Psychological therapy is only effective for about half of all patients with depression and other common mental health conditions. Our existing therapies could be enhanced by a better understanding – and eventual targeting – of their specific cognitive or biological mechanisms. This project would explore mechanistic approaches to psychological therapy, including computational modelling, neuroimaging, and physiological measurement, with a potential focus on integrating body- and brain-based mechanisms. Alternatively or additionally, potential biological augmentations of psychological therapy could be explored, including pharmacological agents and brain stimulation. For example, experimental medicine studies could be designed to augment “behavioural experiment” components of cognitive therapy such as public speaking and other phobia exposures. Alternatively or additionally, physiological aspects of mindfulness-based cognitive therapy could be enhanced using training and/or biofeedback.