

The following is the two-hour long, interactive ethics seminar presented to first and second-year applied physics, applied mathematics, and materials science and engineering doctoral students on May 3, 2013.

The first several slides describe recent events in ethics (confined here to responsible conduct of research and professionalism) and are updated every year.

The next set of slides is core material that is used every year.

Most of the period is used in a discussion of mini-case synopses based on fiction and real circumstances. Different mini-case synopses are selected for use each year. Only the ones used in 2013 are shown; backups that were not used and those used in earlier years (and which will be used again in future years) are not shown. A continually updated listing of mini-case synopses are (or will soon be) also be available from the author's web site, <http://www.columbia.edu/~iph1/> .

Usually slides describing humorous ethics violations in the TV shows House, Bones and Leave it to Beaver are used. They were not used in 2013, but are presented at the end.

You are free to use these slides in a seminar presentation, but you may not distribute them in any manner either as is or in any modified form.

Feedback concerning these slides can be directed to me at IPH1@columbia.edu .

- Irving P. Herman, Department of Applied Physics and Applied Mathematics, Columbia University; posted 1-24-14

Research and Professional Ethics

For **All of Us**

APAM Seminar
Friday, May 3, 2013

NSF Audit of Successful Proposals Finds Numerous Cases of Alleged Plagiarism

by Jeffrey Mervis on 8 March 2013,

The National Science Foundation (NSF) is investigating nearly 100 cases of suspected plagiarism drawn from a single year's worth of proposals funded by the agency.

... that applying plagiarism software to NSF's entire portfolio of some 8000 awards made that year resulted in a "hit rate" of 1% to 1.5%. "My group is now swamped," he says about his staff of six investigators.

Plagiarism is one of three categories, along with fabrication and falsification, recognized as research misconduct by federal research agencies. (NSF labels the latter two categories "problematic data.

..... "substantive allegations of misconduct associated with NSF proposals and awards ... **has more than tripled in the past 10 years**, as has the number of findings of research misconduct." She said her office has issued 120 findings of research misconduct since 2003, and that **"more than 80%" involved plagiarism.**

Harvard Says 125 Students May Have Cheated on a Final Exam

By RICHARD PÉREZ-PEÑA and JESS BIDGOOD Published:
August 30, 2012

http://www.nytimes.com/2012/08/31/education/harvard-says-125-students-may-have-cheated-on-exam.html?_r=1&hpw

Elise Amendola/Associated Press
An entrance to Harvard University in Cambridge, Mass.



[Harvard University revealed Thursday what could be its largest cheating scandal in memory, saying that about 125 students might have worked in groups on a take-home final exam despite being explicitly required to work alone.](#)

Officials said that **nearly half of the more than 250 students** in the ([Introduction to Congress](#)) class were under investigation by the Harvard College Administrative Board and that if they were found to have cheated, they could be suspended for a year. The students have been notified that they are suspected and will be called to give their accounts in investigative hearing.

When final exams were graded in May, similarities were noticed in the answers given by some students, officials said, and a professor brought the matter to the administration immediately. ... Harvard's administrative board conducted ... concluded that almost half of them showed signs of possible collaboration.

“The enabling role of technology is a big part of this picture,” Mr. Harris said. “It’s the ease of sharing. With that has come, I believe, a **certain cavalier attitude.**”

Harvard Finds Scientist Guilty of Misconduct

By Nicholas, Wade
New York Times, August 20, 2010



http://www.wjh.harvard.edu/~mnkylab/personnel_pic/MarcOz.jpg

Harvard University said Friday that it had found a prominent researcher, Marc Hauser, “solely responsible” for eight instances of scientific misconduct.

Marc Hauser worked in the field of cognition and morality.

Hours later, Dr. Hauser, a rising star for his explorations into cognition and morality, made his first public statement since news of the inquiry emerged last week, telling The New York Times, “I acknowledge that I made some significant mistakes” and saying he was “deeply sorry for the problems this case had caused to my students, my colleagues and my university.”

Dr. Hauser is a leader in the field of animal and human cognition, and in 2006 wrote a well-received book, “Moral Minds: How Nature Designed Our Universal Sense of Right and Wrong.” Harvard’s findings against him, if sustained, may cast a shadow over the broad field of scientific research that depended on the particular research technique often used in his experiments.

... In his statement, Dr. Hauser, who is on a year-long leave, said: “I acknowledge that I made some significant mistakes and I am deeply disappointed that this has led to a retraction and two corrections. I also feel terrible about the concerns regarding the other five cases, which involved either unpublished work or studies in which the record was corrected before submission for publication.”

New record for faking data set by Japanese researcher

Anesthesiologists published 212 papers; only 3 clearly fraud-free.

by John Timmer - July 6 2012,

<http://arstechnica.com/science/2012/07/new-record-for-faking-data-set-by-japanese-researcher/>

The Retraction Watch blog has been following the case of one Dr. Yoshitaka Fujii from Toho University's medical school, who has published extensively in the field of anesthesia. Unfortunately, however, it seems that Dr. Fujii has not bothered to perform extensive research to create those publications. Toho University has now published the results of an investigation into Fujii's work, and found that the vast majority of the underlying "data" was simply made up.

Of 212 papers credited to the researcher, the investigation only found clear indications of supportive data for three. At least 172 of the rest are clearly based on fabricated data. Fujii apparently claimed his studies were all double-blind and performed at multiple institutions, factors that would make tracking down the underlying data more challenging. And, to make sure he had indications of collaborators at other institutions, he simply forged their signatures on papers he submitted.

