INSTRUCTIONS FOR CREATING LIABILITIES

As Required by Senate Bill 212
Effective July 1, 1917
INTRODUCTORY NOTE

The attention of the members of the Faculty is directed to the mode of procedure outlined in this paper. The law is printed herein and the action of the Trustees taken in order to put the law into operation throughout the University. The Committee has fixed upon August 15th as the date when all department requests shall be filed and regularly every month thereafter.

The co-operation of the departments is earnestly requested in order that serious embarrassments may be avoided. Attention is directed to the liability involved in the latter part of Section 403-1. The entire law should be read carefully as information and as a guide in action.

Respectfully,

W. O. THOMPSON.

July 16, 1917.
The Ohio State University.

AN ACT

Be it enacted by the General Assembly of the State of Ohio:

SECTION 1. That section 243 of the General Code be amended, and that sections 403 and 242 of the General Code be supplemented by the enactment of sections 403-1, 242-1 and 242-2 of the General Code to read as follows:

Sec. 403-1. Every department, institution, board or commission, the head, trustees or members of which are appointed by the governor, shall on or before five days before the first of each month submit to the governor for his approval, upon such forms as he may prescribe, a detailed itemized statement in duplicate of expenditures to be made during said month. The governor may approve all or any part of such expenditures and disapprove the rest, and shall evidence his action in writing on such statement. One copy of such statement, with his action noted thereon, shall be filed in the office of the auditor of state and the other returned to the department, institution, board or commission. The auditor of state shall not issue his warrant for any expenditure by such department, institution, board or commission that has not been approved by the governor as above specified, unless the governor shall in writing approve such expenditure. Failure to comply with the above provision shall render the head or heads of any department or institution, or the trustees or members of any board or commission referred to in this act personally liable, jointly and severally, in a civil action to any person or persons who shall have furnished labor, material or service, for the value of the labor, material or service furnished, without such approval of the governor; and the state shall not be liable therefor.

Sec. 242-1. An “order” as in this chapter provided shall mean a copy of a contract, or a statement of the nature of a contemplated expenditure, a description of the property or commodity to be purchased or service to be performed other than services of officers and regular employees of the state, and per diem of the National Guard, and the total sum of the expenditure to be made therefor if the same is fixed and ascertained, otherwise the estimated sum thereof. An “invoice” as in this chapter provided shall mean estimates on contracts, or a statement showing de-
livery of the commodity or performance of the service described in the order, and the date of the purchase or rendering of the service, or a detailed statement of the things done, material supplied or labor furnished, and the sum therefor due pursuant to the contract or obligation. All orders and invoices shall specify the appropriation account from which the same is payable. Whenever in any statute the word "voucher" is used, the same shall be held to mean such order and invoice, and the provisions of section 242-1, section 242-2 and section 243 of the General Code shall apply thereto. All orders and invoices shall be approved by the officer, board, commission or trustees of an institution issuing the same, but such trustees, board or commission may by resolution or order filed with the auditor of state designate either a chief executive officer or the secretary or a clerk of such trustees, board or commission to approve the same.

Sec. 242-2. The auditor of state is required to establish uniform order and invoice forms which shall be used by the officers, boards and commissions of the state, and the trustees of institutions receiving state appropriations. In issuing such orders and invoices multiple copies shall be made, one of which shall be filed with the auditor of state and the other preserved by the officer, board, commission or institution issuing the same. The auditor of state and the state budget commissioner shall prescribe rules and regulations as to the method of issuing such orders and invoices and the periods of time which orders for estimated expenditures may cover. No contract or obligation shall be legal or binding upon the state, and no monies appropriated by the General Assembly shall be expended by an officer, board or commission of the state, or by an institution receiving state appropriations, other than for salaries of officers and regular employees of the state, per diem of the National Guard and transportation of the commands of the National Guard when called into active service in time of war, insurrection, riot, fire or flood, unless prior to entering into such contract or obligation, or prior to making such expenditure, an order therefor shall be filed with the auditor of state, but the mailing of such order shall be deemed to be such filing as of the time of the United States Post-office posting mark.

