are copyrighted nowadays. It is true that plagiarism differs from copyright infringement in that, among other things, copying without attribution of works with expired copyright can still comprise plagiarism. But following the cautionary statements of Ketler quoted above can go a long way in avoiding plagiarism also.

written by Scholar

It is not just the “expert” who is very confused here; the person who asked the question is also very confused. “Fair use” is a concept for copyright law and not anything like an antonym for plagiarism. At issue here is academic integrity and standards for scholarship. A very nice guide has been produced at MIT: http://web.mit.edu/academicintegrity/ It does a surprisingly good job of teaching the distinctions between quoting and paraphrasing, etc.

written by Martial

For original research papers, if the experiments did not yield sufficiently novel information, results are unpublishable. If the experiments yielded novel information, the number of words of others is irrelevant so long
as they are referenced. Editors usually trim unneeded fat in such cases. For review articles or meta-analyses, plagiarism is what the attorney defined as being an infringement of the fair-use doctrine. Imagine someone using words from one of your articles. If the authors of an original research paper, especially an important one, thought highly enough of your work to quote it at length, you'd likely be deeply flattered. If a review paper quoted five paragraphs from your discussion, with or without attribution, you would likely be upset.

written by deh

I write many papers and have a lot of material online for others to (hopefully) use and learn from. I am delighted when quoted, whether in a review, a text or a research paper or anything else, just so long as the quote is correctly referenced. As a basic research scientist, my products are ideas and data. If no one quotes and references me, it would mean my products were not of value.

written by hnnigg

If your graduate student is using language from another article, why worry about plagiarism? The graduate student is not an original thinker and that means no creativity. Make it a terminal master's degree. What is described is plagiarism, plain and simple, and the author of the article spends too much text dancing around the issue.

written by HG

As an editor for a journal, I have some comments. First, we catch a lot of plagiarism. It is easy these days. Second, there are two levels of plagiarism. One level is when it is sufficiently long and blatant that we drop the hammer and bring sanctions against an author, including most commonly banning them from the journal. The other level is when I or a reviewer recognize plagiarism (it happens all the time that the person someone steals words from is a reviewer) but the plagiarism is not blatant enough to bring sanctions. At that point, I find an excuse to reject the paper, and I remember the names of the authors. The real world is not like a court of law; plagiarism and other unethical behavior can sink people's careers without their ever being accused. If you call yourself the author of a paper, you are saying that you wrote the words. If you did not, it is a lie. Yes, you should read all of the related literature for your area, but when you go to write, put it all away and write the words yourself.

written by Miguel

In my view, this issue has been framed incorrectly and should not be regarded as a question of copyright violation vs. plagiarism, but as a question of whether the student's writing has crossed the line between what might
be considered acceptable vs. unacceptable scientific scholarship (i.e., plagiarism). The following resource, which I have prepared for, and is hosted by, the US Office of Research Integrity addresses these and related matters of ethical, scientific writing: http://ori.dhhs.gov/education/..plagiarism/.

written by DrFred

Interestingly, the very informative article by Miguel Roig (http://ori.dhhs.gov/education/products/plagiarism/) states that “In some cases the misappropriation of an idea can be a subtle process. Consider the famous case of Albert Schatz who, as a graduate student working under Selman Waksman at Rutgers, discovered the antibiotic streptomycin. Even though the first publications describing his discovery identified Schatz as primary author (Martin, 1997), it was Wakman who, over a period of time, began to take sole credit for the discovery ultimately earning him the Nobel prize in 1952 (see, for example, Shatz, 1993; Mistiaen, 2002 for a fuller description of this case).” Yet in 2005, long after Waksman’s death, Daniel still described this controversy as “what can only be thought of as a can of very messy and still unsettled worms”.

written by Steve

As is often the case in our evolving overly politically correct, conservatively punctilious, pretentiously virtuous, etc. society (especially in academia), a modicum of practical intelligence, i.e. common sense (which unfortunately isn’t all that common), would go a long way to untangle this issue of plagiarism. It slays me that this issue has largely become one of linguistic gamesmanship, where one’s ability to conjure up novel and/or different phraseology becomes the price of admission for consideration to be deemed a fair user of another’s written material. Yep, this approach really adds to a society’s knowledge! Hey, if it’s not blatant, for the sake of Adam let it go. Note that I’m not advocating zero referencing. A major related issue that these people have failed to consider is the exponential rate at which technology will spiral the written word throughout the universe, which essentially will significantly diminish the time it will/should take for published works to become more or less public knowledge. In as little as 10 years, this entire issue may become trite and largely irrelevant. In this regard I have personally thought for a number of years now, especially where students’ writing and publications are concerned, that academicians should be significantly adjusting their antiquated perspectives and rules on these fronts.

written by Al

If the paraphrasing is not adequately referenced, then it is plagiarism. However, in the introduction section, if your post-doc thoroughly references his/her sources, it is not plagiarism. In the results and discussion or
conclusions sections, your post-doc should not be paraphrasing anyone else. It is up to your post-doc (and you) to interpret the data and draw your own conclusions.
The Price of Plagiarism: Journals Impose Mild to Severe Sanctions

Just as the operational definition of “plagiarism” is almost entirely situation-specific, so too is the approach most scientific journals take when dealing with it. That doesn’t mean you won’t get caught if someone in your lab — you or one of your post-docs — tries to pass off someone else’s words or ideas as his or her own. But it does mean that the unintentional plagiarist may have an opportunity to correct an honest mistake — and that the intentional plagiarist’s misdeeds may not sully the entire lab.