Fujii slipped through the cracks partly because there was no obvious responsible party. ... Things only came to a head when the editors of the journal *Anesthesia* hired an outside consultant to investigate

Assuming all of the fraudulent papers get retracted, Fujii will set a new record for the most retractions ever, more than doubling his closest competitor.

This case was submitted to me by an APM graduate student who had attended this seminar.

Selected Recent News from Retraction Watch

as of April 30, 2013 (all from April, 2013) <http://retractionwatch.wordpress.com/>

Three [more papers by Diederik Stapel](#) — who was profiled by The New York Times Magazine [this weekend](#) — [have been retracted](#), all in the Journal of Experimental Social Psychology. ... In case anyone's wondering, Stapel is in no danger of overtaking the current retraction record holder, Yoshitaka Fujii — with 183.

Talanta, a journal serving the analytical chemistry community ... [has retracted a 2013 article by a group of Indian researchers over an authorship dispute](#).

The paper, "Non-enzymatic electrochemical glucose sensor based on silver/silver oxide nano-rods reinforced with multiwall carbon nanotubes," appeared in January, with the authors listed as Leila Shahriary, Santosh K. Haram and Anjali A. Athawale.

[But according to the retraction notice:](#)

[This article has been retracted at the request of the Authors.](#)

[The authors have decided to retract this article because of conflicts among the authors on the right to publish these results.](#)

SpringerPlus has retracted a 2012 paper by a pair of Saudi [mathematicians who lifted text and figures](#) from previously published articles.

The paper, "On soft expert topological spaces," appeared in October 2012. According to the retraction notice:

After publication of article [1], [we became aware of the fact that sections of this article were taken verbatim without quotation](#) from [2] and [3] listed below. In addition, 'example 2' and 'algorithm 4.1' as presented in this article [are identical to](#) 'example 3.3' from [3] and 'algorithm 4.1' from [2]. In light of these problems and in consultation with the journal's Section Editor for Mathematics we have decided to retract this article from SpringerPlus.

More

Selected Recent News from Retraction Watch

as of April 30, 2013 (all from April, 2013) <http://retractionwatch.wordpress.com/>

Last month we wrote about a paper in Nature Photonics that, because of a measurement error, had to be retracted.

It turns out that wasn't the only problem with the article — but we're afraid that the glitch requires us to issue a correction.

The article, "Greatly enhanced continuous-wave terahertz emission by nano-electrodes in a photoconductive photomixer," has listed Aaron Danner as the last — and, we'd assumed — senior author of the paper. But as Danner pointed out to us, that was a mistake by Nature Photonics.

As Danner complained to the journal: ... the author order on the (retraction) website is incorrect and does not match the author order of the downloadable pdf retraction notice, and also does not include all authors.

Please can you correct this immediately? It is having repercussions for my team:

Since my name is printed last and the authors after my name are missing from the list, news reporters monitoring retractions (like this one ...) are assuming that I was leading the team or that I was corresponding author of the original work. My student and I were middle-of-the-list authors and were neither leading nor corresponding authors.

Even More

Selected Recent News from Retraction Watch

as of April 30, 2013 (all from April, 2013) <http://retractionwatch.wordpress.com/>

The journal (Vacuum) is pulling a 2012 paper by a group of researchers from India who stole images and used them in misleading ways ... This article has been retracted at the request of the Editor-in-Chief and Author.

The authors have **plagiarized** Figure 2A from a paper that had already appeared in Science of Advanced Materials, Volume 2 (2010), Pages 432-437, <http://dx.doi.org/10.1166/sam.2010.1108>. Furthermore Figure 10 in the Vacuum article had been previously published in Materials Science and Engineering C 31 (2011) 840–844, <http://dx.doi.org/10.1016/j.msec.2011.01.002>. **However in the Vacuum publication the same results were presented for a different material in both Figure 2A and Fig. 10 compared to the original results. Therefore the editors have concluded that data fabrication is also involved.**

One of the conditions of submission of a paper for publication is that authors declare explicitly that their work is original and has not appeared in a publication elsewhere. Re-use of any data should be appropriately cited.

A University of Wisconsin scientist who was found by the Office of Research Integrity (ORI) to have faked data in two papers, has had a second study retracted.

This article has been retracted at the request of the Author, Dr Rao M. Adibhatla, and the Editor-in-Chief following finding of **research misconduct [data falsification]** ...

Range of Discussion

Data and Research

Authorship

Papers and Theses - Content

Preparing Proposals

Reviewing Papers and Proposals

Employment and Conflicts of Interest

Other - medical, society, industrial ethics

**Responsible
Conduct of
Research**

**Professional
Ethics**

Ethics Awareness and Education

Ethics education is becoming a standard component in graduate and undergraduate studies

- a very good idea
- devote classes to it
or at least multi-day workshops
- equally important for experimentalists
and theorist/modelers
- now being mandated by NSF

Our start:

This seminar (first and second year doctoral students)
On-line course (new)

Our one hour today is not enough time to devote to this
<10 hours out of >8,000 hours

What is right?

What is right?

Do you really know what is right?

Are you, in fact, right?

How can you learn what is right?

Have you been wronged or are you in fact wrong thinking that you have been wronged?

With whom should you discuss the situation?

Aren't there enough "checks and balances" in place to automatically ensure that all will turn out to be correct ethically? (They can never be perfect.)

