

**Nano/micro fibrous gelatin–PLA yarns fabrication and characterization for biomedical applications.** / N. Movagatian, A. Hadjizadeh, M. Latifi. / Nano Studies. – 2015. – # 11. – pp. 95-102. – eng.

Nano / micro fibrous structures made of biodegradable polymers offer many advantages for biomedical applications, including tissue engineering scaffolds and drug delivery systems. In this study, a blend of gelatin (a biodegradable polypeptide) and polylactic acid (a biodegradable polymer) were electrospun to produce nanofibers. These nano / micro fibers were spontaneously collected in the form of yarn using a typical collector system. The produced yarns having 100 – 200  $\mu\text{m}$  diameter and consisting nanofibers (500 – 100 nm) were observed by light and electron microscopy. The fibers then were fixed by glutaraldehyde for gelatin cross linking and the tensile properties of the yarns were tested. Appropriate growth factors will be incorporated in to the yarns by physical adsorption to the gelatin molecules for the sustained release purposes in tissue engineering constructs. Fig. 7, Ref. 11.

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