



# Basics of 3D Cell Culture – Two Days Hands-On Training Course

**Date:** December 3 & 4, 2019

**Location:** 3D Cell Culture Core (3D3C) Facility, BRK2087, Birck Nanotechnology Center, Purdue University

**Course Fee:** \$350 per person

**Who should attend:**

Anybody who wants to learn about the fundamentals of 3D cell culture

**Activities: Lecture, Discussions, Demonstrations, Hands-on Training**

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| Day One | AM | <b>Lecture (1.5h): Basics of 3D Cell Culture</b><br><b>Demonstration (1.5h): Set up of 3D cell cultures using drip method and thick embedding method for spheroid-like formation</b>   |
|         | PM | <b>Hands-On Practical (3h)</b> <ul style="list-style-type: none"><li>• <b>Observation of 3D cultures by microscopy</b></li><li>• <b>Coating of culture vessels with hydrogel type of matrix</b></li><li>• <b>Set up of 3D drip culture</b></li><li>• <b>Set up of thick embedding culture</b></li><li>• <b>Medium change with hydrogel</b></li></ul> |
| Day Two | AM | <b>Q &amp; A (1h)</b><br><b>Demonstration (2h): Dislodging multicellular structures and preparation for immunolabeling</b>   |
|         | PM | <b>Hands-On Practical (3h)</b> <ul style="list-style-type: none"><li>• <b>Dislodging multicellular structures using enzymes that degrade the matrix</b></li><li>• <b>Preparation of frozen blocks of 3D culture for further analysis (histology, immunolabeling , FISH)</b></li></ul> <b>Q &amp; A and Conclusion (1h)</b>                           |

**Prerequisites:** Purdue REM biosafety training and blood borne pathogen training; sufficient knowledge in basic cell culture techniques or 3D3C Cell Culture Basics training workshop

**Class Size:** Six participants (supervised by two trainers)

**Contact for question and registration:** Dr. Yunfeng Bai, Facility Manager, 3D Cell Culture Core (3D3C) Facility (bai0@purdue.edu, 765-496-0225)

**Registration deadline:** November 18, 2019