Raising the Issues and Defining Them

When is an issue an ethical one?

When is it just a mistake or misunderstanding or a legitimate difference in opinion?

When is it sloppiness, which is itself unprofessional if it is deemed to be “reckless”, or an honest mistake made by a careful person?

When is an issue minor or trivial and when is it major and significant-and worth following up on?

When is something a fraud or hoax, and when is the issue really difficult scientific reproducibility?

Is there just right and wrong, or is there a threshold for unethical or irresponsible behavior?

When is it just a matter of style or local convention?

Sometimes the best response is a question asking for more details about the situation - and talking to others.

Why are they making me take this seminar?

Don't they trust me?

**When “violations” occur, it is very serious.
Every year I am shocked by new revelations
of problems in ethics – in the news,
that I see, that I hear about, ...**

28 dynes of prevention is worth 454 dynes of cure
[Ben Franklin (converted to CGS units)]

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**THERE IS SO MUCH BRAND NEW MATERIAL
FOR THIS SEMINAR EVERY YEAR!!!**

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How do you distinguish between ethical issues and possible “power” issues in asymmetric relationships?

Once you have properly analyzed the ethical issues, how do you address these issues in asymmetric relationships?

I have as many examples of ethical “lapses” involving more “senior” people as I do of more “junior” people; some of them do involve asymmetries.

How to Resolve Issues?

Colleagues

Advisor

Department Chair

Department Conciliators

Ombud's Office

The Goals Today Include How to Identify, Understand, and Resolve Ethical Issues

FAQ:

Do faculty members take seminars like this?

No

Why Do This?

Situation is

clearly
unethical



probably unethical probably ethical



clearly
ethical



Why Do This?

Situation is

clearly unethical

probably unethical probably ethical

clearly ethical



#1
thinks



Good
ethical
compass

Why Do This?

Situation is

clearly unethical

probably unethical probably ethical

clearly ethical



#1
thinks



Good
ethical
compass

#2
thinks



No ethical
compass



Why Do This?

Situation is

clearly unethical

probably unethical probably ethical

clearly ethical



#1
thinks



Good
ethical
compass

#2
thinks



No ethical
compass

#3
thinks



Terrible
ethical
compass



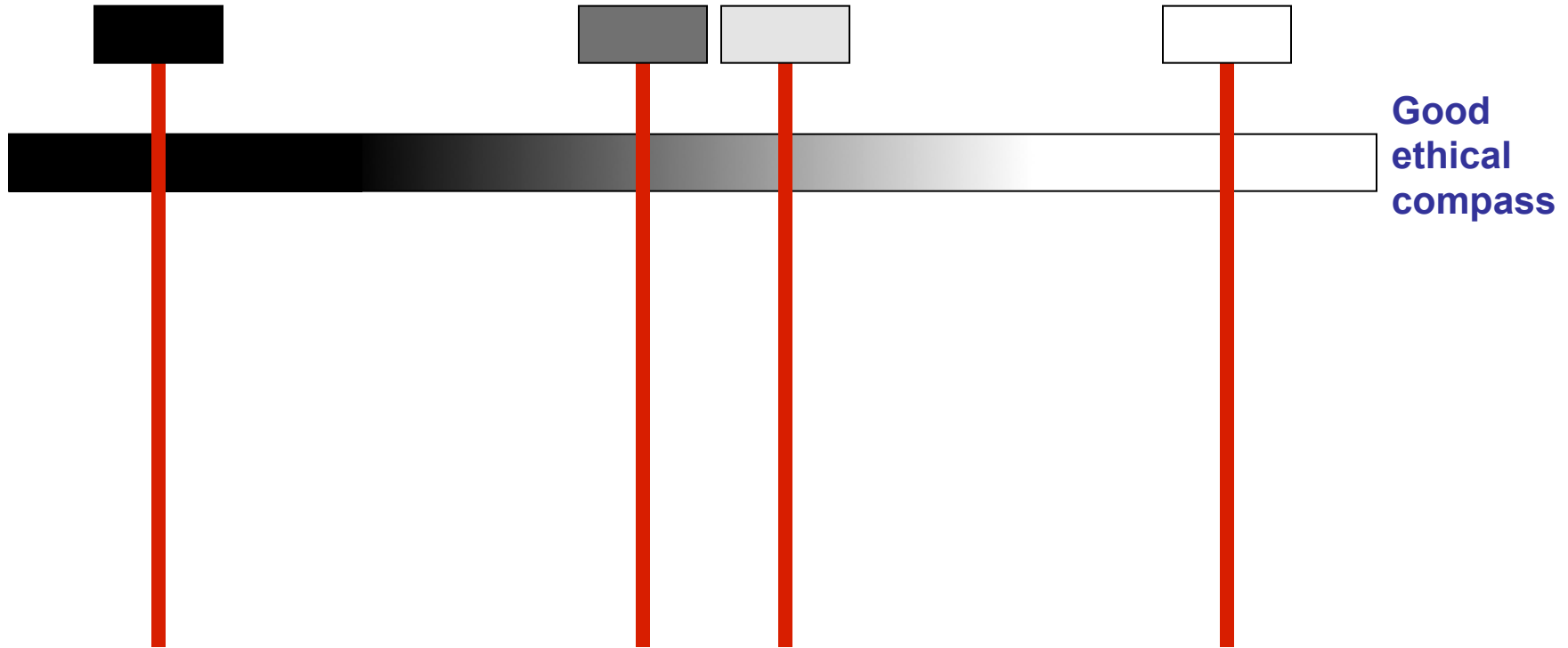
Why Do This?

