

## Computational Psychiatry Postdoctoral Position at Columbia Psychiatry

A postdoctoral position is available at the Horga Lab at Columbia Psychiatry in New York City (PI: Guillermo Horga). The project will combine data-driven approaches to large-scale multimodal datasets and theory-driven computational approaches in order to provide a framework bridging genetics, development, circuit function, cognition, and phenomenology of schizophrenia. Specifically, the project will measure intrinsic neural timescales (INT) from resting-state fMRI data as an index of excitation/inhibition imbalance in cortical microcircuits. In doing so, this project will validate a theoretically informative, interpretable, translatable, and scalable resting-state fMRI measure—INT—that may be relevant across several disorders. Other ongoing related projects at the lab include studies on inferential mechanisms of psychosis and neuromelanin-MRI-related biomarker development.

Applicants should have strong quantitative skills, substantial experience with MRI preprocessing and advanced analysis methods (SPM, FSL, fMRIPrep, HCP, multivoxel decoding and machine learning methods), and advanced programming skills using different languages (including Matlab and Python). Interested applicants should contact Guillermo Horga, MD, PhD ([guillermo.horga@nyspi.columbia.edu](mailto:guillermo.horga@nyspi.columbia.edu)).