

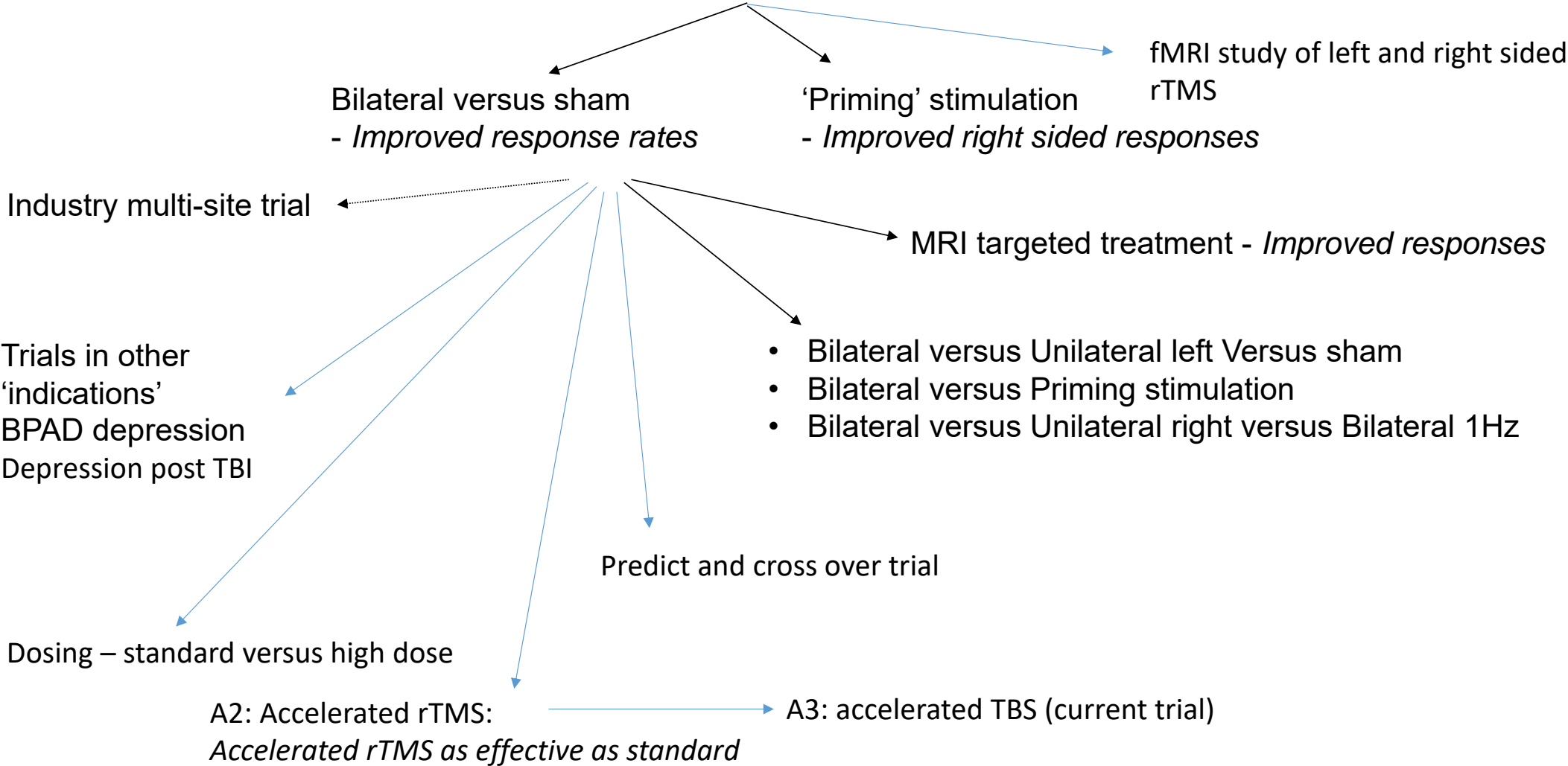
Professor Paul B Fitzgerald & Team

Professor Paul Fitzgerald is Professor of Psychiatry at Epworth Healthcare, Monash University and deputy director of Monash Alfred Psychiatry Research Centre. He has been conducting research with transcranial magnetic stimulation and other brain stimulation treatments for 20 years including conducting over 15 clinical trials in depression, schizophrenia, OCD and other disorders. He has published over 400 journal articles, been cited over 10,000 times and has held 3 consecutive NHMRC Practitioner Fellowships. He has received over 5 million dollars in grant funding in the last 5 years from the NHMRC, ARC and a number of US based organisations. He has established multiple clinical TMS programs, set up Australia's first TMS training program and is a founder and board member of TMS Clinics Australia.