Situation is

clearly unethical

probably unethical probably ethical

clearly ethical



Good ethical compass

Why Do This?

Situation is

clearly unethical

probably unethical probably ethical

clearly ethical



Good ethical compass

With some information, may initially think



Why Do This?

Situation is

clearly unethical

probably unethical probably ethical

clearly ethical



Good ethical compass

With some information, may initially think



With more information, may then think



Why Do This?

Situation is

clearly unethical

probably unethical probably ethical

clearly ethical



Good ethical compass

With some information, may initially think



With more information, may then think



Or with even more



Theory vs. Practice

**Answering questions correctly on an
ethics exam**

vs.

What you actually do

Theory vs. Practice

**Answering questions correctly on an
ethics exam**

vs.

What you actually do

What you should do

vs.

What you can do (and get away with)

**Responsible conduct of research
vs. professional conduct in procedures
vs. professional conduct in society issues
vs. professional courtesy**

Professional (dis)courtesy

- A person surfs the net during a lecture or seminar

Method: Discuss Case Histories

Case synopses handed out

- some are referenced
- some come from personal knowledge or from others
- many of the more outrageous ones are based on real events

See references cited in the handout

Columbia University

Institutional Policy on Misconduct in Research, February 3, 2006

<http://www.columbia.edu/research/index.html>

Research Misconduct: Responsible Conduct of Research http://ccnmtl.columbia.edu/projects/rcr/rcr_misconduct/foundation/index.html

On Being A Scientist: Responsible Conduct In Research,
National Academy Press, 1995 and 2009

- **received by all incoming doctoral track APAM graduate students**
- <http://www.nap.edu/readingroom/books/obas/>

Plastic Fantastic: How the Biggest Fraud in Physics Shook the Scientific World, Eugenie Samuel Reich (Macmillan Science) 2009. Jan Hendrik Schön

Method: Discuss Case Histories

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National Academy Press, 1995 and 2009

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1995

- * Introduction
- * The Social Foundations of Science
- * Experimental Techniques and the Treatment of Data
- * Values in Science
- * Conflicts of Interest
- * Publication and Openness
- * The Allocation of Credit
- * Authorship Practices
- * Error and Negligence in Science
- * Misconduct in Science
- * Responding to Violations of Ethical Standards
- * The Scientist in Society
- * Bibliography
- * Appendix: Discussion of Case Studies

2009

- Advising and Mentoring
- The Treatment of Data
- Mistakes and Negligence
- Research Misconduct
- Responding to Suspected Violations of Professional Standards
- Human Participants and Animal Subjects in Research
- Laboratory Safety in Research
- Sharing of Research Results
- Authorship and the Allocation of Credit
- Intellectual Property
- Competing Interests, Commitments, and Values
- The Researcher in Society

Range of Discussion

Data and Research

Authorship

Papers and Theses - Content

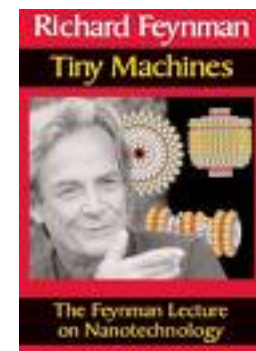
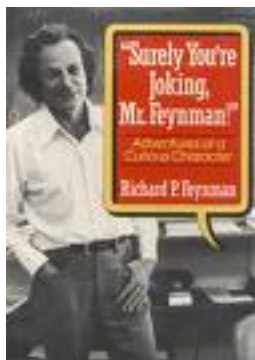
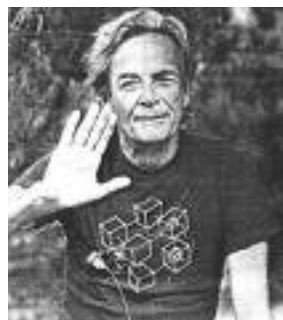
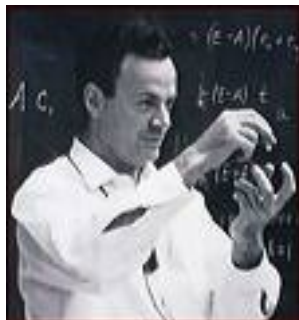
Preparing Proposals

Reviewing Papers and Proposals

Employment and Conflicts of Interest

Other - medical, society, industrial ethics, ...





From the book: Surely You're Joking, Mr. Feynman!, by Richard Feynman

...For example, **if you're doing an experiment, you should report everything that you think might make it invalid--not only what you think is right about it:** other causes that could possibly explain your results; and things you thought of that you've eliminated by some other experiment, and how they worked--to make sure the other fellow can tell they have been eliminated.

Details that could throw doubt on your interpretation must be given, if you know them. You must do the best you can--if you know anything at all wrong, or possibly wrong--to explain it. **If you make a theory, for example, and advertise it, or put it out, then you must also put down all the facts that disagree with it, as well as those that agree with it. ...**

In summary, the idea is to **give all of the information to help others to judge the value of your contribution; not just the information that leads to judgement in one particular direction or another.**

We've learned from experience that the truth will come out. Other experimenters will repeat your experiment and find out whether you were wrong or right. Nature's phenomena will agree or they'll disagree with your theory. **And, although you may gain some temporary fame and excitement, you will not gain a good reputation as a scientist if you haven't tried to be very careful in this kind of work.**



Why the Interest in Seeing the Raw Data?

