Emma Cunningham, PhD, MRCP
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Key Areas: delirium, postoperative cognitive dysfunction, cerebrospinal fluid biomarkers, diagnosis, dementia

As an academic geriatrician based at Queen’s University Belfast, Emma Cunningham cares for and strives to improve the care of patients with early dementia and older patients undergoing routine surgery. Delirium is common after surgery and is associated with an increased risk of subsequent dementia. It is unclear whether this is because delirium unmasks a pre-existing cognitive vulnerability or whether the delirium accelerates dementia processes. As more older people undergo surgery, research in this area is necessary to reduce the scale and impact of dementia around the world.

Cunningham’s research utilizing cerebrospinal fluid (CSF) biomarkers of dementia to better understand who is at risk of delirium after surgery has wider implications for the early diagnosis of Alzheimer’s disease and other dementias. Her work as an Atlantic Fellow at GBHI will advance perioperative research and care—and thus the brain health—of older patients, as well as contribute to the global literature on CSF biomarkers in early Alzheimer’s disease and other dementias. Cunningham brings valuable clinical and research expertise in the assessment of patients and the sampling and analysis of CSF biomarkers to GBHI.

“ I am working to maximize brain health for older people undergoing routine surgery.

Bio: Emma Cunningham graduated with distinction in medicine from Queen’s University Belfast in 2004. She completed clinical posts north and south of the Irish border and worked for several months in Uganda before undertaking higher specialty
training in geriatric and general medicine in 2008. Subsequent to being awarded her PhD in 2015, Cunningham was appointed to her current role as an academic clinical lecturer in geriatric medicine, combining clinical and academic work in the Belfast Trust and Queen’s University Belfast.