A case-by-case approach to plagiarism is best, says Gia Honnen-Weisdorn, JD, LLM, MBA, adjunct professor of law at Pepperdine University and a practicing attorney. “Plagiarism is not really a legal term,” she explains. For legal purposes, the bigger issue may be whether the use of the prior work rises to the level of copyright infringement, which is the theft of another’s protected form of expression in a work of authorship.

“It’s highly fact-specific and very subjective,” the attorney says. “There may be some protections under the ‘fair use’ defense, and a fraud claim is possible — but they’re generally not drafted into the law.” Rather, the penalties for plagiarism are “more like codes of conduct at a university or the principles of an industry,” meaning that perhaps the worst punishment of all is “the shame of your colleagues,” Honnen-Weisdorn says, adding: “Really, the problem with plagiarism is usually not enough citations, maybe sloppiness — or trying to appear smarter than you are.”

Besides the shame factor, the plagiarist faces adverse publicity in journals where the questionable material was published (and then retracted or corrected) and potential disciplinary actions by institutions.

Editors at Nature Reviews Genetics retracted a Michigan State University scientist’s review paper, after learning the author lifted the bulk of one paragraph from another paper she had peer-reviewed. It was the first article ever retracted from any of the 15 Nature Reviews journals. The author appealed, saying her mistake was unintentional, likely caused by a medical condition, but the university took disciplinary action, including ineligibility for internal research funding for two years, no salary increase for two years, plus stronger oversight of her research activities.

The World Association of Medical Editors (WAME) calls plagiarism “scientific misconduct” and calls on its member editors to “have an explicit policy describing the process by which to respond to allegations of misconduct.” It provides a sample policy on its Web site.

Responses by journal editors to suspected plagiarism — recommended by WAME — include these, ranked in approximate order of severity, mildest to worst:

• “a letter of explanation sent only to the person against whom the complaint is made, where there appears to be a genuine and innocent misunderstanding of principles or procedure;
• a letter of reprimand, warning of the consequences of future such instances, where the misunderstanding appears to be not entirely innocent;
• a formal letter as above, including a written request to the supervising institution that a investigation be carried out and the findings reported in writing to the journal;
• publication of a notice of plagiarism, if appropriate and unequivocally documented; and
• formal withdrawal or retraction of the paper from the scientific literature, published in the journal, informing readers and the indexing authorities … if there is a formal finding of misconduct.”

Then there’s “self-plagiarism,” which WAME calls “the practice of an author using portions of [his or her] previous writings on the same topic in another of publication without specifically citing it formally in quotes.” That practice, the organization notes, is “sometimes unintentional, as there are only so many ways to say the same thing on many occasions, particularly when writing the ‘methods’ section of an article.”

The association adds: “Although this usually violates the copyright that has been assigned to the publisher, there is no consensus as to whether this is a form of scientific misconduct, or how many of one’s own words one can use before it is truly ‘plagiarism.’ Probably for this reason, self-plagiarism is not regarded in the same light as plagiarism of the ideas and words of other individuals.”

The U.S. Office of Research Integrity (ORI) is similarly realistic about plagiarism. It can, the organization says, “occur in many forms, and some of the more subtle instances, while arguably unethical in nature, may not be classified as scientific misconduct by federal agencies such as the National Science Foundation or the ORI.”

Indeed, the ORI acknowledges “situations in which an idea claimed by its author to be completely original may actually have been articulated earlier by someone else. Such ‘rediscovery’ of ideas is a relatively well-known phenomenon in the sciences.”

When it’s clearly plagiarism, though, it is “one of the three major types of scientific misconduct defined by the Public Health Service,” the ORI says. “Most often, those found to have committed plagiarism pay a steep price,” it adds, noting that “plagiarists have been demoted and dismissed from their schools [and] their jobs, and their degrees and honors have been rescinded as a result of their misdeeds.”

How does that case-by-case approach to plagiarism play out in practice? Inderscience Publishers provides a good example. The publisher of peer-reviewed international journals in engineering, energy, health care and medical engineering, among other fields, rarely encounters plagiarism, reports Jim Corlett, the company’s information manager.

“I can think of only four [instances] in the last few years,” he says. The publisher generally hears about possible plagiarism from authors of an original paper or reviewers of the bogus work.

When that happens, Corlett tells Principal Investigator Advisor, “we write to the authors requesting an explanation. If we are unsatisfied with replies and satisfied that plagiarism has taken place, we ban the authors from ever publishing with us and write to the heads of their institutions and to the editor of the publication from which it was plagiarized.” That ban, he emphasizes, only applies to the researcher who submitted the plagiarized paper. The lab’s main PI is “not necessarily” tarred with the same brush, Corlett says.