

School of Engineering

Department of BIOMEDICAL ENGINEERING

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People

Faculty

Emeritus Faculty

Part-time Lecturer

Staff

Faculty

David Kaplan

Stern Family Professor of Engineering Profesor and Chair, Department of Biomedical Engineering Professor, Department of Chemical Engineering Director, Bioengineering and Biotechnology Center

Education

1975 B.S., SUNY, Albany 1978 Ph.D., Syracuse University and SUNY Syracuse

Honors and Awards

- Elected Tissue Engineering Society (TERMIS) Member-at-Large: North America (2009)
- Society for Biomaterials, Clemson Award for Literature (2007)
- Henry and Madeline Fischer Faculty Award Tufts University (2006)
- Elected Fellow, American Institute of Medical and Biological Engineering (2003)
- Outstanding Faculty Award, Tufts University (1997-1998)
- Decoration for Meritorious Civilian Service, U.S. Government (1991)

Research Interests

Research at the interface between biology and materials science and engineering - aimed at understanding and controlling the biological synthesis and processing of polymers and polymer interfaces. This understanding is used to control the functional attributes of the polymers related to cell responses, solution properties, architectural control of assembly, self-assembly. This problem is addressed using genetic, physiological and enzymatic approaches. These concepts are also integrated into ongoing efforts in tissue engineering. Studies are focused on the manipulation of

adult human stem cells on novel protein-based matrices in novel bioreactors to generate desired tissue outcomes – ligament, bone, cartilage.

Biography

Dr. David Kaplan holds an Endowed Chair, the Stern Family Professor of Engineering, at Tufts University. He is Professor and Chair of the Department of Biomedical Engineering and also holds faculty appointments in the Department of Chemical and Biological Engineering, Department of Chemistry, the Tufts University School of Medicine and the Tufts University School of Dental Medicine. His research focus is on biopolymer engineering to understand structure-function relationships, with emphasis on studies related to self-assembly, biomaterials engineering and functional tissue engineering. He has published more than 400 papers and edited eight books. He directs the NIH P41 Tissue Engineering Resource Center (TERC) that involves Tufts University and Columbia University, and the Bioengineering and Biotechnology Program at Tufts University. He serves of the editorial boards of numerous journals and is Associate Editor for the journal *Biomacromolecules*. He has received a number of awards for teaching, was Elected Fellow, American Institute of Medical and Biological Engineering (2003) and received the Society for Biomaterials Clemson Award for contributions to the literature in 2007.

Contact Info

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