Ethical principles at a University

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Sources:
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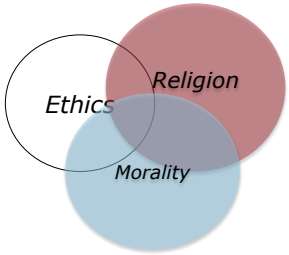
Ethical principles

Ethical principles



Ethical principles

The two main goals of academic institutions:

-**Dissemination and creation of knowledge**

-**fair assignment of credit for the learning and the work**

Ethical principles

Use of human subjects in research
Consent, …

Use of animal subjects in research
Appropriate care, appropriate use,…

Moral debates
Evolution, stem cell research, weapon developments, genetic screening,…

Professional issues
Plagiarism, authorship, confidentiality,…

How to avoid ethical dilemma

-Know the rules!
http://sja.ucdavis.edu/cac.html

On being a scientist (National Academy of Sciences)
http://www.nap.edu/openbook.php?record_id=4917

-Know your rights and responsibility

-Learn to recognize common ethical mistakes

-Act early to avoid conflicts

Ethical principles

Do's and Don't's:

-**Plagiarism** : copying someone else's work and attempting to pass it off as one's own work

-**Hiring someone to do your work**

-**Using work without proper attribution**

-Using work with proper attribution, but **relying exclusively on such work rather than developing one's own solutions**

Ethical principles

Do's and Don't's:

-**Aiding a student who is taking a test**

-**Receiving credit for work you have not done**

Ethics and Publication

Policies

Acknowledgement of Credit

Writing the paper

Citations

Reviewing a paper

Ethics and Publication: Policies

Many scientific journals impose ethical rules on authors:

-Release of data and/or software to the community

-Compliance with NIH for experiments with human subjects

-Compliance with NIH for experiments with animals

-Research should not have being published (or submitted) elsewhere

Ethics and Publication Acknowledgement of credit

There are two ways to acknowledge contribution to a paper:

-Authorship

-Acknowledgements

Ethics and Publication Acknowledgement of credit

Who should be a co-author:

Anyone who has made a significant and direct contribution to the work, where contribution relates to:
-Providing key ideas
-Doing the implementation
-Collecting/analyzing data
-Writing the paper

Note that being co-author is a privilege and a responsibility!

Ethics and Publication
Acknowledgement of credit

Order of appearance of authors:

Generally, authors are listed in decreasing contribution level…

There are many exceptions:

-Some fields use alphabetical listing

-The first and last positions carry more weight

-There are cultural differences between fields of studies

-Papers in CS usually have up to 4 names

Ethics and Publication
Acknowledgement of credit

Order of appearance of authors:

Ethics and Publication
Acknowledgement of credit

Who you should acknowledge:

-People who contributed a good idea

-People who provided pointers to papers

-People that helped debug a tricky part of the code

-People that helped with illustrations

-Funding agencies!

It is good manner to acknowledge!

Ethics and Publication
Acknowledgement of credit

What you should ask your advisor:

-What is the policy about co-authorship in your field?

- What is the policy in the lab?

Ethics and Publication
Fraud in Research

Trimming: smoothing irregularities to make the data appear extremely accurate and precise.

Cooking: retaining only those results that fit the theory, and discarding others.

Forging: inventing some or all of the research data that are reported; even reporting experiments that were never performed.

Sigma Xi's "Honor in Science"

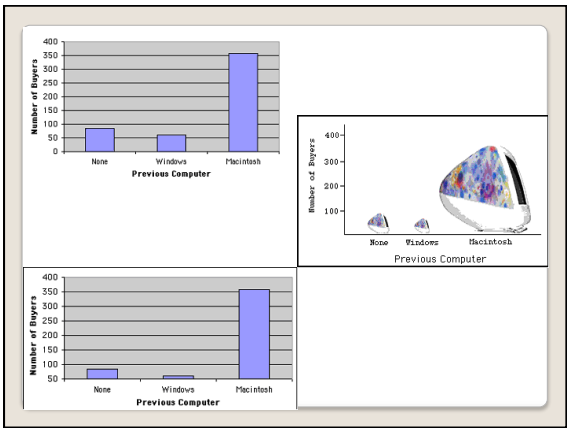
Ethics and Publication
Fraud in Research

Favorite excuses for trimming and cooking:

"those outlier points must be measurement error"

"they would only confuse the readers"

"everybody cleans up their data before publication"



Ethics and Publication
Fraud in Research

The "hall of shame":

NIH Office of Research Integrity

http://ori.hhs.gov

Ethics and Publication
Writing the paper

Beware of plagiarism!

It is easy to avoid with quotes and citation.

Beware of plagiophrasing!

Celera of Rockville, Maryland, is a private company that last year (2000) completed a map of all human genes. Formed just three years ago, the company instigated a contentious race with the federally funded Human Genome Project when company officials announced they would create a map in only three years, while the government project had been working on it for about a decade. (http://www.wirednews.cmo/news/tecnology/0,1282,41306,00.html)

Original text

Plagiophrasing

Six years ago (2000), Celera of Rockville, Maryland, a private company, completed a map of all human genes. Formed just three years before, the company sparked a contentious race with the federally funded Human Genome Project when company officials announced they would create a map in only three years, while the government project had been working on it for about a decade.

In 2000 a private company, Celera of Rockville, Maryland, beat the federally funded Human Genome Project to the goal of mapping allhuman genes. (http://www.wirednews.cmo/news/tecnology/0,1282,41306,00.html)

Paraphrasing

(Masiel, Writing Department, UC Davis)

Ethics and Publication Citations

Cite other people's work often:

-Avoid antagonizing reviewers by not citing their work

-Demonstrate that you know your field and have done your background work

-Make new friends (people like to be cited!)

Ethics and Publication Reviewing

- Do your fair share of reviewing
- Be careful about conflict of interests
- Say no to a request if you are not familiar with the topic of the paper
- Judge quality objectively
- Respect confidentiality
- Provide adequate support to your arguments, including citations!
- Be polite and respectful!

Ethics
If you have a problem/ doubts

- Get your advisor's advice.
- If you have a problem with your advisor, discuss it with him or her before seeking outside opinions.
- If necessary, speak confidentially with some other senior scientist whose opinions you respect.