

TECH SPACE

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Presentation Title: The Science House Presents: Printing Possibilities: A Middle Grades Exploration of Biophysics With 3D Materials

This interactive TechSpace session showcases a STEM outreach experience that combines 3D printing, biophysics and biomedical engineering for beginning to advanced middle school students. Participants explored how digital design tools and printed models could teach core physics and biomechanics concepts — like torque, flexibility, and joint function — through human-centered design challenges. Attendees will interact with student projects, test materials, and learn how to integrate low-cost fabrication into their own outreach or classrooms. This replicable approach supports developing STEM identity, real-world application, and inclusive innovation — bridging the gap between classroom learning and emerging technologies in health and engineering fields.

Presentation Target:

Middle School

Presenter(s):

1. Alonzo B. Alexander, Director of Imhotep and Kyran Anderson Academies, The Science House
2. Jason L. Painter, Director, The Science House