## **Captain's Charity for 2023**







## Dementia Research

Helping transform the world of dementia Most of us will know someone touched by dementia yet dementia research only receives 3% of the UK's medical research funding.

Nottingham University's dedicated researchers are using powerful MRI technologies, first developed in Nottingham, to pave the way towards an earlier diagnosis and personalised treatments. This will help transform the lives of dementia patients, and their carers.

It takes only three people to each give  $\pm 75$  to help fund a day of dementia research.

## Unique research

## Nottingham is the only UK university using Dynamic Nuclear Polarization (DNP) to research dementia.

This technology is ten thousand times more sensitive than conventional MRI scanning, meaning that they can detect neverseen-before changes happening within the brain.

Currently, they can diagnose dementia only once damage to the brain has started. DNP technology gives them the opportunity to

look for the minute chemical changes that occur first. If they can pick up these early signs, they can give treatment before the disease develops.

They believe DNP could offer a breakthrough in dementia research. It has the potential to pave the way towards developing tests for earlier diagnosis and move us one step closer towards developing treatments that can be tailored to the needs of individual patients.



https://www.nottingham.ac.uk/impactcampaign/projects/dementia-research.aspx