

Nano Science, Technology and Industry Scoreboard

Biotech Receives £200k to Accelerate Tissue-repairing Nanotechnology

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A biotech company that has developed nanotechnology that could help cells repair damaged tissue has secured a £200,000 investment.

MICA Biosystems has developed a system that is able to control a patient's own stem cells in their body using nanotechnology to repair or replace damage or diseased tissue. Patients would attend an out-patient procedure, with the only equipment involved being two needles and a take home bandage.

MICA Biosystems received the funding from a £25 million Innovate <u>UK</u> scheme which supports technology advances in the <u>UK</u>. The company will use the money to partner up with The Royal Orthopaedic Hospital to take the next step in making the treatment available to patients.

"Innovate <u>UK</u> is a fund which aims to propel forward world-changing innovation, developed and based in the <u>UK</u>. It provides a springboard to technologies which are a step-change from the status quo or the competition, and we're glad we are recognised as such. We conducted extensive preclinical research and are working to begin the clinical trials to start improving the lives of millions of people across the world," explained Dr Mike Zurawski, chief executive officer of MICA Biosystems."

"The female-founded company was started by world-class scientists in the field of regenerative medicine, and we aim to not only add years to the lives of patients, but add life to their years by significantly improving their quality of life."

"Stem cells have long been seen as having huge potential in medicine- they're effectively a cell which can change itself to a specific tissue. Think of a block of clay, which can be shaped into a specific type of pottery before it's fired. However, doctors have had no way of controlling this shaping process, leaving it up to the environment of the cell- essentially up to

chance. This is what we're changing- giving the medical teams the ability to remotely control what the cell is going to be shaped into, all while it's already in place. We're first looking at spinal repair, but we have plans to treat arthritis, tendon and ligament damage, strengthen and repair bone, and even aim to treat some neurodegenerative diseases and spinal cord damage."

This newest cash injection brings the funding total to £3.5 million to date, with the aim to accelerate the technology into clinical trials.

Read the <u>original article</u> on European Pharmaceutical Manufacturer.