

Bioresearch Support Core

HKU HKS Faculty of Medicine Centre for PanorOmic Sciences 香港大學泛組學科研中心

BCN3D Sigma R19 3D Printer

3D printing is an emerging technique applied in various research fields. Coupled with a 0.4mm nozzle, highprinting stage and flexible choice of resolution filaments, this 3D printer enables rapid production of labware. Examples include customised simple mechanical adaptors to sophisticated device such as zebrafish embryo entrapment chambers. With BCN3D Sigma R19 3D Printer, you can conveniently tailor-make your own labware that is not commercially available. **New in CPOS Examples PDMS** Negative **Cell Seeding** 3D Printed Mold Agarose Wells ▲ Self-assembled agarose cell seeding wells¹ ▲ iPhone adaptor Teaching aids² for microscope³ \triangleright 🗲 Zebrafish embryo entrapment chamber4 🔻 A) Using chamber vs (B) Manually 2.0 mm Φ=0.9 mr

Embryo entrapment well

Reference

¹ Strobel, H. A., et al. (2018). Fabrication of Custom Agarose Wells for Cell Seeding and Tissue Ring Self-assembly Using 3D-Printed Molds. *Journal of Visualized Experiments, 134*. https://doi.org/10.3791/56618; ² Double helix challenge by chylld. (2010). Thingiverse. https://www.thingiverse.com/thing:4659; ³ iPhone XR adapter for Omax microscope. by Sergey. 77. (2021). Thingiverse. https://www.thingiverse.com/thing:5136958; ⁴ Yu, T., et al. (2018). A 3-dimensional (3D)-printed Template for High Throughput Zebrafish Embryo Arraying. *Journal of Visualized Experiments, 136*. https://doi.org/10.3791/57892