To see if good records are being kept (lab book, etc.)

To understand the nature of the data (signal/noise, ...)

To help analyze it (look for trends)

To look for honest mistakes, misinterpretations

To make sure that there is no reckless sloppiness in obtaining the data

To make sure that the data have not been “massaged”

To see if anything is “unusual” (fabricated, Schoen)

Reviewing Manuscripts

A scientist is asked to review a manuscript submitted for publication that is very similar to one he/she has just submitted (but clearly involves independent work). What should he/she do?

A scientist is asked to review a manuscript submitted for publication that is very similar to one he/she is just about to submit (but clearly involves independent work). What should he/she do?

Use of Open Sources/Web Resources

A university is upset because another organization has published a book based on its open video courses without asking any permission. What should it do?



Philosophy professor Shelly Kagan in a still shot from his Open Yale Courses video lecture series, "Death."

Shaanxi Normal University, which describes itself as “the cradle of teachers in Northwest China,” has published a book based on several of the most popular Open Yale Courses, including economist Robert Shiller’s “Financial Markets” and philosophy professor Shelly Kagan’s “Death.”

Confidentiality

July 27, 2008, The Ethicist, Hidden Opinions, By [RANDY COHEN](#)

I was on a university search committee when a former student of mine applied for a job. She got a quite negative reference letter from a professor known in his country (but not here) for churlish behavior. I told the student not to use him as a reference again. She told him that she knew his letter was negative. He then complained to my university about a breach of confidentiality. But I did not divulge the content of the letter, only cautioned my student. Isn't that O.K.? — NAME WITHHELD, BERKELEY, CALIF.

[http://www.nytimes.com/2008/07/27/magazine/27wwln-ethicist-t.html?
_r=1&ref=magazine&oref=slogin](http://www.nytimes.com/2008/07/27/magazine/27wwln-ethicist-t.html?_r=1&ref=magazine&oref=slogin)

YOUR ANSWER?

Confidentiality: continued

July 27, 2008, The Ethicist, Hidden Opinions, By [RANDY COHEN](#)

You deftly met your clashing ethical obligations to your student and the Grouchy Professor (my least favorite Disney movie, by the way). By speaking to the former, you protected her from avoidable professional harm. By keeping mum about the letter's contents, you respected the latter's confidentiality.

Your student simply assumed the letter to be derogatory. Even a well-meant reference letter can be ineffectual, a good reason to eschew it in the future. It could be too brief to be helpful or lacking in specifics or clumsily written or covered with soup stains. The Grouchy Professor's own reputation could make his endorsement counterproductive. Having made that assumption, the student imprudently confronted the professor, stirring up this hornet's nest and placing you in jeopardy.

She should have known better.

UPDATE: The student's approaching her reference provider induced other people to make more substantive complaints about the professor. He subsequently decided to retire.

[http://www.nytimes.com/2008/07/27/magazine/27wwln-ethicist-t.html?
_r=1&ref=magazine&oref=slogin](http://www.nytimes.com/2008/07/27/magazine/27wwln-ethicist-t.html?_r=1&ref=magazine&oref=slogin)

Direction of Research

A graduate student, told by his/her professor that he/she needs to modify the direction of his/her thesis research some because his research assistantship is now supported in part by a new second grant, is upset that his research plans are being altered because of money considerations and not by where the results take him/her. What should he/she do?

Professional Decisions: Improving Your Results

A professor thinks he/she deserves a large salary raise and understands that the only way to get one is to seek more lucrative offers from other schools, and wonders whether it is proper to apply for other positions he/she has no interest in accepting just to help his salary negotiations at his current university. What should he/she do?

Intellectual Property

A graduate student and his/her professor have a brainstorming sessions and come up with several good ideas for research, and the student later learns that his/her professor has filed for a patent for these ideas without consulting him/her or including him/her as an inventor. What should he/she do?

Plagiarism

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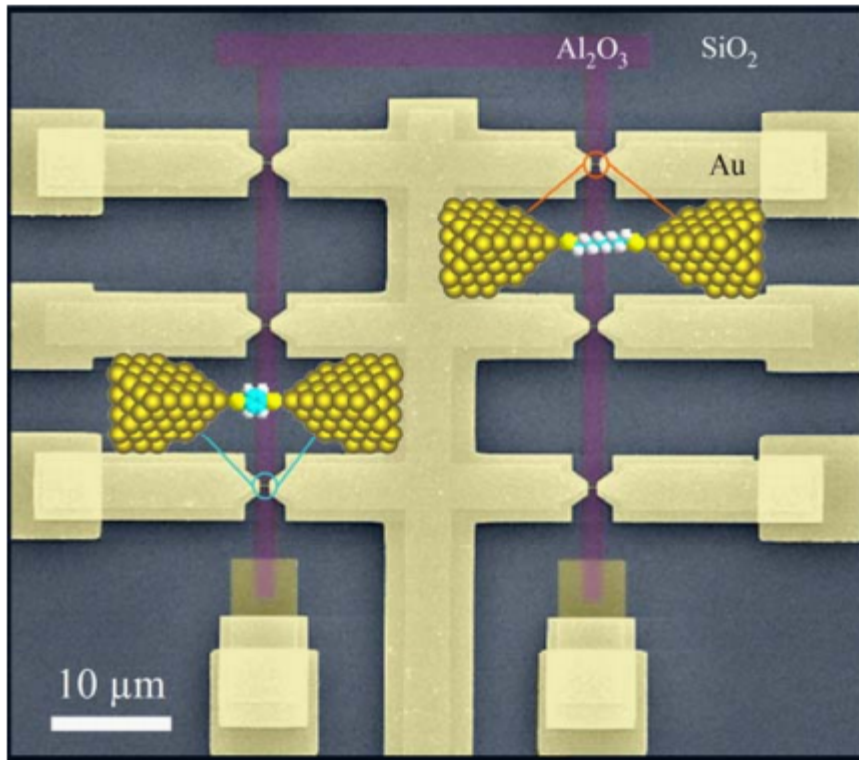
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IV. A professor reading a student term paper in a course learns that an on-line search shows that “much” of it is the same as material available on-line. What should he/she do?

