VA Biofabrication Community of Science

Speaker Series: Marc Ferrer
Wednesday, April 20, 2022, 2:30-3:30pm ET

Marc Ferrer, Ph.D.

Director, National Center for Advancing Translational Sciences (NCATS) 3D Tissue Bioprinting Laboratory, National Institutes of Health.

Clinical Application Areas: Tissue Models

Presentation Title: Operationalizing the Use of Biofabricated Tissue Models as Drug Testing Assay Platforms

Presentation Overview: The operationalization of biofabricated 3D tissues as robust testing platforms for the discovery and development of new therapeutics requires reproducible tissue assembly in well-based microplates, in-depth morphological and physiological tissue validation, benchmarking with clinical markers, qualification for their intended context of use, and development of readouts that are amenable to laboratory automation used in high throughput screening laboratories. This presentation will discuss the approach that the NCATS 3D Tissue Bioprinting Laboratory is implementing to develop and use biofabricated 3D tissues for disease modeling and drug screening.

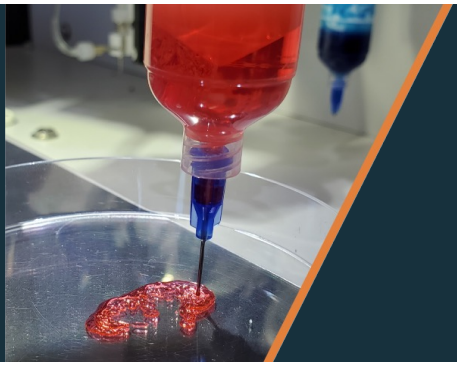
About: Marc Ferrer is the Director of the NCATS 3D Tissue Bioprinting Laboratory at the NIH, a multidisciplinary group with the goal of creating, validating, and using 3D bioengineered tissues for disease modeling and drug discovery and development. Previously, Marc was a Team Lead at the NIH Chemical Genomics Center working on the discovery of small molecule probes to study protein function. Before joining NIH, he was Director of Assay Development and High Throughput Screening at the Department of Automated Biotechnology at the Merck Research Laboratories. Marc received a BSc degree in Organic Chemistry from the University of Barcelona, and a Ph.D. degree in Biological Chemistry from the University of Minnesota.

Biofabrication at VA:

- Biofabrication offers Veterans **point-of-care solutions** for the customized restoration of health**.**
- Through the VA Biofabrication Community of Science (BioFab CoS), VA is establishing an integrated infrastructure that aims to serve **Veterans first** with patient-matched biofabricated solutions.

Biofabrication CoS Provides:

- A **platform to connect** for internal and external stakeholders across the biofabrication continuum to learn, ideate, research, and build solutions for Veterans, together.
- A **set of practices** to develop biofabrication solutions across every stage of the development process and the eventual goal of first in-human clinical trials.
- **Regular touchpoints** to stay up-to-date on internal and external activity in the biofabrication space.



VA Biofabrication CoS Symposium

The first VA Biofabrication CoS Symposium will be held virtually **May 4–5, 2022.** We are excited to engage biofabrication researchers, practitioners, visionaries, and innovators like you to grow VA's biofabrication efforts.

You can register for the VA Biofabrication CoS Symposium using the following link: https://www.surveymonkey.com/r/2G2LL5Z.

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