

Company Develops a New Approach to Nerve Repair

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A new company, Neurotex Ltd, has been established to develop novel silk-based materials that have the potential to provide a new generation of nerve repair materials and treatments.

Neurotex Ltd is a joint venture company, bringing together the expertise of Professor John Priestley, Head of Neuroscience at Queen Mary's School of Medicine and Dentistry, and the unique silk-based materials technology developed by Dr David Knight, and Dr Nick Skaer of Oxford Biomaterials Ltd. Dr Richard Skipper has been appointed Chief Executive Officer of the new company.

Neurotex Ltd is developing a range of patented devices for the repair of damaged nerves using a modified wild silk developed by Oxford Biomaterials, called Spidrex®.

Spidrex has biological and mechanical properties that make it a highly attractive candidate for nerve repair devices. Initial studies have shown Spidrex to be highly supportive of directed nerve growth with low immunotoxicity. Professor John Priestley, Scientific Founder of Neurotex expects that the research will lead to treatment for peripheral nerve injury, and may eventually lead to treatments for repairing damaged spinal cords – however, he cautions that spinal cord damage is far more complex and a much longer term goal.

Professor John Prestley, Scientific Founder of Neurotex said; "For us it's an ambitious but realistic goal to repair the peripheral nervous system. If



you damage a peripheral nerve, so long as it has a support to follow, the nerve should regrow and hopefully the nerve injury will repair itself. If you damage the spinal cord, however, there are lots of things that will try and prevent the regrowth taking place, such as natural inhibitory components. To repair a damaged spinal cord, we will need different types of tubes and will have to combine other approaches such as stem cells, growth factors or other additives. So it's a much longer term goal, but the rewards are potentially much greater." The Kinetique Biomedical Seed Fund has invested £250,000 to develop devices for use in peripheral nerve injury repair.

Source: Queen Mary, University of London

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