



CiRA OPEN SEMINAR SERIES

HUMAN LIVER ORGANOIDS: A MULTICELLULAR APPROACH TO DISEASE AND THERAPY

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The liver is a highly complex organ composed of diverse cell types that interact to regulate metabolism, detoxification, and immune responses. Traditional liver models often fail to capture this cellular interplay, limiting their utility for studying human disease and developing new therapies. Recent advances in stem cell biology and tissue engineering have enabled the generation of multicellular liver organoids that incorporate parenchymal and non-parenchymal populations, providing more physiologically relevant platforms. These organoids allow for improved modeling of liver development, disease mechanisms, and drug responses, while also offering translational opportunities in regenerative medicine. This presentation will highlight current strategies for building multicellular liver organoids and discuss their potential impact on advancing both basic research and therapeutic innovation.

Giuseppe Pettinato, Ph.D., is a molecular biologist with a doctorate in Embryology from the University of Catania, completed through a collaborative program with the Andalusian Center for Molecular Biology and Regenerative Medicine (CABIMER) in Seville, Spain. With over 20 years of experience in stem cell biology, organoid engineering, and translational medicine, he is currently an Instructor in Medicine at Harvard Medical School and the PI and Director of the Stem Cells and Organoids Research Engineering (SCORE) Center within the Division of Gastroenterology at Beth Israel Deaconess Medical Center.

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Registration



TUE
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14:00~15:00



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