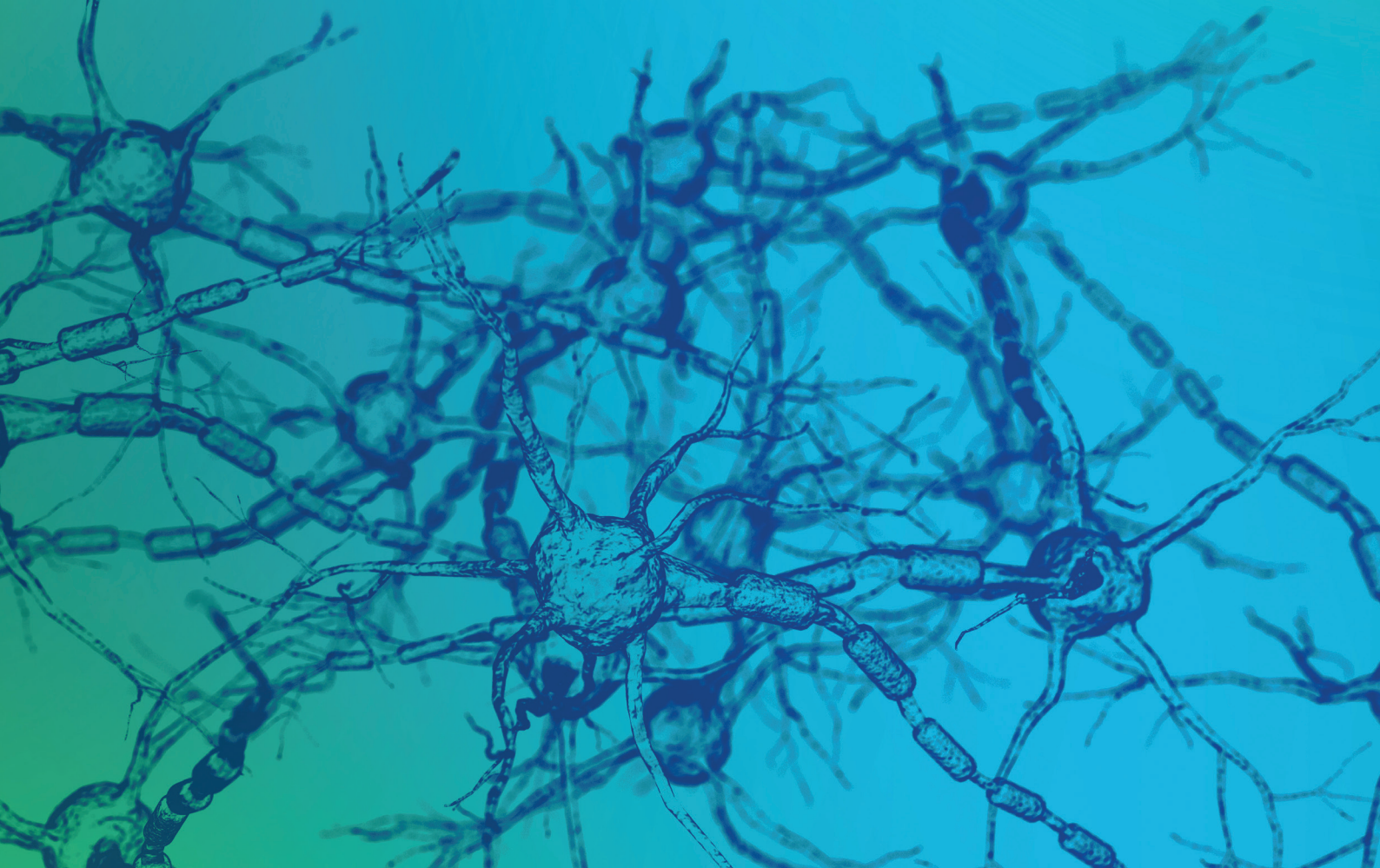
The University
Of Sheffield.
Neuroscience
Institute.

Giving new hope to patients with devastating neurological conditions

Advanced therapies signal a new era of medicine. For the first time we have the potential to offer much-needed treatments for devastating neurological diseases that cannot be treated by conventional drug compounds.



Scientists at the Neuroscience Institute at The University of Sheffield have already broken new ground in this field, being the first site in the UK to:

» Demonstrate the use of a genetic therapy to silence the SOD1 gene that can lead to motor neuron disease and become the flagship UK site to deliver the first genetic therapy trial for MND.

» Develop a stem cell treatment for multiple sclerosis that has been proven to stabilise the disease and reduce disability to levels never previously seen before in research trials. Many patients in this trial regained their ability to walk, run and even dance as a result.

"Several of my symptoms have now disappeared – I no longer get spasms that go down my spine when I flex my head forward, and my right leg hasn't given way for three years. I now have the possibility of living a life without MS and contemplating a future without disability."

Colette Beecher, 50, from Wickersley, Rotherham, was diagnosed with MS in January 2011, and has been relapse free for five years after having the MS stem cell transplantation at Sheffield's Royal Hallamshire Hospital in April 2016.

A new facility to speed up translational research and get treatments to patients faster

Gene Therapy Innovation and Manufacturing Centre

The recently announced Gene Therapy Innovation and Manufacturing Centre (GTIMC) at The University of Sheffield will accelerate the ability to treat millions of patients including those with rare and life-threatening genetic diseases.

Forming a key part of the £18m Gene Therapy Innovation Hub network, the centre includes a state-of-the-art modular GMP (Good Manufacturing Process) facility that will generate clinical-grade viral vectors needed for academic-led early phase clinical trials and support gene therapy projects emerging from UK universities.

"Sheffield has emerged as one of the leading players in cell and gene therapy and this national network of partners, facilities and training programmes will allow us to keep pace with translational discoveries for new and potentially life changing treatments"

Professor Mimoun Azzouz, Director of the GTIMC.

The future of medicine

The University of Sheffield is training the next generation of leaders with a newly established MSc in Advanced Therapies. It is also actively seeking funding to expand its facilities to further advance its crucial work combating devastating neurodegenerative diseases and transforming millions of lives.

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