Sec. 243. Whenever an order is presented to the auditor of state he shall charge the proper appropriation account with the sum or estimated sum of such order, and such sum shall be a prior charge upon such appropriation account and shall be available only for the payment of invoices issued against such order, until the final invoice therefor is filed with the auditor of state, or until the auditor of state is satisfied that such order and the obligation recited therein have ceased to be an obligation against the state. Whenever any commodity or service included in such order is delivered or performed, or whenever any payment is due upon such contract or obligation, an invoice shall be filed with the auditor of state therefor. The total of all invoices issued against any order shall not exceed the sum of such order or the estimated sum appearing on such order. The auditor of state shall examine each invoice presented to him, or claim for salary of an officer or employee of the state, or per diem and transportation of the commands of the National Guard, or sundry claim allowed and appropriated for by the General Assembly, and if he finds it to be a valid claim against the state and legally due, and that there is money in the state treasury duly appropriated to pay it and that all requirements of law have been complied with, he shall issue thereon a warrant on the treasurer of state for the amount found due, and file and preserve the invoice in his office. He shall draw no warrant on the treasurer of state for any claim unless he finds it legal, and that there is money in the treasury which has been duly appropriated to pay it.

SECTION 2. That section 243 of the General Code be, and the same is hereby repealed.

E. J. HOPPLE,
Speaker of the House of Representatives.

EARL D. BLOOM,
President of the Senate.

Passed March 21, 1917.
Approved March 31, 1917.

JAMES M. COX, Governor.

Filed in office of Secretary of State, April 2, 1917.
DEAR SIR: Senate Bill 212 passed by the 82nd General Assembly provides that you shall submit estimates of expenditures monthly to the Governor on blanks furnished by him. The enclosed blanks are to be filled out on typewriter in duplicate and forwarded so as to arrive in this office not later than the 25th of each month. Observe specimen enclosed herewith in making out monthly estimates.

There is no disposition to hamper departments by requiring unnecessary or superfluous data. Sound business methods require that expenditures be planned carefully. Supplementary expenditures may and will be authorized if necessary.

In filling in blanks give details and explanations wherever possible. It will not suffice for a department to make estimates as follows:

D-3 General Plant Materials $800.00

Instead arrange as follows:

D-3 General Plant Materials—
Gingham $ 60.00
Sheeting 50.00
Barbed Wire 100.00
Hardware 100.00
Leather 200.00
Paint 150.00
Miscellaneous 140.00 $800.00

Expenditures from Rotary Funds should not be included.

The law provides that the Auditor of State shall not draw warrants against vouchers until these expenditure estimates are submitted and approved by the Governor. Neglect of this duty may inconvenience you.

Yours truly,

W. T. Donaldson,
Commissioner.

RESOLUTION OF THE BOARD OF TRUSTEES

The President reported to the Board that under the operation of Senate Bill 212, effective July 1, 1917, the University is required to furnish monthly estimates of expenditures to the Governor for approval, before any liabilities may be incurred against existing appropriations.

In order to better carry out the provisions of the law above referred to, the President recommended that the appropriations made by the legislature for the University, including Agricultural Extension, for expense and equipment be held together, and not distributed to the departments at the beginning of the year as heretofore.

He recommended further, that the President be authorized to appoint a committee on appropriations, to meet monthly, to consider requests from departments for expenditures, and that this committee be granted full power to authorize or decline requisitions so presented.

Upon motion, the above recommendations were approved, and the President was directed to appoint such a committee on appropriations, which committee shall have full power over all expenditures, including labor, except for fixed salaries, and such other specific appropriations as may be made from time to time by the Board of Trustees. Said committee shall prepare such rules and regulations as may be necessary to carry out the provisions of the law and the work of the committee.

Acting under the above resolution the following Committee was appointed by the President:

W. O. Thompson
Carl E. Steeb
Dean Adams
Dean Coddington
Dean Vivian
The Committee organized by electing President Thompson, Chairman, and R. M. Royer, Secretary.

The following rules were adopted:

Requests by departments for allowances shall be made out on regular requisition blanks furnished by the Purchasing Agent.

Requisitions for supplies, traveling expenses, labor, equipment or service of any kind whatsoever desired by a department shall cover an entire month and shall be submitted for approval to the Dean of the College on or before the 15th day of the month preceding the month covered by the requisition.

The following departments will submit their requisitions for approval on or before the 15th day of the month with the President of the University:

- Library
- Military Science
- Physical Education
- President's Office
- Registrar's Office

The following departments will submit their requisitions for approval on or before the 15th day of the month with the Business Manager:

- Business Manager's Office
- Division of Operation and Maintenance
- University Architect
- Stores and Receiving
- University Chemist

The Deans of the Colleges, the President of the University and the Business Manager shall file such requisitions as they have approved with the Committee on Appropriations on or before the 20th day of the month preceding the month covered by said requisitions.

