

## **What is well? Reconciling First- and Third-Person Perspectives on Depression Recovery with Deep Brain Stimulation**

It is now 20 years since the first proof-of-principle case of Deep Brain Stimulation (DBS) for treatment resistant depression. Initial studies were catalyzed by critical clinical need, informed by converging findings from imaging studies of depression pathophysiology and antidepressant treatment, and operationalized using established standards for movement disorder surgery. As subcallosal cingulate DBS has evolved and matured, neuroimaging continues to play a crucial role, with implementation of refined multimodal techniques for surgical targeting, and emerging clues as to which patients are most likely to benefit. Additional perspectives on trajectory, time-course, and sustainability of DBS effects have been advanced by engineering and device innovations that address mechanisms at the neural level. Current studies are further poised to explore strategies to maximize rehabilitative gains of patients once the DBS itself is optimized. Together, these studies provide a unique opportunity to link first person experiences to changes in brain state, towards a more comprehensive understanding of depression, recovery and resilience.