GRBIO, SECTIONS UPC & IGTP: RECENT SCIENTIFIC ACHIEVEMENTS

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GRBIO: UPC AND IGTP SECTIONS



























OUTLINE

- PROJECTS AND NETWORKS
- Publications
- TALKS AND POSTERS
- Software
- **5** FURTHER ACTIVITIES

PARTICIPATION IN RESEARCH PROJECTS AND NETWORKS

- GRBIO: Grup de Recerca en Bioestadística i Bioinformàtica
- Statistical Methodologies for Clinical and Omics Data and Their Applications in Health Sciences

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- Xarxa R+D+I en Tecnologies de la Salut (Xartec Salut)
- Avanzando en la Investigación de Excelencia en Bioestadística a Nivel Nacional e Internacional (Biostatnet)
- Spanish Network in Transportation, Artificial Intelligence, and Data Analytics (TRA-Al Network)

Participation in research projects and networks

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- Catedra ENIA: "Siemens Energy Al Chair. Energy Sustainability for a Decarbonized Society 5.0."

PARTICIPATION IN RESEARCH PROJECTS AND NETWORKS

- Clinical trial to evaluate the administration of ApTOLL in ambulances and the neuroprotective effect in stroke patients
- RACE Plus: Al-driven application to allow pre-hospital diagnosis and management of stroke patients
- Gate2Math: Open multilingual smart library for mathematical resources supporting efficient learning.
- Artificial Intelligence and IoT for Optimizing Energy Consumption in Transportation with Electric Vehicles
- Data Science for Aquaculture (RTVU1914)

Publications in scientific journals

Total number reported (\pm last 12 months): **42**

• First author: 4

• Last author: 8

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- Statistical journals: 4
- R Packages, Packages App: 2

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- First author: 4
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- Statistical journals: 4
- R Packages, App: 2
- Medicine, pharmacology, biology, public health, etc.: 22
- COVID-19 (**DIVINE*): 6 (3)
- Others (Building, traffic, sports): 8

Presentations at international conferences

Oral presentations:

- Bridging Statistical Strategies for Censored Covariates
- 12023 IMS International Conference on Statistics and Data Science
- New Zealand Statistical Association conference
- = : 9th Survival Analysis for Junior Researchers conference
- 🗮 : 45th Annual Conference of the International Society for Clinical Biostatistics

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Posters:

- = : International Workshop on Statistical Modelling
- Young Statisticians' Meeting (YSM 2024)
- International Workshop on Statistical Modelling

ORAL PRESENTATIONS AT WORKSHOPS

- V International Workshop on Proximity Data, Multivariate Analysis, and Classification 2023
- International Workshop on Survival Analysis and Related Procedures
- Adaptive Designs and Multiple Testing Procedures Workshop 2024
- III Jornadas Científicas de Estudiantes de la

SOFTWARE DEVELOPMENT

R Packages

CompAREdesign:

"Statistical Functions for the Design of Studies with Composite Endpoints". R package version 2.3.1

• flowchart:

"Tidy Flowchart Generator". R package version 0.4.0

• GofCens:

"Goodness-of-Fit Methods for Complete and Right-Censored Data". R package version 1.0.

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• MSMpred:

Web application for multi-state models.

https://www.grbio.eu/pubs/MSMpred/

Activities that help others to "produce science"

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- Short course "Review of machine learning models for survival analysis" at VII Jornadas Científicas de Estudiantes de la SEB
- See/remember Conxita's talk on GRBIO Divulga

Take-home message 1:

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We have done a lot during the last 12 months.

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We have done a lot during the last 12 months.

Take-home message 2:

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There is room for improvement over the next 12 months.

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Great news:

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Great news:









¡Muchas gracias!

Muito obrigado!

Moltes gràcies!

Děkuji pěkně!

Dankeschön!