In making requisitions department heads shall use separate blanks for Equipment and Current Expense items.

Unencumbered balances at the close of each month shall automatically lapse and revert to the general fund.

No person shall create any liability beyond that granted by the Committee on Appropriations. (See last paragraph of Sec. 1 of law printed above.)
OSU hunts core of plagiarism

Plagiarism appears to be difficult for experts of all sorts, including enforcers, to pin down.

By David Lore
Dispatch Project Editor

Recent plagiarism cases at Ohio State University have prompted efforts to better define an often misunderstood academic crime.

"In its more blatant forms, plagiarism is well-understood, but it frequently occurs in less-obvious situations," Edward F. Hayes, OSU vice president for research, warned in a June 4 memo to faculty members.

Plagiarism, in general, means to use the ideas or words of others without attribution. Faculty members can be disciplined not just for copying another's work verbatim but also for paraphrasing it.

In the most recent case at OSU, the charge was leveled because a professor paraphrased another's writing in a footnoted summary and then copied some of the bibliographic citations verbatim.

The Hayes memo may be the first step at OSU to define plagiarism, an academic crime not now defined under OSU's 1989 guidelines on scholarly misconduct.

The scholarly misconduct and faculty disciplinary procedures are being revised by three faculty panels in cooperation with Hayes and OSU Provost Richard Sisson. New rules may be ready by winter, Hayes said.

The rewrite was prompted by several recent scandals at OSU. Records on these cases were obtained under Ohio's Open Records Act.

Jeffrey A. Coffman, an assistant professor in psychiatry, for example, resigned in 1990 in the face of a faculty investigation that concluded that "a number of paragraphs" from his 1989 book were "verbatim transcriptions" from a 1988 textbook written by others.

In February 1992, another faculty investigatory panel held that chemistry professor Leo A. Paquette, in a grant application to the National Institutes of Health, plagiarized several paragraphs from an earlier NIH grant application from a Texas chemist.

The committee believed the plagiarism was unintentional, but it was concerned that Paquette, as an NIH reviewer, had failed to hold such applications in confidence.

Please see PLAGIARIZE Page 2A
Then, in December, Dr. Joseph R. Drago, former director of the OSU Division of Urology, resigned after a faculty investigation committee concluded he had falsified and fabricated research data.

Drago was also found to have used material from articles and books he co-authored in subsequent writings carrying only his own name.

Late last year, a second plagiarism complaint was filed against Paquette at the National Science Foundation.

Reviewing this charge, an OSU panel concluded that Paquette again had taken information from a grant application he was reviewing, using it to prepare a March 1992 research article in the Journal of the American Chemical Society.

Although Coffman and Drago left quietly, Paquette is appealing this second finding with support from many students and faculty members in his department. The forum is likely to be disciplinary hearings, which threaten Paquette with job sanctions or removal.

A faculty member since 1963, Paquette, 59, has received several top campus honors and, at $124,716 a year, is among the highest-paid faculty members on the campus.

Many of his students and some colleagues are convinced that nothing in Paquette's Journal article constitutes plagiarism. They say the faculty investigators, lacking expertise in organic chemistry, judged Paquette's introduction to an article on developments in the field as though it were a work of art or literature.

The dispute centers on Paquette's six-paragraph introduction, which summarized previous research on the chemistry problem at issue, as well as on two supporting footnotes.

OSU officials do not contend that anything else in the 9½-page article is tainted or that any research was falsified.

"The plagiarism," the investigations committee said, "consisted of condensing and paraphrasing a section of the (National Science Foundation) applicant's proposal into two introductory paragraphs ... and involved the use of illustrative examples, general organization and supporting literature citations, two of which were compound citations containing typographical errors that were copied nearly verbatim."

Paquette has refused to comment on this second charge.

But Harold Shechter, a professor emeritus of chemistry at OSU, says the whole controversy is much ado about nothing.

"It's not plagiarism," Shechter says, because Paquette, by footnoting the introductory paragraphs, made clear these were conclusions drawn by others.

And, although Paquette admitted copying the citations in the footnotes from the grant application, the copying of citations is extremely common in chemistry, Shechter said.

