

VA Biofabrication Community of Science

Speaker: Dr. Jay Patel

Wednesday, March 23, 2022, 2:30-3:30pm ET



Dr. Jay Patel

Assistant Professor, Emory University,
Department of Orthopedics
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Clinical Application Areas: Cartilage

Presentation Title: Designing Biomaterials for Multi-scale Functionality in Cartilage Repair

Presentation Overview: Articular cartilage is often injured, cannot self-heal, and progressively wears. Techniques to delay, or even prevent, the deterioration of cartilage after an initial injury would be beneficial to the field. Our research designs and implements biomaterials, to specifically alter how cells within cartilage interact with their environments to halt disease progression.

Website: the-patel-lab.com

About: Dr. Patel joined the faculty at Emory in September 2020, and his program focuses on the repair and regeneration of musculoskeletal tissues (e.g., cartilage, meniscus), with an emphasis on using micro-scale findings to drive macro-scale therapies. His lab uses a combination of biomechanics, biomaterials, mechano-biology, *in vitro* systems, and functional *in vivo* models to motivate, design, develop, and evaluate novel treatments and therapeutics for orthopedic injuries. Dr. Patel received his Bachelor's in Bioengineering from Rice University and his PhD in Biomedical Engineering from Rutgers University.

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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