

BIOENGINEERING SEMINAR

SPRING 2022

3D Printing Technology to Enhance Clinical Efficacy and Research for Neurovascular Diseases

Abstract

Three-dimensional (3D) printing technology constitutes a novel manufacturing process that builds layers to create a 3D solid object from digital image data. An interest in having 3D printing capability in neurovascular field has emerged recently as it has a natural synergy in many ways including education, treatment planning, and research. Complex patient-specific structures can be printed with various materials by 3D printers based on radiographic data. Multiple types of 3D printers are commercially available and different in terms of mechanism, material, resolution, cost etc. The differences should be recognized before utilizing this emerging technology. The purpose of this seminar is to summarize the 3D printing methods and the promising roles to enhance clinical efficacy and research for neurovascular diseases.

Biography

Naoki Kaneko, M.D, PhD. is an Assistant Professor of Radiology at the David Geffen School of Medicine at UCLA. Dr. Kaneko received his MD and PhD degrees from Tohoku University in Japan, and completed neurosurgery residency at Jichi Medical University. Dr. Kaneko specializes in treating patients with cerebrovascular disorders, including brain aneurysms, arteriovenous malformation and ischemic stroke. Dr. Kaneko is a director of the Interventional Radiology/Neuroradiology Translation Research Laboratory (IRTRL). He currently focuses on understanding the pathophysiology of neurovascular diseases including brain aneurysms, and the development of new neuroendovascular devices.



Naoki Kaneko, PhD

Assistant Professor,
Radiology at the David Geffen School
of Medicine
University of California, Los Angeles
Los Angeles, CA

**Thursday, April 21st
12:00-1:00 pm**

Fairfax Campus (in-person):
Horizon Hall, Rm 2010

SciTech Campus (live-streamed):
Katherine Johnson Hall, Rm 258

Please RSVP to bioeng@gmu.edu with speaker name included.
Be sure to have green Mason COVID Health Check ready for entry.