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DPGU wins major ICMR grant of Rs 1.09 Cr for diabetic wound care innovation

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Innovation integrates electrospinning technology, bio-derived materials, and advanced coculture cell design

In a significant boost to biomedical research in Maharashtra, a team from Dnyaan Prasad Global University School of Pharmacy and Research by Dr. D.Y. Patil Unitech Society has secured a prestigious ICMR Intermediate Grant (IIRPIG-2025-01-01082) worth Rs 1,09,93,437 for their work on developing an advanced biomaterial for diabetic wound care.

The project, led by Dr Asha Thomas, Head of the Department of Pharmaceutical Chemistry, with co-investigators Dr Sanjeevani Deshkar (HOD, Pharmaceutics) and Dr Vinita Patole, focuses on creating a collagen–elastin composite scaffold supported by bioactive chicken-derived skin oil to accelerate healing in chronic diabetic wounds.

The team also plans to explore co-culture techniques using keratinocyte and fibroblast cells to enhance tissue regeneration — an area that holds tremendous promise for patients with slow-healing ulcers.

The innovation integrates electrospinning technology, bio-derived materials, and advanced coculture cell design, representing a truly translational approach to regenerative medicine. Chronic diabetic wounds remain one of the most critical unmet clinical needs in healthcare, and this research aims to deliver a next-generation, cost-effective biomaterial that can strengthen clinical outcomes and reduce healing time in high-risk patients.