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PROFILE

My research aims at extracting predictive and diagnostic information from diverse neurobiological, neurocognitive and clinical data for an improved early recognition of affective and non-affective psychoses. For this purpose, I have been conducting cross-sectional and longitudinal studies of persons at an increased risk of developing psychotic illness and examined them with structural MRI, neuropsychological testing and clinical evaluations within the specialized Early Recognition Service of our Department.

Using advanced pattern recognition methods, which I implemented during my postdoctoral work, I was able to identify and cross-validate MRI and neurocognitive biomarkers allowing for an accurate, single-subject prediction of psychoses. As Head of the Department's Early Psychosis Studies and Section for Neurodiagnostic Applications, I am striving to develop and implement prognostic and diagnostic models that (1) enable an effective personalized management of high-risk individuals across different centers and healthcare settings, (2) facilitate the individualized stratification of risk for disease onset, chronicity and poor functional outcomes across different psychiatric disorders, and (3) improve our understanding of the diagnostic boundaries between and within these disease entities based on multivariate subgroup identification methods.

Equally important, I train new investigators at the pre- and post-doctoral levels to comprehensively analyze complex, high-dimensional data using multivariate analysis methods.

PUBLICATIONS

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