# Ethical Issues and Concerns in Publication of Scientific Outputs

#### Evelyn Mae Tecson-Mendoza

Research Professor & UP Scientist III, Institute of Plant Breeding, Crop Science Cluster, CA, University of the Philippines Los Baños, College, Laguna 4031

Editor-in-chief, Philippine Agricultural Scientist (2004-2009)

Email: emtmendoza@nast.ph; emtmphil@yahoo.com

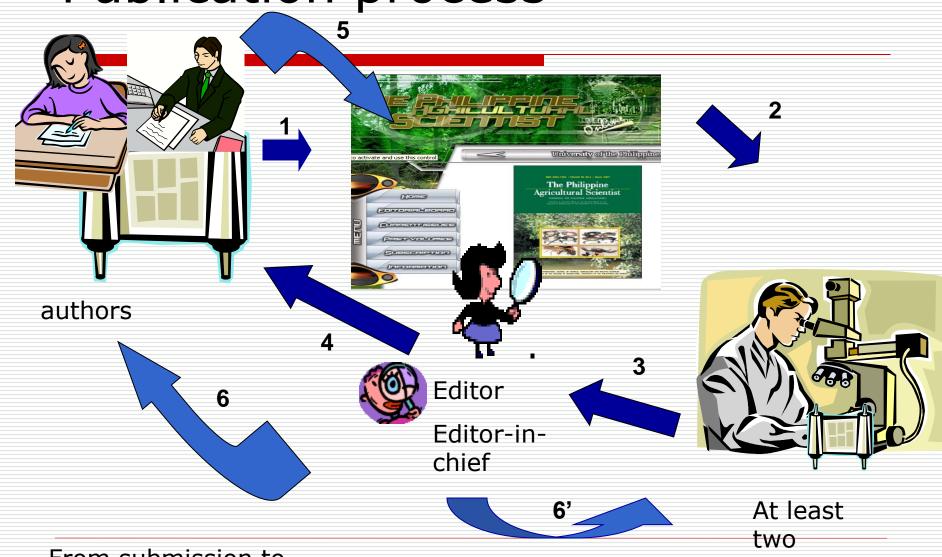
OVCRE March 8, 2011

## **W**

### scope

- Publication process
- Issues
  - ethical issues
    - Copyright and plagiarism
    - authorship
- Responsibilities of authors
- Responsibilities of editors
- Responsibilities of reviewers

## Publication process



reviewers

From submission to publication—3 to 6 months

### Issues and concerns

- Ethics
  - The study of standards of right and wrong
  - A formal or professional rules of right and wrong; system of conduct or behaviour

[The World Book Dictionary]

## Plagiarism is both an ethical and legal issue

"To plagiarize- to take and use as one's own (the thoughts, writings, or inventions of another), especially, to take and use (a passage, a plot or the like) from another writer."

[The World Book Dictionary]

## Plagiarism also includes

- "Turning in someone else's work as your own
- Copying words or ideas from someone else without giving credit
- Failing to put a quotation in quotation marks
- Giving incorrect information about the source of a quotation
- Changing words but copying the sentence structure of a source without giving credit
- Copying so many words or ideas from a source that it makes up the majority of your work, whether you give credit or not."

From Plagiarism.org

(http://www.plagiarism.org/learning\_center/what is plagiarism.html)





### Issues and concerns

- Legal
  - Copyright and plagiarism
  - Copyright is concerned with protection and exploitation of the expression of ideas in a **tangible** form.
  - Protected by law (Intellectual Property law).
  - Protects original works (regardless of quality) and only if works are fixed in a material form

## Avoid plagiarism (both an ethical and legal issue)

- Copying infringes one's copyright!
- Avoid by
  - Citing literature used (all types, including internet materials)
  - Paraphrasing cited literature at once
  - Not using full sentences or even phrases from another work
  - If using exact words or sentence(s), quote and then cite source
  - If quoting more than 50 words, ask permission from copyright owner

## Avoid plagiarism (both an ethical and legal issue)

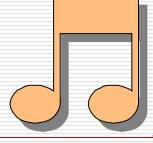
- Avoid by
  - Getting permission to use photographs, figures, etc from copyright owner
  - If illustration is not unique (eg., development of coconut), redraw and cite original source (adapted from or based on Cruz et al 1988)