Shechter also questions whether paraphrasing, especially in a summary introduction, is plagiarism. "We teach our students to paraphrase," he said.

In his June 4 memo, however, Hayes specifically says that "using another's work in a bibliography section of a paper, in a general description of prior work in the area of the paper, or in an application for funds can be plagiarism."

"Appropriation of another's work is still plagiarism, even though it does not involve the central idea of the paper in which it occurs," Hayes wrote.

Paquette's supporters, however, contend Hayes issued this clarification two months ago just to shore up OSU's case against Paquette.

Hayes said last week he doesn't foresee that any "overarching definition" of plagiarism will be incorporated into the misconduct rules since each case depends on the context of the act and requires individual judgment. In fact, experts have disagreed on what constitutes plagiarism.

In the first Paquette case, one expert witness said his use of the Texas material constituted plagiarism; a second expert witness said it did not.

In the second case, an OSU consultant, a Nobel laureate from Cornell University, found plagiarism in Paquette's article. In his appeal, however, Paquette will offer counter testimony from a Nobel laureate at the University of California, Shechter said.

Defining and prosecuting plagiarism are national problems for academia.

"A broad spectrum of misconduct falls into this category, ranging from obvious theft to uncredited paraphrasing that some might not consider dishonest at all," according to a National Academy of Sciences' publication, On Being a Scientist.

"Occasional overlap is one thing," the advisory says. "Systematic, unacknowledged use of the techniques, data, words or ideas of others is another. Erring on the side of excess generosity in attribution is best."
OSU rethinking plagiarism policy after profs accused

ASSOCIATED PRESS

COLUMBUS

Ohio State University officials are redefining the school's policy on plagiarism after academic misconduct cases involving professors.

Three faculty panels, along with Edward F. Hayes, vice president for research, and Provost Richard Sisson are rewriting rules and disciplinary procedures for faculty. The new standards could be in place by winter, Hayes said.

"In its more blatant forms, plagiarism is well-understood, but it frequently occurs in less obvious situations," Hayes said in a June memo to faculty members.

Plagiarism is not defined in OSU's 1989 guidelines on scholarly misconduct, but faculty members are expected to understand what plagiarism is, said OSU spokesman Malcolm Baroway. Plagiarism is defined in the student code of conduct as copying another person's work verbatim or paraphrasing it without attribution.

In the past three years, two faculty members have resigned after being found guilty of plagiarism. Jeffrey A. Coffman, assistant professor in psychiatry, resigned in 1990 after a faculty investigation concluded that some paragraphs from his 1989 book were "verbatim transcriptions" from a 1986 textbook that others had written.

Dr. Joseph R. Drago, former director of the Division of Urology, resigned in December after a faculty committee concluded that he falsified and fabricated research data.

Twice in the past 1½ years, faculty investigation panels found chemistry Professor Leo Paquette guilty of plagiarism. In February 1992, a panel ruled that Paquette unintentionally plagiarized several paragraphs from a Texas chemist.

"We teach our students to paraphrase," he said. Paquette is appealing an OSU ruling that said he took information from a grant application and used it in a research article he submitted to the Journal of the American Chemical Society.

Harold Shechter, a professor emeritus of chemistry, does not think the article constitutes plagiarism. The material in question was footnoted, and he questioned whether paraphrasing is plagiarism.

"We teach our students to paraphrase," he said.
Hayes clarifies concept of scholarly misconduct

Policies and procedures used for judging scholarly misconduct apply to all scholarly work at the University, irrespective of the source of funding for the research involved. Edward F. Hayes, vice president for research, reminded faculty in a recent memo.

Scholarly misconduct would at least include falsification or fabrication of research results or supporting data, Hayes wrote. Plagiarism — the appropriation of someone else's work and passing it off as one's own — also is scholarly misconduct.

Plagiarism, falsification and fabrication occur not only when work is published, but also when it is present in the application process or in submission of work to others prior to publication, Hayes added. Also, when contractual terms under which the research is to be conducted are violated, scholarly misconduct may occur.

"All of us in the academic community have a responsibility to report incidents of possible scholarly misconduct about which we become aware," Hayes wrote. If an incident that may involve misconduct with regard to research comes to a person's attention, he or she should report it to an appropriate University official.

Copies of federal and University policies are available from the Office of Research. The Guidelines on Misconduct in Scholarly Activities also are on the OASIS menu on MAGNUS.