Is this Plagiarism?

“The image on the right was a Nature cover from 2002. On the left, there is an image from the SI (supporting information) of a subsequent Nature paper (2009) by a different group (no authors in common), that looks identical. The latter paper does cite the former one, but, is this plagiarism?”



Song, H., Y. Kim, et al. (2009). "Observation of molecular orbital gating." *Nature* **462**(7276): 1039-1043



Park, J., A. N. Pasupathy, et al. (2002). "Coulomb blockade and the Kondo effect in single-atom transistors." *Nature* **417** (6890): 722-725.

This was submitted for your consideration by a member of APAM.

Data Reproducibility

A graduate student is told to reproduce the experiment done by a graduated student, as preliminary work for a more advanced experiment, and repeatedly cannot, and tells the professor, who then becomes very annoyed. What should he/she do?

[Scientific reproducibility]

Analyzing Data – Show Me the Raw Data

A graduate student is shocked when his/her advisor wants to see the raw (primary) data, and not secondary data (imported into a data processing code) and wonders whether he/she is being trusted. What should he/she do? [Plastic Fantastic]

A graduate student is shocked when his/her advisor wants to see the raw (primary) data, and not secondary data (imported into a data processing code) and wonders whether he/she is being trusted, **and how can this matter anyway since there were no witnesses to his/her taking the primary data.** What should he/she do? [Plastic Fantastic]



**Jan Hendrik
Schön; Plastic
Fantastic**

Analyzing Data – Match for Perfection

A graduate student wonders whether it would be okay to use data from different samples in one graph. What should he/she do?

A graduate student wonders whether it would be okay to use data from different samples in one graph, **selectively choosing data points to get a cleaner fit and one that is more like the anticipated result.** What should he/she do? [Plastic Fantastic]



**Jan Hendrik
Schön; Plastic
Fantastic**

Helping out a Friend

A student, with access to a machine shop with a couch, wonders why everyone is making such a big deal out of him/her letting a drunk friend sleep off stupor on the couch in the early hours of the morning. What should he/she do?

Publication Issues

A scientist and his/her colleague cannot agree how to publish their joint results, and later the scientist learns that the colleague has published their work, without consulting him/her, and has included him/her as an author. What should he/she do?

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A professor learns that a recently graduated student (now a postdoc elsewhere), who is upset with him/her, refuses to let any more of his/her thesis be published in journals (which the professor must do to justify the funding that supported that student and future students) and also claims rights to all in the thesis because he/she copyrighted the thesis. What should he/she do?.

Advisor Wants to Make a Joke

A graduate student is upset because his/her famous advisor wants to add a third (also famous) author to the paper, who never worked on the project at all, because the author list would then be humorous, but he/she objects because all would think the work was done by the two famous scientists and not by him/her. What should he/she do?

The Origin of Chemical Elements

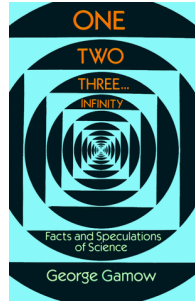
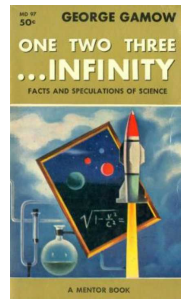
“Almost”
Nobel Prize in
Physics, 1978



R. A. ALPHER*
*Applied Physics Laboratory, The Johns Hopkins University,
Silver Spring, Maryland*

AND

G. GAMOW
The George Washington University, Washington, D. C.
February 18, 1948



The Origin of Chemical Elements

R. A. ALPHER*

*Applied Physics Laboratory, The Johns Hopkins University,
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H. BETHE

Cornell University, Ithaca, New York

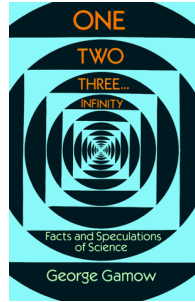
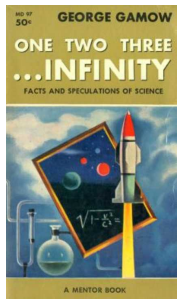
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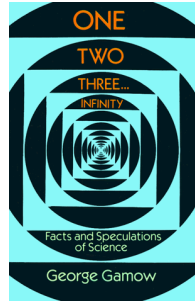
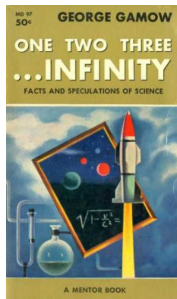
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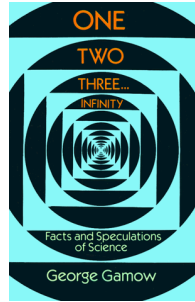
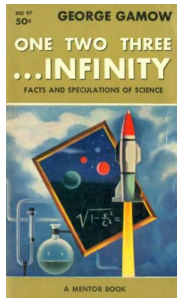
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“Almost”
Nobel Prize in
Physics, 1978

Nobel Prize in
Physics, 1967



The famous $\alpha\beta\gamma$ paper.

