



**S.V. Kirthanashri**  
Assistant Professor

**Specialization: Tissue engineering, Scaffold fabrication, Nanoparticle drug delivery, Stem cell Research**

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Dr. Kirthana completed her PhD from Centre for Nanotechnology & Advanced Biomaterials (CeNTAB), SASTRA University, Tamil Nadu specializing in hepatic tissue engineering. After finished her PhD, she gained experience from Translational Research Platform for Veterinary Biological (DBT-TANUVAS partnership programme), Chennai where she was involved in developing tissue engineering based products for veterinary applications. Later she joined School of Material Science & Engineering (MSE) at Nanyang Technological University, Singapore to explore hepatocyte regeneration using stem cells in collaboration with Northwestern University, Chicago. Her research is focused on scaffold fabrication for modeling regenerative diseases with special focus on liver fibrosis. She is using most recent three dimensional bioprinting technology for her research and is also exploring therapeutic potential of new medicines on various 3D disease models. Her research interest includes three dimensional bioprinting, scaffold fabrication, drug delivery, stem cells & tissue engineering. She is also involved in teaching courses like stem cells & tissue engineering, Biochemistry, Physiology and other allied courses.

#### **Honours and awards:**

1. SASTRA Teaching Assistant Award – 2009
2. DBT-ABCEP postdoctoral fellowship 2014
3. UGC Kothari Postdoctoral fellowship 2014
4. NTU-NU Nanomedicine Post-doctoral award 2015

#### **Selected Publications:**

1. **Kirthanashri S V**, A Subramanian, UM Krishnan, S Swaminathan. Development Of Porous Hydrogel Scaffolds With Multiple Cues For Liver Tissue Engineering **Regenerative Engineering and Translational Medicine**, (2017),3,3,176-191.
2. **Kirthanashri S V**, S Swaminathan, M Parthasarathy. Electrochemical Evidence for Asialoglycoprotein receptor mediated Hepatocyte Adhesion and Proliferation in Three Dimensional Tissue Engineering Scaffolds. **Analytica Chimica Acta**. (2015) Aug 26;890:83-90 (IF: 4.51)
3. **Kirthanashri S V**, A Subramanian, UM Krishnan, S Swaminathan. Influence of 3D Porous Galactose Containing PVA/Gelatin Hydrogel Scaffolds on Three-dimensional Spheroidal Morphology of Hepatocytes. **Journal of Material science: Materials in medicine**. (2015) Jan; 26(1):5345 (IF: 2.58)
4. **Kirthanashri S V**, A Subramanian, UM Krishnan, S Swaminathan. Role of biomaterials, cells & therapeutic molecules in hepatic tissue engineering. **Biotechnology Advances**. (2012) May-Jun; 30(3):742-52. (IF: 9.5)
5. Kuppan P, **Kirthanashri S V**, Sundaramurthi D, UM Krishnan, S Swaminathan. Development of Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) fibres for skin tissue engineering: Effects of topography, mechanical and chemical stimuli. **Biomacromolecules**. (2011) Sep 12; 12(9):3156-65. (IF: 5.75)