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Summary of research

Key words: cognition, neurological, depression, bipolar, genetic

1a: We intend to investigate the potential causes, correlates and consequences of reduced renal function and chronic kidney disease (CKD).

1a: The aim of this research is to improve our understanding of variation in cognitive performance in adults with behavioural and brain disorders such as depression, bipolar disorder and multiple sclerosis. We will investigate the nature and extent of cognitive impairment in these groups compared to healthy controls, and we will develop multivariate models to explore the relationship between cognitive performance and medical status, demographic and lifestyle factors, and genetic markers.

1b: Cognitive impairment is common and functionally disabling in patients with behavioural and brain disorders, but it remains poorly understood at an individual level. This cross-sectional research will contribute to the refinement of hypotheses regarding risk factors for cognitive impairment, providing a foundation for future longitudinal research focused on

understanding, preventing and treating cognitive impairment in these groups.

1c: This research will comprise a series of cross-sectional studies of baseline cognitive data from the UK Biobank resource. Complex statistical models will be used to estimate the relationship between key risk factors (e.g. medical status and genetic markers) and cognitive performance, while taking into account the additional influence of other demographic, social and lifestyle factors.

1d: This research will make use of the full UK Biobank cohort. Sub-groups with behavioural and brain disorders will be identified, and the remainder of the cohort will serve as a control group for comparison.