To Whomsoever It May Concern

It is my great pleasure to give this recommendation letter to Ms Ashwini Vasudevan, who is currently associated with me as a Senior Research Fellow at the Institute of Liver and Biliary sciences, New Delhi. Ashwini has completed her master's in medical nanotechnology (M Tech) from SASTRA University, Thanjavur, I know Ms Ashwini since last three years when she joined my lab as a junior research fellow in a DST funded project. She worked sincerely and has completed the project successfully. She has developed nanofiber scaffolds with liver extracellular matrix to predict in vivo hepatotoxic dose in rodents during this project. These scaffolds have been fabricated with undigested liver matrix without the incorporation of any external chemical crosslinking agent. The developed matrix-incorporated scaffolds had pore size optimum for the culture of primary hepatocytes and maintained metabolically active hepatocytes for prolonged in vitro cultures. We have filed an e-patent for these scaffolds as an ex vivo platform for drug screening. This work has also been communicated as a research manuscript in ACS Biomaterial science and engineering journal and is under revision.

Ashwini is also working on developing biomimetic scaffolds for liver that would support hepatocyte proliferation both *in vitro* and *in vivo* as her PhD thesis with ICMR fellowship. She has gained considerable experience and expertise in the fabrication of decellularized tissue-based scaffolds with the help of tissue engineering techniques such as electrospinning, 3D printing and alginate-based microbead encapsulation. She also has developed expertise in the isolation and culture of primary liver cells. She has also optimized 3D organoid cultures of primary hepatocytes. She is experienced in making several animal models of liver regeneration and injury. She is equally good in molecular biology techniques like western blotting, RT-PCR, histopathological staining, immunostaining and confocal imaging. In a short span of time, she has now emerged as an independent and skilful researcher. She is an enthusiastic and diligent student who does not accept defeat even after failed attempts, ensuring completion of her work. She has now also developed the ability to generate new research hypotheses based on her findings and designing and carrying out experiments to test them. Personally, Ashwini is quite friendly, a team player and has been a helping hand for other fellow students in the lab.

I unreservedly and empathetically recommend her candidature for the travel award

If I can be of any further assistance, or provide you with any further information, please do not hesitate to contact me.

Warm regards,

Dr. Savneet Kaur Associate Professor

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