To see a 3D printer in scaffold shape can help to determine how cells grow, or how stem cells engineer and chief executive of Organovo.

The company's next step will be to test pharmaceuticals. The most advanced to build 3D tissue structures that could be used ing with printing human cells — either individually or in multi-cell blobs — that fuse together naturally. These techniques have successfully produced blood vessels and beating heart tissue. The ultimate dream of at the Scripps Research Institute in La Jolla, California, 30 years ago.

Other groups are using 3D printing of plastic or collagen to con...