The Origin of Chemical Elements

“Almost”
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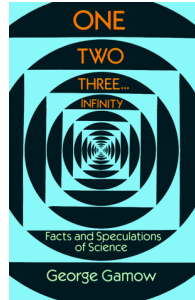
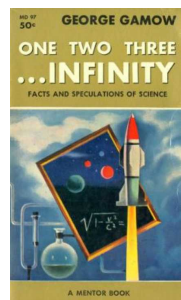
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The George Washington University, Washington, D. C.

February 18, 1948



Nobel Prize in
Physics, 1967



The famous $\alpha\beta\gamma$ paper.

Gamow humorously decided to add the name of his friend—the eminent physicist Hans Bethe—to this paper in order to create the whimsical author list of Alpher, Bethe, Gamow, a play on the Greek letter α , β , and γ (alpha, beta, gamma).

Gamow: ... (this paper) is often referred to as the 'alphabetical article.' It seemed unfair to the Greek alphabet to have the article signed by Alpher and Gamow only, and so the name of Dr. Hans A. Bethe (*in absentia*) was inserted in preparing the manuscript for print. Dr. Bethe, who received a copy of the manuscript, did not object, and, as a matter of fact, was quite helpful in subsequent discussions. There was, however, a rumor that later, when the alpha, beta, gamma theory went temporarily on the rocks, Dr. Bethe seriously considered changing his name to Zacharias.

Professional Decisions: The Job You Want

A graduate student finishing his/her thesis applied for employment from companies A and B, received and then accepted the offer from company A, later received an offer from company B---which he/she prefers---and wonders whether it would be proper to then rescind his/her acceptance to company A and accept the offer from company B. What should he/she do?

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**Let's continue our discussion
over lunch**

Bones - Season 7, Episode 9 (Review): The Don't in the 'Do

<http://www.poweredbyosteons.org/2012/04/bones-season-7-episode-9-review.html>



FBI Special Agent (Seeley) Booth and Bones (Dr. Temperance Brennan)



Intern/lab assistant/grad student
Arastoo Vaziri (Pej Vahdat) with Bones

<http://www.imdb.com/media/rm1591589120/nm1798530>

Episode Summary... And in the C plot, (intern) Vizidi gets an article accepted to the fictional *Journal of Forensic Anthropology*. There is absolutely nothing factual about this plot, as the writers clearly have no idea how academic publishing works and didn't even bother to do a little research or ask one of their forensic consultants for some ideas.

Bones - Season 7, Episode 9 (Review): The Don't in the 'Do

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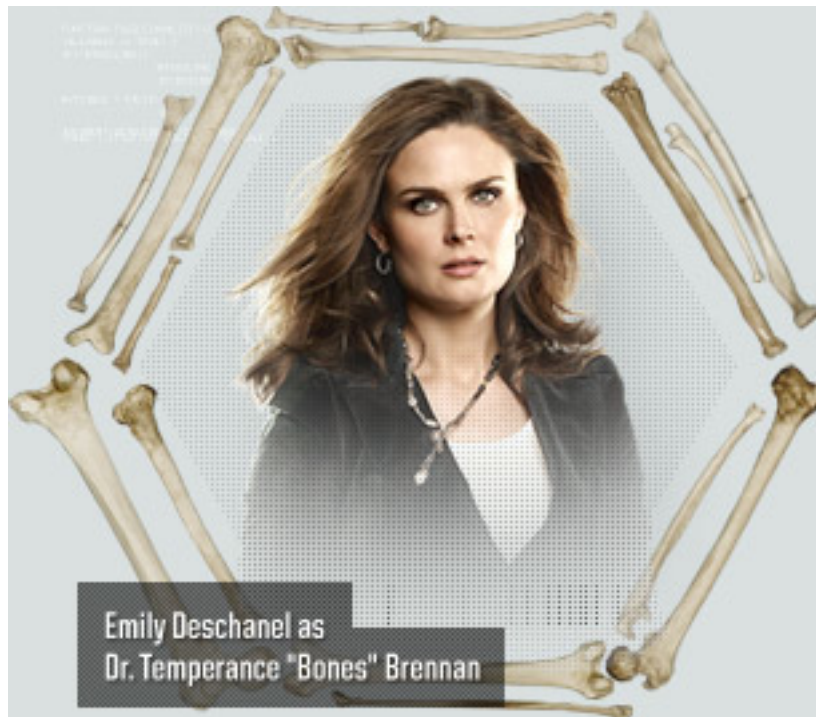
And finally, this is NOT how academic publishing works:

