Jennifer A. Lewis
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Biomanufacturing Vascularized Human Tissues for Drug Testing, Disease Modeling, and Therapeutic Use

Friday, March 8, 2024
3:00pm in Room 66-110
2:30pm Reception

About Jennifer A. Lewis
Jennifer A. Lewis is the Jianming Yu Professor of Arts and Sciences, the Wyss Professor for Biologically Inspired Engineering in the Paulson School of Engineering and Applied Sciences and a core faculty member of the Wyss Institute at Harvard University. Her research focuses on biomanufacturing vascularized human organoids and tissues for drug testing, disease modeling, and therapeutic use. Multiple startups are commercializing technology from her lab ranging from drug delivery and kidney therapeutics. She is an elected member of the National Academy of Sciences, National Academy of Engineering, National Academy of Inventors, and the American Academy of Arts and Sciences and has received numerous awards for her work.

About the Michaels Lectureship
The lectureship was established in 1995 to stimulate the collaboration of the medical profession, life sciences industries, and chemical engineering researchers. The most exciting and promising developments in medicine and the life sciences - those leading to improved therapies for the treatment or mitigation of intractable diseases, and strategies for prevention of debilitating or life-threatening genetic deficiencies - are largely emerging from discoveries in molecular biology and biochemistry, in concert with those in the sister-sciences of immunology, pharmacology, and genetics. These developments involve the basic tools that are the hallmark of the chemical engineer’s profession: molecular thermodynamics, chemical reaction kinetics, homogeneous and the heterogeneous catalysis, fluid mechanics, and mass- and energy-transport processes. Few other engineering disciplines are as well qualified to deal with the microscopic and molecular phenomena affecting living systems.