



# Ethics in Research I

## Conduct in research ...

has many facets:

- Plagiarism
- Research integrity
- Collaborations
- Peer review of papers and proposals
- Ethics at the workplace

## Conduct in research ...

- What constitutes plagiarism?
  - Copying in essentially unchanged form from other sources without proper attribution or acknowledgement (copying a definition or a theorem is fine if they are common ones; copying a paragraph from wikipedia or another paper because it captures a certain concept particularly well is unethical unless the paragraph is identified clearly as a quote and the source is acknowledged)
  - Self-plagiarism: copying from your own papers
  - Applies to all forms of dissemination (papers, talks, grant proposals, ...)
  - Plagiarism is unethical; self-plagiarism may not be considered as unethical by everybody but it is very bad practice and may result in rejection when discovered in a submitted paper
- Respecting copyright
  - Seek permission for figures copied from other copyrighted work and attribute sources clearly (this may include your own figures depending on the copyright form you signed)
- Misconduct in research:
  - Falsifying results such as proofs or numerical simulations
  - Omission of contradictory data, eg in numerical simulations
  - Not publishing errata when discovering significant mistakes or errors in published work

## Conduct in research ...

- How do I acknowledge contributions from others? For instance:
  - Outcomes of discussions with others, or suggestions received from others
  - Suggestions from referees
- How do I avoid conflicts when collaborating with others?
  - Who will be co-authors on a paper?
  - Who will be first author (if in non-alphabetical order)?
  - Often difficult to predict when problems arise: be aware of potential problems and handle them professionally – seek advice from advisors or mentors
  - What often works: be open, be proactive, be generous
- Intellectual property:
  - Who owns results?
  - Examples: graduate students working with faculty mentors, ...

## Conduct in research ...

- Peer review of papers and proposals:
  - declare anything that can be perceived as a potential conflict when refereeing papers or proposals: examples are: the author is a former student or a close collaborator of yours; you work on exactly the same problem and may have an interest in delaying the review or giving a negative report; ...
  - peer reviews are strictly confidential: you **cannot**
    - use any of the material you learned about in the reviewed manuscript (unless you also obtained it independently from the author or a depository)
    - give the manuscript to anybody else unless the editor allows it
    - talk to others about the manuscript unless you have a technical question that you can ask without revealing the identity of the author or communicating confidential material
    - disseminate your review to anybody except the editor or program officer who requested the review
    - contact the author with questions or comments

## Professional ethics at the workplace ...

- Ethical use of institutional computer, email, and office facilities
- Confidentiality of privileged information (grades, referee reports, recommendation letters,...)
- Being aware of, and abiding by, copyright and software license requirements:
  - be careful when installing software on different computers or for different users
  - do not download scanned copies of copyrighted material
- Personal conflicts of interest:
  - financial, family, ...
  - dating students and postdocs
  - asking students or postdocs for personal favours