Q&A illuminates the 'golden age' of memory science

When it comes to the study of memory, we might be living in something of a golden age. Researchers are exploring provocative questions about what memory fundamentally is—and how it might be manipulated. Some scientists are tweaking the brains of lab rats in order to remove memories or implant false ones. Others are looking into how memory might be enhanced. Such research often sounds creepy, but it could lead to ways of staving off dementia, neutralizing post-traumatic stress disorder, reducing anxiety, treating depression, or curbing addiction.

Among the stunning implications is that intervening in the reconsolidation process can alter a memory and change how it feels. Some of the most intriguing research on this idea has been led by Joseph LeDoux, a neuroscientist who has been working since the 1970s to investigate how processes in the brain generate emotions. In recent years, he and colleagues have investigated whether giving people an antianxiety drug as they recall a traumatic experience can reduce the dread they feel upon further recollections. If it works, it could be one of many opportunities for reshaping memory, as LeDoux told *MIT Technology Review*'s deputy editor, Brian Bergstein, in his NYU office.

Read the full, original article: The Promise and Perils of Manipulating Memory