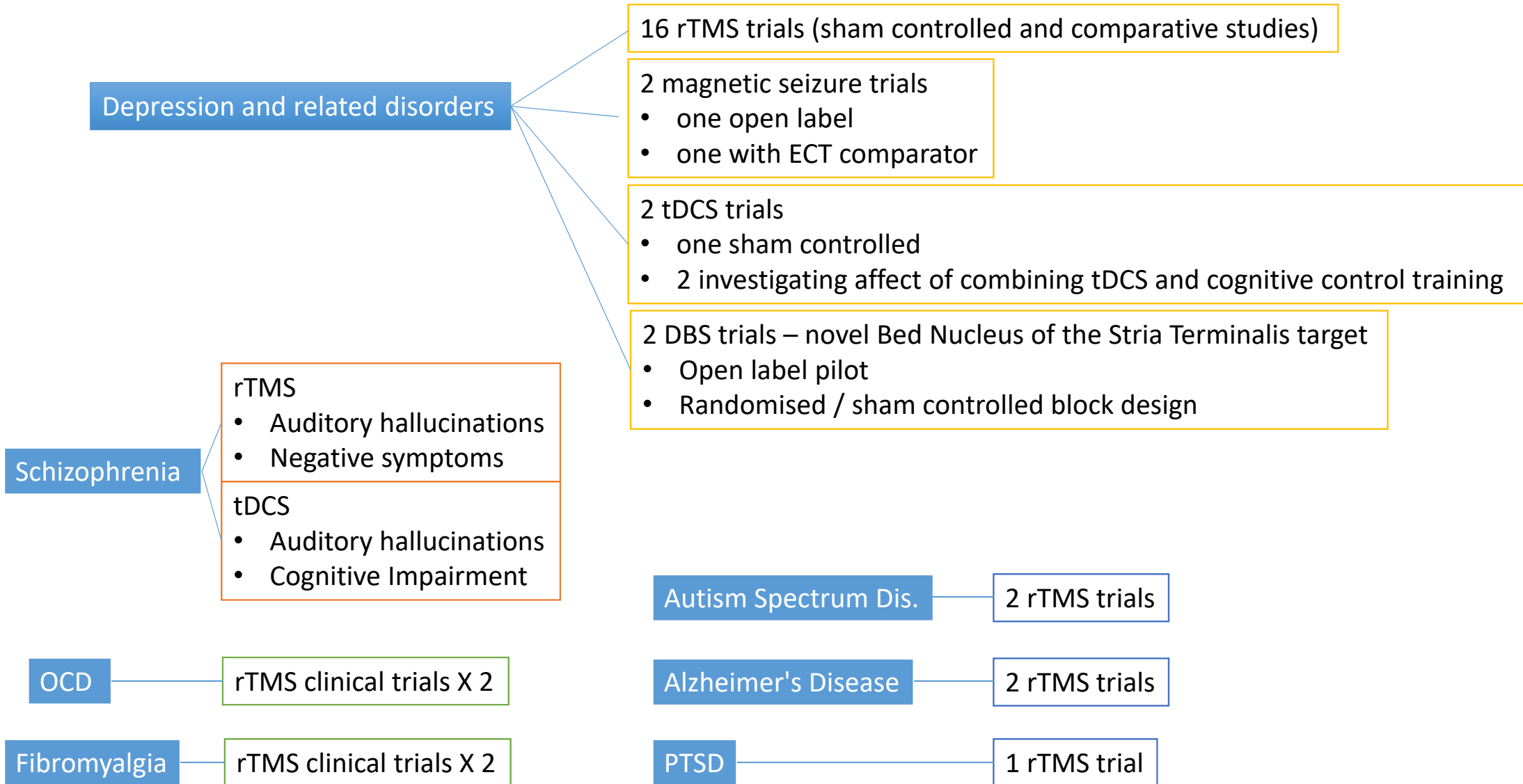


Depression rTMS Trials: 2001-2018

High Frequency Left versus Low frequency Right versus sham – *both active groups effective*



Therapeutic Brain Stimulation Trials: 2001-2018



Key rTMS Therapeutic Innovations

- Demonstration and confirmation of efficacy of low frequency right sided and bilateral rTMS in depression
- Proof of concept that neuro-navigationally targeting enhances rTMS depression treatment outcomes
- Validation of an accelerated rTMS treatment model
- Development of therapeutic predictive tools
- Initial confirmation of efficacy of MST in depression
- Demonstration of additive value of cognitive activation strategies with NIBS



Innovative Approaches

- Exploration and demonstration of abnormalities in cortical inhibition and cortical plasticity in schizophrenia
- Developing TMS-EEG methods for assessment of prefrontal cortical inhibition
- Developing TMS-NIRS methods for the assessment of prefrontal cortical perfusion to optimise coil orientation and develop prefrontal threshold techniques
- Developing fMRI and EEG methods to predict response to treatment
- Developing new technologies for closed loop frequency specific brain stimulation