It is the policy of the University to aggressively investigate any allegation of scholarly misconduct. Any comments concerning these matters may be directed to the Office of Research, 208 Bricker Hall.
Academic fairness in dispute

- Targets of plagiarism charges say they are judged by unqualified faculty panels.

By David Lore
Dispatch Projects Editor

Recent disciplinary action against several Ohio scientists has raised questions about the way universities in Ohio are investigating allegations of plagiarism and research fraud.

"If I'd spent all this time developing my career, teaching students, getting grants for the university, I'd expect I'd be given at a minimum the same rights as an armed robber," said Mark Ferguson, an attorney defending chemist Leo A. Paquette against plagiarism charges at Ohio State University.

Attorneys for accused faculty members say their clients are denied basic legal protections and are judged by faculty committees that are subject to bias and lack the technical expertise to understand the science involved.

University officials admit they are inexperienced in dealing with scholarly misconduct. Formal procedures for such cases were spelled out by federal research agencies only in 1989.

Nevertheless, they say, current procedures are equitable and keep the faculty in charge rather than the lawyers.

In the wake of several scholarly misconduct cases at OSU, The Dispatch reviewed how such allegations were handled in three cases — one each at OSU, the Medical College of Ohio in Toledo and Ohio University in Athens.

The Ohio State and Medical College cases both involved plagiarism charges against senior scientists that were referred to campus officials by federal fund-
What is plagiarism?

That's often a central question in scholarly misconduct cases, and one of the most difficult for investigators to resolve. Here are several views:

"Taking over the ideas, methods or written words of another, without acknowledgement and with the intention that they be taken as the work of the discoverer, is plagiarism.

— American Association of University Professors, 1990

"Plagiarism is the most blatant form of misappropriation of credit. A broad spectrum of misconduct falls into this category, ranging from obvious theft to uncritical paraphrasing that some might not consider dishonest at all... However, occasional problems in this area—systematic, unacknowledged use of the techniques, data words or ideas of others—is another.

— On Being a Scientist: National Academy of Sciences, 1989

"Plagiarism, fabrication or intentional falsification of data, research procedures or data, research procedures or data; or other deliberate misrepresentation in proposing, conducting, reporting or reviewing research.

— U.S. Public Health Service Advisory Comm for Scientific Integrity, 1992

"In its more blatant forms, plagiarism is well-understood, but it frequently occurs in less obvious situations. For example, using an article in a bibliography without citing it, using a general description of prior work in the area of the paper, or in an application for funds can be plagiarism. Appropriation of another's work is still plagiarism even though it doesn't involve the central idea of the paper in which it occurs."

— Edward F. Hayes, vice president for research, OSU, June 4, 1993

Diagram: graph
Senate okays misconduct rule

By Steve Sterrett

University Senate on Nov. 6 unanimously approved a revised procedure for hearing complaints against faculty members.

Judith K. DeIzell, associate professor and chair of the senate's Rules Committee, told senators that the current procedure is cumbersome and simply does not work. "If we don't develop workable procedures for complaints against faculty, someone else will step in and do it for us," she said.

The amendment to Faculty Rule 3335-5-04 recognizes the role of the faculty in University governance, gives the responsibility for judging complaints to faculty peers in the colleges, and provides a broader range of sanctions when a complaint is found to have merit, according to Delzell.

The amendment now will go to the Board of Trustees for adoption.

Under the revised procedure, a complaint against a faculty member would be filed first with the department chair.

According to the amendment, "A complaint shall state facts to support an allegation that a faculty member has failed to meet his or her teaching, service or research obligations, has committed acts or omissions which otherwise impair his or her effectiveness in meeting these obligations, or has violated University rules."

Examples of such complaints would include a faculty member who regularly misses assigned classes or who misappropriates University property, according to Delzell.

"If the chair determines that there is probable cause to believe that the allegations are true and that it is not appropriate to reach an informal resolution, the chair shall refer the matter to the dean," the amendment reads. If probable cause isn't found, the chair will dismiss the complaint.

An appeal process is outlined for both complainant and the faculty respondent for various stages throughout the proceedings.

If the dean determines there is probable cause, he or she would refer the complaint to the college investigation committee, a standing committee in each college composed of tenured faculty members.

After meeting with the complainant and faculty respondent and reviewing evidence and information from other persons, the committee would send the dean "its findings, a recommendation concerning the merits of the complaint and, if the complaint is judged to have merit, a proposed sanction."