- Vizidi gets galley proofs for his *Journal of Forensic Anthropology* article. (Galley proofs are electronic, not printed.)
- He's not allowed to tell anyone about the article acceptance until the journal comes out. (Articles are published online after peer-review as early view. In some journals, articles are published even before copyediting, or immediately after acceptance. No one is ever surprised by the contents of a published journal volume.)
- Vizidi excitedly shows Hodgins a footnote citing one of his papers. Hodgins is excited. (Most anthro journals don't use footnotes, they use parenthetical references. The footnote to Hodgins is incomplete. And if Hodgins is as much a bad-ass as he claims, another citation to his work wouldn't even make a dent in his h-index.)
- * - Brennan reveals that she was one of the peer reviewers. (Advisors and other supervisors generally don't review their students' papers unless there's a really good reason to do so. Brennan's reviewing it would be considered a conflict of interest by most journal editors.)
- In the end, Vizidi's paper is not published. (Journals don't retract papers except in the case of data mismanagement or other ethical violations.)
- Instead of Vizidi's paper, the *Journal of Forensic Anthropology* plans to run a puff piece on Selena Gomez on a fossil hunt. (Peer-reviewed journals don't run "puff" pieces. And even if they did, an article on a fossil hunt is completely inappropriate for a forensic journal. But now my life's goal is to get AJPA to publish pictures of me and The Biebs riding a dinosaur at the Creation Museum.)
- Brennan thinks that Vizidi is too immature to understand what "being published" means. (Anthropology graduate students routinely come out of school with 3 or more publications these days. Vizidi is pretty far behind if this is his first article. Also, "being published" means just that - you've told other people about something you did, and a few people agreed with you that it was neat. It's not the end all be all.)
- Oh, right, and Vizidi's awesome article? "New Methodologies for Osteometric Analysis in Human Remains." (Because what we need is another article to tell us how to measure the length of a bone?) His follow-up? The hilariously non-specific, "Advances in Forensic Odontology."

Bones - Season 7, Episode 9 (Review): The Don't in the 'Do

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Brennan reveals that she was one of the peer reviewers. (Advisors and other supervisors generally don't review their students' papers unless there's a really good reason to do so. Brennan's reviewing it would be considered a conflict of interest by most journal editors.)



Bones is ethical to a fault.

What was she thinking?

<http://www.fox.com/bones/>

“House”

The Players (M.D.s, not Ph.D.s)



<http://www.fox.com/house/>

SLEEPING DOGS LIE, Aired 4/18/06, Season 2, Episode 218,
<http://www.fox.com/house/recaps/218.htm>;
EUPHORIA, PART 2, Aired 5/3/06, Season 2, Episode 221,
<http://www.fox.com/house/recaps/221.htm>

The Conflict



The Conflict

I am very angry. I wrote a manuscript about our case. It sat on House's desk for months waiting his approval. I gave Foreman my notes about the case when he asked for them, and he knew I was writing an article based on them. Now I have just learned that he wrote an article about our case with my notes, House approved it, and now it has been submitted to journal, and published by him.



The Response



The Response

Big deal. Get over it.



The Response

Big deal. Get over it.

I didn't really read either one of them. I just thought he would punish (i.e., bother) me more if I didn't let him submit his manuscript.



The Resolution



The Resolution

(On the verge of dying in a later episode--he really doesn't die) I'm sorry, I shouldn't have stolen your article.



The Resolution

(On the verge of dying in a later episode--he really doesn't die) I'm sorry, I shouldn't have stolen your article.

(When Foreman is dying) I don't accept your apology.

(When Foreman is on the verge of death) I accept your apology.



What do you think?

Who is at fault?



All Are Wrong

All are wrong, but some were more wrong than others

- Cameron is the least wrong

Should have been only 1 paper with all as authors (if all contributed)

- maybe “medical community” standards are different (no)

Foreman using her notes is wrong

- accentuated by his knowledge of “her” article

Boss (House) made a mess

- didn't care at all about any of this





The Ethics Violator: Theodore Beaver Cleaver
But is he the only ethics violator?

“Leave it to Beaver”

Original Air Date:

2 October 1958 (Season 2, Episode 1; Episode 40 overall)

Beaver's Poem (1958) or

Ethics Violation in the Third Grade



The Cleavers

Wally



Ward

June

Beaver
aka the Beave
aka Theodore



<http://www.leaveittobeaver.org/>

<http://www.imdb.com/title/tt0827858/>

http://en.wikipedia.org/wiki/Leave_It_to_Beaver_%28season_2%29



The scene of the ethics violation.

Beaver needs to write a poem for a school assignment.

Beaver needs to write a poem for a school assignment.

Ward writes the poem when Beaver goes to bed.

Beaver needs to write a poem for a school assignment.

Ward writes the poem when Beaver goes to bed.



Sue Randall as
Miss Landers



Beaver needs to write a poem for a school assignment.

Ward writes the poem when Beaver goes to bed.

The next day, Wally announces Beaver has been chosen to read his poem in assembly and will be given an award.

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What should happen?

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What should happen?

Ward and June discourage Beaver from accepting an award for a poem he didn't write.



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What should happen?

Sue Randall as
Miss Landers



Ward and June discourage Beaver from accepting an award for a poem he didn't write.

What should happen?



Ward talks to Mrs. Rayburn who decides to give Beaver another chance to write a poem.



Doris Packer as Mrs. Cornelia Rayburn (the Principal)

Who is Wrong?: Beaver? Ward Cleaver?
Will Beaver be a recidivist ethics violator?

“Leave it to Beaver”

Original Air Date:

2 October 1958 (Season 2, Episode 1; Episode 40 overall)

***Beaver's Poem* (1958) or**

Ethics Violation in the Third Grade or

Father Doesn't Know Best or

All in the Family or

Poetic Justice

