

Dr. Christine Klein
Institute of Neurogenetics and Section of Clinical and Molecular Neurogenetics
Department of Neurology, University of Lübeck
Ratzeburger Allee 160, 23538 Lübeck, Germany

Dr. Klein,

We are submitting a paper entitled “**Transcriptomic similarity in the mouse and human brain**” for publication as an original research article in *Science Advances*. Our work examines how the brain-wide expression patterns of homologous genes can be used to evaluate the similarity of mouse and human brain regions in a quantitative manner. If accepted, this would be the first peer-reviewed study to use gene expression data sets to create a common space in which to directly compare mouse and human brains. Additionally, we present a novel machine learning approach to maximize the information value in the data sets, which will be widely applicable to other analyses of this kind. Our study contributes to the growing push for more direct and quantitative methods of assessing the correspondence between the brains of different species.

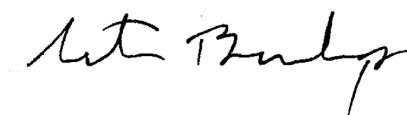
This work has not been published nor submitted for publication elsewhere.

The authors of this study declare no conflicts of interest.

All of the data underlying the study are available on the web. We used open data sets from the Allen Institute for Brain Science, which are accessible online via their API. The remaining data, code, and all files related to the manuscript are available online at <https://github.com/abeaucha/MouseHumanTranscriptomicSimilarity>. There are no restrictions on data availability.

We request Dr. Malu Tansey as Associate Editor for this submission.

Thank you for your consideration.



Antoine Beauchamp