

# MindHive

## A Community Science Platform for Human Brain and Behavior Research

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Human brain and behavior research has traditionally—and paradoxically—taken place mostly in environments that are isolated from the public: In a typical human neuroscience study, scientists recruit university students to participate in well-controlled laboratory studies, i.e., outside of humans' natural habitat. This model is currently under attack from multiple directions, ranging from scholars arguing that it generates biased data, to communities who express distrust toward scientists, to educators who are eager for more authentic science experiences for their students. While a growing number of researchers is turning to citizen science approaches to both educate and involve the general public in science, these initiatives are most pervasive in the 'traditional' sciences (e.g., ecology, astronomy), and often focus on recruiting the public to help collect data, rather than including non-scientists as partners in their scientific process.

**MindHive** ([www.mindhive.science](http://www.mindhive.science)) is an online community science platform for human brain and behavior research that engages its users in the full spectrum of scientific inquiry. Taking an open science approach, MindHive features a collaborative study design environment, comprising an experiment builder, a database of validated tasks and surveys, and a public-facing study page; a peer review center; and GDPR-compliant data collection, data management, and data visualization and interpretation functionality. We describe case studies from the COVID-19 pandemic to illustrate how MindHive envisions enabling scientists, students, educators, not-for-profit organizations, and community members globally to contribute studies, resources, and research data to the platform, as such supporting both STEM learning and scientific discovery.

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