

Mr. Abdullah Chand, Scientist and Ph.D. research scholar blaze a new trail to make artificial human liver tissue.

NEWSPAPER: BANGALORE MIRROR ON 23rd Dec.2015

<http://www.bangaloremirror.com/bangalore/others/City-scientists-blaze-a-new-trail-to-make-artificial-liver-tissue/articleshow/50288429.cms>

At a time when scientists all over the world are struggling to develop artificial liver tissue, a Ph.D research student of CMJ university have actually developed such tissues that perform functions of the human liver. This breakthrough has not just brightened hopes for patients seeking liver tissues from live donors, but has also brought a potential alternative to artificial extracorporeal liver support (or liver dialysis) used in detoxification treatment for liver failure - a process similar to hemodialysis.

The trio that achieved the breakthrough comprises includes Abdullah Chand (from CMJ university) and his fellow researchers working on tissue engineering at Pandorum Technologies (Bengaluru).

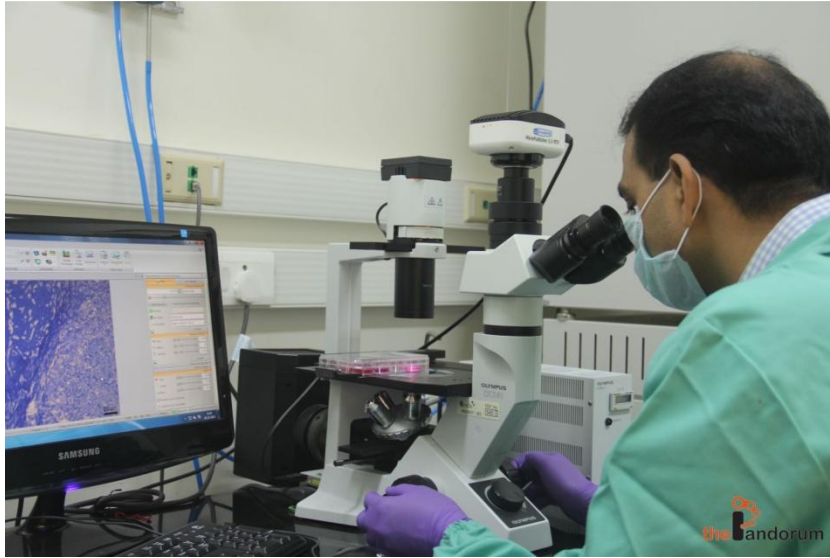
The process of making this made-in-India liver tissue involved taking cells from a live human liver and encapsulating them in hydrogel. These were then bio-printed as mini-livers using an indigenously developed 3D bio-printer. The cells in the hydrogel were then grown in an environment that almost replicated the conditions in which liver thrives in a live human body.

NEWSPAPER: THE HINDU ON 24TH DEC.2015

<http://www.thehindu.com/business/Industry/indian-startup-grows-human-liver-in-lab/article8022411.ece>



3D bio-printed mini-livers that mimic the human liver will serve as test platforms for discovery and development of drugs and vaccines, says Abdullah Chand and his fellow Senior Scientists



Pic : CMJ University Ph.D student Abdullah Chand working to finish his research project



Fig: Abdullah working for his Ph.D research project

3D-printed living tissues made of human cells would enable affordable medical research with reduced dependence on animal and human trials. It will also eventually lead to full scale transplantable organs.

3D bio-printed mini-livers that mimic the human liver will serve as test platforms for discovery and development of drugs and vaccines.