## More about copyright

- No registration provisions
  - Copyright protection commences automatically with the creation of a work in material form
- Still prudent to assert copyright ownership by registration with the National Library

## More about copyright







- Subject matter of protection
  - Printed literary artistic and literary works
  - Technical drawing, maps, paintings and 3-D works such as sculptures and architectural works, photographs and cinematographic works
  - Research notes and reports
  - Computer programs and databases

## More about copyright

- Rights—owner of a copyrighted work may exclude others from using it without authorization
  - Copying or reproducing work
  - Performing in public
  - Making a sound recording of the work
  - Making a motion picture
  - Broadcasting
  - Translating or adapting the work
- Right to object to any distortion, mutilation or modification of, or any derogatory action...

## Infringement of copyright can lead to

- In class, failing assigned work or course, suspension, expulsion
- For submitted thesis, withdrawal of degree by university
- For published paper, removal of paper from journal listing
- If brought to court, jail term and/or penalty (\$\$\$PhP)

## Authorship

- Authors should have made substantial intellectual contribution to overall study
  - Origin or conceptualization
  - Design of studies and experiments
  - Completion, analysis, interpretation
  - Modeling data, writing up for publication
  - Answering reviewers, revision and finalization of paper for publication



## authorship

- Should accept responsibility for paper's content
  - Input should be beyond general supervision or instruction
  - Must have understanding of methodology and implications of work
  - Must be able to defend work against challenge
- Should approve final version of paper and publication; for scientific papers, the agreement of the co-authors is required before publication.



#### Research

#### Universal features in the genome-level evolution of protein domains Marco Cosentino Lagomarsino\*†, Alessandro L Sellerio\*, Philip D Heijning\* and Bruno Bassetti\*†

Addresses: \*Università degli Studi di Milano, Dip. Fisica. Via Celoria 16, 20133 Milano, Italy. †INFN, Via Celoria 16, 20133 Milano, Italy.

Correspondence: Marco Cosentino Lagomarsino. Email: Marco.Cosentino@unimi.it

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#### Authors' contributions

MCL designed and performed research, and wrote the paper. BB designed and performed research. AS and PH performed research. All authors read and approved the final manuscript.

#### http://www.hms.harvard.edu/integrity/authorship.html

#### **AUTHORSHIP GUIDELINES**

Many institutions, including medical schools and peerreviewed journals, have established standards for authorship. These standards are similar on basic issues but are changing over time, mainly to take into account the growing proportion of research that is done by teams whose members have highly specialized roles.

Adopted December 17, 1999

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### From Harvard Univ

- The authors should decide the order of authorship together.
- Authors should specify in their manuscript a description of the contributions of each author and how they have assigned the order in which they are listed so that readers can interpret their roles correctly.
- The primary author should prepare a concise, written description of how order of authorship was decided.
- ...These policies should be reviewed periodically because both scientific investigation and authorship practices are changing.

## APA Ethical Principles of Psychologists and Code of Conduct (1992)

- (a) Psychologists take responsibility and credit, including authorship credit, only for work they have actually performed or to which they have contributed.
- (b) Principal authorship and other publication credits accurately reflect the relative scientific or professional contributions of the individuals involved, regardless of their relative status. Mere possession of an institutional position, such as Department Chair, does not justify authorship credit. Minor contributions to the research or to the writing for publication are appropriately acknowledged, such as in footnotes or in an introductory statement.
- (c) A student is usually listed as principal author on any multiple-authored article that is based primarily on the student's dissertation or thesis.

## Authorship

- What is "guest" or "honorary authorship
- Including the name of a person in the authorship of a paper only because of his/her rank or position to "improve" the "credibility or impact" of the paper is not ethical. Inclusion of a person as co-author should be based on only his/her substantial contribution to the paper.
- As earlier stated, the agreement of all authors should be obtained. At times, the guest or honorary author does not even know his/her name has been included as co-author of a paper.

