【文献調査】
Precision Functional Mapping of Individual Human Brains

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1　タイトル

個々の人間の脳の精密な機能マッピング

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3　出典

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4　アブストラクト

fMRI を用いた人間の脳機能の研究は，休止状態の機能的接続性（RSFC）およびタスク活性化マップの詳細と特異性，および臨床的有用性を調べるためにグループ全体で平均化されたデータを分析することに主に焦点を当てている．脳組織の機能的な理解を個々の人間のレベルについて行うために，10 名の成人のそれぞれから，5 時間の RSFC データ，6 時間のタスク fMRI，複数の構造的 MRI，および神経心理学的検査を含む新規な MRI データセットを用意した．これらのデータを使用して，個人ごとに 10 の忠実度の高い個人特有の機能的コネクトームを生成しました．この個人の機能的接続に基づくアプローチは，構造的およびタスクに由来する脳の特徴に対応する独自のネットワーク機能とネットワークトポロジーを含む，脳ネットワークにおけるいくつかの新たな変動性を明らかにした．我々は健常者および罹患した個々の人間の脳の組織を調べる将来の研究に用いるモデルとして，この高度にサンプリングされた個人中心のデータセットを神経科学者のためのリソースとして発表した．

5　キーワード

fMRI, individual variability, functional connectivity, brain networks, myelin mapping

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