

The banner features a dark blue background with a central, glowing blue silhouette of a human torso. To the left of the torso are three large, textured blue spheres resembling cells or eggs. To the right is a complex network of glowing blue dots connected by thin lines, resembling a molecular or neural network. Below the network is a glowing blue hand holding a small, glowing blue cube with internal structural patterns.

NextRegen 2026

International Symposium on Next-Gen Regenerative Medicine and AI Technologies

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Theme: “Intelligence Meets Regeneration – Engineering the Future of Healing”

April 2–5, 2026

Symposium Overview

NextRegen 2026 brings together global experts in regenerative medicine, stem-cell technologies, and artificial intelligence to shape the next frontier of healthcare innovation. The symposium explores how AI-driven design, predictive modeling, and data-intensive methods accelerate breakthroughs in tissue engineering, cell therapy, and biofabrication.

Through keynote lectures, panel discussions, and interactive workshops, participants will share pioneering research and discuss translational challenges from the lab to clinical practice.

Main Topics

Track I – Stem Cells and Regenerative Therapies

- Mesenchymal, induced pluripotent (iPSC), and embryonic stem-cell applications
- Genetic reprogramming and CRISPR-based regenerative tools

- Exosomes and extracellular vesicles in repair mechanisms
 - Cell–matrix interactions and tissue microenvironment engineering
 - Translational case studies in musculoskeletal, neural, and cardiac regeneration
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◆ **Track II – AI and Computational Technologies in Regeneration**

- Machine learning for cell-behavior prediction and tissue modeling
 - AI-driven biofabrication and scaffold optimization
 - Digital twins for personalized regenerative medicine
 - Deep learning in histology, microscopy, and image-based cell tracking
 - Ethical and regulatory aspects of AI-assisted biomedical systems
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