Among the sanctions are verbal and written reprimands, mandatory counseling, reimbursement for damages or improper use of University resources, temporary reassignment of duties, restriction of access to University property or services, temporary salary reduction, and dismissal from the University faculty.

The dean then would review the committee's recommendations and could choose to dismiss the complaint, uphold the committee's recommendation and proposed sanction, or uphold the recommendation with an equivalent or lesser sanction.

The faculty respondent may appeal any decision or sanction to the provost. A decision to dismiss a tenured faculty member may be appealed to the current University-wide Faculty Hearing Committee.

The revised procedure was developed by the Rules Committee in a series of efforts over the past seven years. In its current form, the amendment to the rule was proposed in the summer of 1992.

Delzell gave credit to Stephen Reed, associate professor and chair of the Rules Committee in 1992-93, for guiding the proposal through a thorough review by various committees throughout the University.
OSU is changing research rules to stem cheating

By David Lore
Dispatch Science Reporter

The faculty this fall is expected to adopt a new rule covering research cheating at Ohio State University, a rule that may be influenced by a federal review of OSU plagiarism charges against one of the campus's top scholars.

At issue is academic misconduct including plagiarism — when one copies another's work and represents it as one's own — as well as falsification and fraud in the conduct of research.

Several serious cases of academic misconduct have rocked OSU in recent years, prompting administrators and faculty committees to begin updating guidelines adopted by the administration in 1989 to cover such infractions. Faculty Senate approval of a permanent rule is expected this winter, said Edward F. Hayes, vice president for research.

At the same time, Hayes and other top OSU administrators are waiting to see if the National Science Foundation upholds university disciplinary action against chemistry Professor Leo A. Paquette.

Paquette, honored four times since 1988 by OSU for academic excellence, is one of only three OSU members of the prestigious National Academy of Sciences. He is one of OSU's best-paid professors, taking home $125,000 during 1993-1994.

In 1991, however, he was barred for 10 years from serving as a grant reviewer for the National Institutes of Health after two faculty panels concluded he had — probably inadvertently — used material from a Texas researcher's NIH grant application in one of his own applications.

Then, in August 1993, OSU officials said they would take further disciplinary action against Paquette on a finding — in a second campus investigation — that the chemist had published a scientific article using material plagiarized from another grant application he was reviewing, this time for the National Science Foundation.

At a minimum, officials said then, Paquette would be barred from doing peer review of other scholars' work. Additional restrictions and punishments were to be considered by the Chemistry Department and by an OSU disciplinary hearing panel.

Paquette, however, with support from colleagues at OSU and across the country, appealed this campus conviction to the inspector general at the National Science Foundation. He contends the supposedly plagiarized material was merely introductory material which had been paraphrased and had footnoted literature citations.

The appeal has — for 13 months — suspended any campus disciplinary action against Paquette.

Nevertheless, the delay has forced the professor to begin another school year under a cloud.

"I don't know what they (National Science Foundation officials) are up to or why they're taking so long," Paquette said last week. "The fact of the matter is they're dragging their feet — this should have been done."

Meanwhile, Paquette said he is scheduled this year to teach one course each quarter, continue his research with foundation funding and supervise the work of 21 graduate students and about 10 post-doctoral students.

Paquette, in his appeal, also is challenging how OSU conducted its probe of the foundation case. His lawyers argue, for example, that the faculty investigations panel didn't include appropriate experts and that Paquette was denied due process.

If the science foundation agrees, that could affect any new rules governing misconduct cases coming before the Faculty Senate.

OSU law professor James Meeks, who coordinates scholarly misconduct investigations for the administration, said a proposed draft of the new rule will go to various committees of the Faculty Senate this month.

Ohio State, he said, also must comply with federal requirements to adopt a new rule by July defining and regulating conflict-of-interest situations in research.

"I've been involved with the new rules and I think they're fair," said Lynne Olson, associate professor of veterinary physiology and pharmacology. "I think they strike a nice balance between the need to be thorough and the need to be timely, and I think they try to redress some of the perceived wrongs."

Olson — and faculty members in engineering and physics — are also putting a new emphasis this year on teaching research ethics, either through new courses or by giving the subject more attention in existing courses.

Graduate students need to know, she said, not only how to avoid ethical lapses in their own research but how to fairly evaluate the work of others.