

STANFORD CTSA PROGRAM ON RESEARCH RIGOR & REPRODUCIBILITY (SPORR)

*In collaboration with Duke, Indiana, Harvard and Columbia,
cordially invites you to the 6th:*

Reproducibility Rounds

Estimating Replicability of Lab Biology Research at a National Level: Results and Lessons from the Brazilian Reproducibility Initiative

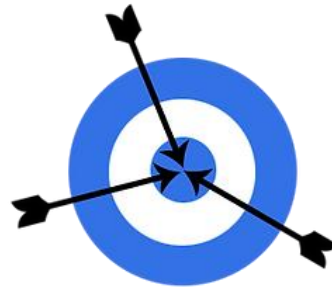
Tuesday, May 20, 2025 - 9 am PT - 12 pm ET - 6 pm CET

[Registration Link](#)

Speaker:



[Prof. Olavo Amaral, MD, PhD](#), Leopoldo de Meis
Institute of Medical
Biochemistry, Federal
University of Rio de
Janeiro



[Brazilian
Reproducibility
Initiative](#)

Abstract: In this talk, we will present the results of a large multicenter replication of biomedical lab research from Brazil using three common experimental methods: the MTT assay, the reverse transcription polymerase chain reaction (RT-PCR), and the elevated plus maze (EPM) experiments in mice. A total of 56 laboratories performed 143 replications of 56 experiments, of which 97 replications of 47 experiments were judged valid by an independent committee. Replication rates for these experiments varied between 15% and 45% according to five predefined criteria. In median terms, relative effect sizes (expressed as ratios of means) were 60% larger in original experiments than in replications, while coefficients of variation were 60% smaller. Beyond the results, we will discuss what we have learned about factors that limit replicability in lab biology, as well as about the challenges of performing large-scale confirmatory research projects in academia.

Reproducibility Rounds, produced in collaboration with representatives from multiple CTSA hubs, is a **new monthly webinar**, designed to foster an exchange of experiences and ideas between institutions, researchers and other stakeholders about how to improve biomedical research rigor and reproducibility. Rounds will be interactive. Future sessions and archived rounds can be found on the SPORR website.

[Interested in contributing? Contact us at sporr@stanford.edu.](mailto:sporr@stanford.edu)

[SPORR](#) is part of Spectrum, Stanford's Center for Clinical and Translational Research and Education, supported by the National Center for Advancing Translational Sciences of the NIH, under Award Numbers UL1TR003142 and UM1TR004921. SPORR is also supported by the Stanford School of Medicine Research Office.

Stanford Program on Research Rigor & Reproducibility (SPORR)
sporr.stanford.edu