

UCL licences research to Collagen Solutions for next generation collagen products

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UCL Business, the wholly-owned technology transfer company of UCL, has concluded an exclusive licencing agreement with Collagen Solutions – the developer and manufacturer of medical grade collagen components for use in regenerative medicine, medical devices and in-vitro diagnostics –for a breakthrough platform technology for the production of stronger, more durable, living collagen-based 'tissues'.

Generated in the laboratory of Professor Robert Brown (UCL Orthopaedics), the core patent – already granted in the USA – is for an innovative rapid fabrication platform which will make it possible to produce strong graft-like tissues within hours, instead of the weeks it takes currently.

Using the novel process covered by the license, the production process creates collagen materials with a significant range of additional clinical applications in the replacement of tissues such as skin, tendon, bone and even cartilage, blood vessels and nerve conduits.

The most significant advantage of these natural, living materials are their physical strength and rapid speed of production. This means that surgeons will be able to implant them immediately, whilst at the same time they have the potential to have the novel collagen-based products customised to the precise needs of the patient and their injury.

From a business and manufacturing perspective, there is also the advantage that the collagen sources used for these materials are many

times more efficient than current comparable collagen feed-stocks. These advantages will inevitably assist other areas of clinical research into technologies for rapid and specific fabrication of novel tissues using bio-lamination or 3D bio-printing which are presently very difficult due to the lack of suitable support materials.

It is envisaged that this platform technology will enable the creation of a new generation of collagen based tissue replacements for use in a far wider patient population than is presently feasible with added potential to expedite both autologous and allogeneic cell therapies.

Dr Stewart White, Chief Executive Officer of Collagen Solutions, said: "This licence is hugely significant for Collagen Solutions as it places us at the very centre of the future of collagen engineering. With our own know-how and exclusive access to the technology developed in Professor Brown's laboratory, we believe that this combination will make us the "go to" company for any biopharmaceutical company looking to create new bio-active tissue regeneration and repair products.

"The licencing of this IP is designed to integrate our specialist biomaterials capabilities with the diverse biomedical capacity and global research standing of UCL and will drive new patient benefit in many new areas of regenerative medicine."

Professor Brown, Director of Research at the Centre for Tissue Regeneration Science within the Institute of Orthopaedics and Musculo-Skeletal Sciences (Division of Surgery) in the UCL Medical School and Scientific Advisor to Collagen Solutions, added: "This marks a new stage in the development of the established close links between Collagen Solutions and my own labs at UCL.

"This relationship has grown out of the flexibility that the Company has shown and its development capability that we feel will be instrumental in

successfully commercialising this IP which is the culmination of many years of research emphasising the pivotal role that collagen materials have in [regenerative medicine](#)."

Provided by University College London

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