

The European College of Neuropsychopharmacology, in collaboration with the Global Preclinical Data Forum, announces the winner of the 2024 Best Negative Data Prize in Preclinical Neuroscience

3 September 2024

The European College of Neuropsychopharmacology (ECNP) is pleased to announce the winner of the 2024 Best Negative Data Prize, an initiative established in 2017 by ECNP in conjunction with the Global Preclinical Data Forum (GPDF) and Cohen Veterans Bioscience.

The prize recognises the researcher or research group whose neuroscience study best exemplifies data got which the outcomes do not confirm the expected results or working hypotheses. The goal of the award is to incentivise researchers to publish negative or null findings to enhance data utility for clinical research and development and to demonstrate that all data holds value for the scientific process. The Best Negative Data Prize aims to initiate a paradigm shift in which negative data is valued according to the same standards as positive data.

The 2024 prize is awarded to Karlijn Kooij, the Netherlands, for her paper:

Fecal microbiota transplantation of patients with anorexia nervosa did not alter flexible behaviour in rats

Int J Eat Disord. Jun 27 2024 (doi: 10.1002/eat.24231)

Although the study as published did not meet all criteria set by the Prize Review Committee for the results to be judged as robust and reliable, the award was made after extensive review on the basis that:

- This is an important 'negative' result in a field that is flooded with potentially false positive data, inflated effect sizes, and overoptimistic claims for clinical relevance.
- The overall quality of the study is superior to that of most other research reports in the field.
- The authors provided additional information (not included in the publication) that addressed at least some of the concerns (e.g. what the primary endpoint and effect size were based on and which power analysis was used to estimate sample size).

We take this opportunity to encourage all future applicants to preregister their studies and to make every effort to implement all recommended measures against risks of bias. When reporting, it is essential to follow ARRIVE and RIVER recommendations for in vivo and in vitro experiments, respectively.

"While investigating the impact of microbiome changes in anorexia nervosa on the brain, we set ourselves an ambitious goal," said Karlijn Kooij, post-doctoral fellow in the Department of Translational Neuroscience at the University Medical Centre Utrecht (UMCU). "After an intensive

and carefully conducted study, our microbiome manipulations did not alter reward signalling. Negative results can be disappointing, especially since they are usually less valued than positive findings. However, we were fortunate to share our results in a publication, a critical step for advancing scientific research. Receiving this ECNP award, which highlights the importance of negative data, I feel acknowledged and encouraged.”

Presentation

The award will be presented at the 37th ECNP Congress on 21-24 September 2024 in Milan, Italy. It is accompanied by travel and accommodation grant to attend the ECNP Congress.

Evaluation Process

Each submission for the Best Negative Data Prize was rigorously evaluated by a Prize Review Committee, comprised of members of the GPDF Steering Committee and with the support of leading experts from the scientific community and ECNP leadership. The multi-step review process evaluated each submission based on the data analysis and statistics, adherence to research rigor standards, a technical review of the materials and methods used in the study, and a field-specific scientific review by two subject matter experts, in accordance with [recommendations](#) developed by GPDF experts.

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European College of Neuropsychopharmacology

ECNP is an independent scientific association whose mission is to advance the science of the brain, promote better treatment and enhance brain health. The annual ECNP Congress attracts some 6,000 scientists and clinicians from across the world to discuss the latest advances in brain research in Europe’s largest meeting on brain science. More information about ECNP, its aims and activities, can be found at www.ecnp.eu.

Global Preclinical Data Forum

The GPDF is an international initiative that encourages global collaboration to address the challenge of preclinical research reproducibility. The focus of the GPDF is to increase the robustness, translatability and reporting transparency of preclinical data derived from both animal research and animal-free methods. Our responsibility includes knowledge transfer of high-quality practices in the preclinical research community, as well as communicating the goals and value of preclinical research to the broader public and policy makers. See further: <https://www.preclinicaldataforum.org>.