

## **Màster Biomedicina**

### **Programa de l'assignatura:**

**Nom de l'assignatura:** Scientific Communication

**Crèdits:** 3

**Coordinador:** Francesc Cardellach

### **Blocs temàtics:**

#### **Subject 1. Models of scientific communication**

Professor: Francesc Cardellach and Marta Pulido

Content: Presentation of different reasons to the need to learn skills in scientific communication and its different types: biomedical research article, oral presentation and poster.

Teaching Methodology: Audiovisual.

Duration: 2 hours

#### **Subject 2. The scientific article and publication-related resources available in Internet**

Professor: Marta Pulido

Content: Different types of biomedical articles: original article, editorial, letter to editor, review, among others. Structure of the original article: Introduction, material and methods, results, discussion, references, tables and figures.

Teaching methodology: Audiovisual.

Duration: 4 hours (includes practical exercise)

#### **Subject 3. How to search the literature: main databases**

Professor: Marta Pulido

Content: Different databases: characteristics and usefulness. How to retrieve salient information. The impact factor: analysis of the Journal Citation Reports.

Teaching methodology: Audiovisual (Informatics classroom). Direct connection to Internet

Duration: 2 hours (includes practical exercise)

#### **Subject 4. The decision process**

Professor: Marta Pulido

Content: How to select the right journal. Cover letter and other required forms to be filled out at the time of electronic submission of the paper.

Teaching methodology: Audiovisual.

Duration : 2 hours

#### **Subject 5. The editorial process**

Professor: Francesc Cardellach

Content: description of all steps involved in the editorial process, from the paper reception to publication. The role of the Editorial Committee.

Teaching methodology: Audiovisual.

Duration: 1 hour

**Subject 6. The quality assessment of a scientific article**

Professor: Francesc Cardellach

Content: Analysis of the structure, method, results and discussion. Critical analysis of the title, abstract and references. Analysis of the most frequent mistakes.

Teaching methodology: Audiovisual.

Duration: 2 hours (includes practical exercise)

**Subject 7. Critical analysis of design and statistical methodology of a biomedical article**

Professor: Alejandro de la Sierra

Content: Main different designs in biomedical research, statistical techniques and most frequent errors.

Teaching methodology: Audiovisual.

Duration: 4 hours (includes practical exercise)

**Subject 8. The Peer review process**

Professor: Francesc Cardellach

Content: Description of the peer review process. Interactions of reviewers, Editorial Committee and authors.

Teaching methodology: Audiovisual.

Duration: 2 hours

**Subject 9. Ethics and bias in biomedical publication**

Professor: Josep M<sup>a</sup> Ribera

Content: Description of ethical aspects that affect the authors, the Editorial Committee and the reviewers. Different types of bias related to biomedical publication.

Teaching methodology: Audiovisual..

Duration: 1 hour

**Subject 10. The Postpublication impact**

Professor: Josep M<sup>a</sup> Ribera

Content: Relationship between Editorial industry and Communication media.

Teaching methodology: Audiovisual.

Duration: 1 hour

**Subject 11. Oral Presentation of scientific study**

Professor: Francesc Cardellach

Content: From preparation to presentation an oral communication. Tips to success in oral communication and errors that should be avoided.

Teaching methodology: Audiovisual. Oral presentation of a research study by participants.

Duration: 3 hours (includes a practical exercise)

**Subject 12. How to elaborate and to present a Poster**

Professor: Francesc Cardellach

Content: Description of poster elaboration. The “ideal” poster.

Teaching methodology: Audiovisual. Poster presentation by participants based on data from a research study.

Duration: 3 hours (includes a practical exercise)

## **REFERENCES**

### **Biomedical article**

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2. Caldeiro MA, Feliu E, Foz M, Gracia D, Herranz G, Lience E, Pulido M, Ribera JM, Rey-Joly C, Ruiz FJ, Vilarroya O. Medicina Clínica. Manual de estilo. Publicaciones biomédicas. Barcelona: Ediciones Doyma, 1993.
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### **Peer Review and ethics in publication**

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4. Cardellach F, Ribera JM. El proceso editorial. En: J. Jiménez Villa; JM Argimón Pallás; A. Martín Zurro; M. Vilardell Tarrés, eds. Publicación científica biomédica. Cómo escribir y publicar un artículo de investigación. Elsevier España, Barcelona, 2010; 309-326.
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## Oral Presentation

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## **Poster**

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