



Particle3D

# Uniquely Lifelike Bone Environments

P3D Scaffolds

## Bring natural bone environments to the lab

Enhance your research with:

- Porous  $\beta$ -TCP bone-like 3D structure
- Directly translate your research from in vitro to in vivo
- Realistic setting for testing of therapies and disease models

[www.Particle3D.com](http://www.Particle3D.com)

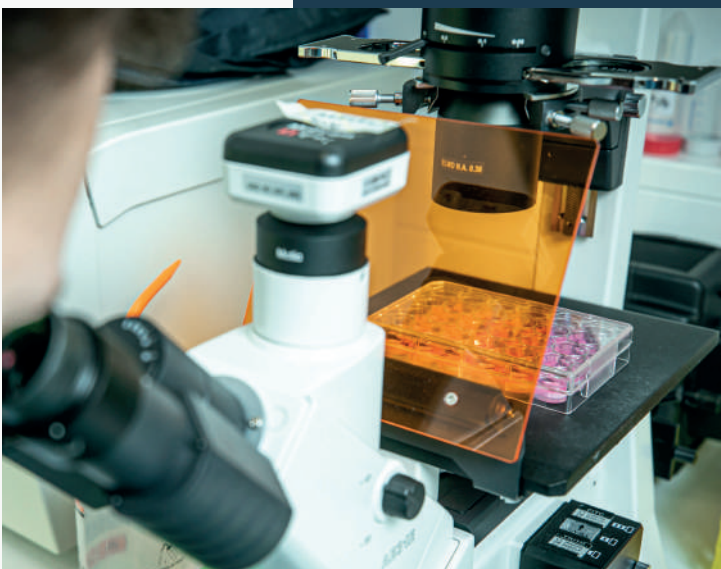


## P3D Bone Scaffolds

Lifelike bone models wherein disease mechanisms can be studied and new treatments can be tested. Various cells and pharmaceuticals can be added onto these structures to study how they interact with each other and with the bone within its pores. The surface area onto which cells can attach and pharmaceuticals can access is maximized due to the scaffold's internal porosities. The P3D scaffolds are compatible with standard analytical methods.

## Bone-Like 3D Structure

The material composition combined with the 3D printing technology enables the creation of a lifelike trabecular bone structure. This secures more realistic testing when drug perfusion is uneven and where bacteria and cancer cells may hide in pores. Such structures are difficult to create with traditional ceramic manufacturing techniques and even many 3D printing methods. It furthermore allows for a unique tailoring of the scaffold to your specific needs.



## From In Vitro to In Vivo

The P3D Scaffolds can be used both in vitro and in vivo to bridge the gap between the lab and animal trial research. This allows for better extrapolations between laboratory research and animal trials, thereby securing that the conclusions derived from in vitro experiments accurately account for the events that occur in vivo. Publications that demonstrate the P3D Scaffolds' usability in vitro and in vivo are available on Particle3D's website.