## Authorship: multiple authors

- ☐ How is the sequence of authorship determined?
- The sequence of authorship should be decided by the coauthors. This is usually based on the contribution of the various co-authors to the study on which the paper is based.
- Practices in different disciplines
- The authorship sequence varies in different disciplines and is considered part of the culture of the respective discipline.
- e.g., in the arts and humanities, a student is sole author of paper based on his/her thesis; in physics, authors are listed alphabetically; in the life sciences, the student/post doc/researcher who is major contributor is first author and last author is the project leader.

### multiple authorship

- In general, for student's thesis, the senior or first author is the student.
  - Exceptions: when several students contributed to paper; when adviser thinks student is not deserving; or when it is the professor's culture to be senior author in papers.
- Corresponding author is project leader and is ultimately responsible for paper.
- See guidelines of various universities and professional associations regarding authorship

## Authorship

## AGRICULTURAL AND FOOD CHEMISTRY

8S Globulin of Mungbean [*Vigna radiata* (L.) Wilczek]: Cloning and Characterization of Its cDNA Isoforms, Expression in *Escherichia coli*, Purification, and Crystallization of the Major Recombinant 8S Isoform

AMY EMILIANA N. BERNARDO,<sup>†</sup> ROBERTA N. GARCIA,<sup>†</sup> MOTOYASU ADACHI,<sup>‡</sup>
JORGE GIL C. ANGELES,<sup>†</sup> AKITO KAGA,<sup>§</sup> MASAO ISHIMOTO,<sup>||</sup>
SHIGERU UTSUMI,<sup>‡</sup> AND EVELYN MAE TECSON-MENDOZA\*,<sup>†</sup>

Bernardo and Garcia are considered first authors (they contributed equally to this study), Tecson-Mendoza is corresponding author and project leader, has overall responsibility for paper.

## Authorship



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## Comparative Physicochemical Characteristics of Virgin Coconut Oil Produced by Different Methods

Vermont P. Dia<sup>1\*</sup>, Virgilio V. Garcia<sup>1</sup>, Reynaldo C. Mabesa<sup>1</sup> and Evelyn Mae Tecson-Mendoza<sup>2</sup>

This paper is based on the MS thesis of Vermont P. Dia, the senior or first author. Other co-authors were members of his advisory committee but each one substantially contributed to various aspects of study.





- First authorship must be deserved; assigning undeserved authorship connotes
  - False representation of the individual's scholarly expertise;
  - Having been able to publish, he/she could be perceived as better skilled than a peer who has not published;
  - He/she may be expected to accomplish tasks outside his range of expertise.

## Responsibilities of authors

- Work is original including write-up
- Identified authors contributed significantly to work (not because one is the director or boss in authors' institution!)
- Submit work only to one journal or publisher at any one time!
- Do not submit for publication papers already published (as in proceedings etc)

### Editor's responsibilities to authors

- Treat submitted authors/materials
  - Fairly, objectively, courteously and honestly
  - Consistently
  - In a reasonable period of time
  - Avoiding bias
  - Conflict of interest
  - External pressure

### Editor's responsibilities to authors

- Recognize the intellectual independence of authors
- Protect the integrity and privileged nature of author's work
- Provide guides for preparing and submitting manuscripts, for answering comments and suggestions from reviewers
- Select appropriate reviewers

### Editor's responsibilities to authors

- Provide process for responding to allegations of misconduct by authors
- Publish corrections in paper if needed
- Provide guide or process for author appeals

### Editor's responsibilities to reviewers

- Assign papers appropriate to reviewer's expertise
- Allow enough time to complete reviews
- Provide explicit instructions regarding journal's expectations for content, quality and timeliness
  - Guide questions and rating, recommendation

## Editor's responsibilities to reviewers

- Recognize contribution of reviewers
  - Publish names of reviewers in the last issue for the year
- Recognize the intellectual independence of reviewers

## Responsibilities of reviewers

- Accept only when paper is in his/her field of expertise
- Keep review in confidence
- Be objective, fair, avoid bias
- Do not use materials in reviewed paper until published or permission from authors is obtained (complicated if subject of paper is patented!)
- Complete and submit review to editor within a reasonable period of time

## **W**

#### ethical issues and concerns

- Publication process
- Issues and concerns
  - Ethics & Legal
  - plagiarism, authorship
- Responsibilities of authors
- Responsibilities of editors
- Responsibilities of reviewers

