From science to solutions

Our model helps to solve real-world problems, including:



Identifying & testing mechanisms of action for psychiatric and CNS-targeted drugs;



Discovery & validation of immune biomarkers for clinical stratification & improving treatment efficacy;



Precision medicine testing of novel compounds for patients with elevated neuroinflammation.

Why work with us?

- Validated, Standardised & Ethics-Approved
- Reproducible Behavioural and Immune Phenotyping
- Compatible with Multi-site or GLP Workflows
- Access to well-characterised Human Brain & Blood Samples

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Prof Weickert



Translational Research for Complex BrainImmune Disorders



SCHIZOPHRENIA RESEARCH LABORATORY







Did you know?



"Emerging evidence suggests that understanding and control of interactions between the immune system and the nervous system might be key to the prevention or delay of most brain diseases."

Heneka et al., 2015. The Lancet Neurology. PMID: 25792098.



"Patients with Major Depressive Disorder exhibit all of the cardinal features of an inflammatory response."

Miller and Raison, 2016. Nature Reviews Immunology. PMID: 26711676.



"Blood-brain barrier dysfunction could contribute to the aetiology, clinical course and treatment response via increased permeability to inflammatory molecules and impaired action of antipsychotics and development of treatment resistance."

Pollak et al., 2018. The Lancet Psychiatry. PMID: 28781208.

One Mechanism, Many Disorders

Neuroinflammation is a central mechanism in a wide spectrum of brain disorders, from psychiatric illnesses like depression and schizophrenia to neurodegenerative conditions such as Parkinson's Disease and Alzheimer's Disease.

Yet most traditional models fail to capture these immune-mediated pathways, leaving inflammation-related symptoms underserved by current treatments.



We offer CRO-ready, validated in-vivo models that:



Recreate systemic inflammation and its downstream effects in the brain;



Model blood-brain barrier transport of immune-derived metabolites (e.g. kynurenine);



Enable in-vivo testing of antiinflammatory, neuroprotective, and CNS-active therapeutics.



Reproducible. Ethical. Actionable.

Model Induction + Human Brain Studies







Behaviour & Immune Profiling







Drug or Intervention Testing







Biomarker Identification for Diagnostics







Translation & Collaboration







Built for Translation. Ready for Collaboration.