אוניברסיטת בן-גוריון בנגב
Ben-Gurion University
of the Negev
The Faculty of Engineering Sciences

בימת דיקן הפקולטה למדעי ההנדסה

פרופ' גבי בן-דור דיקן הפקולטה למדעי ההנדסה
מתכבד להזמינך להרצאת אורח בימת-הדיקן

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Columbia University
Director, Bioreactor Core of the National Tissue
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תרצה בנושא:

Engineering Human Body Parts

The overall objective of all tissue engineering is to fully restore the lost tissue function. Engineered tissues of sufficiently high fidelity can also provide physiologically relevant yet controllable models for fundamental research - for example, to study stem cells in a native-like three-dimensional context of development or disease. The utility of tissue engineering depends on our ability to predictably direct the cells to express the right phenotype in the right place and at the right time. We are observing that the same factors that regulate tissue development in vivo (molecular and physical) can be used to direct cell fate and tissue assembly in vitro. The focus of our research is on engineering functional human tissues, by an integrated use of stem cells (the actual "tissue engineers"), biomaterial scaffolds (cell-instructive templates) and bioreactors (culture systems designed to regulate tissue development). This talk will discuss advanced technologies for regulation of stem cell fate and function, and their application in functional tissue engineering and the study of development and disease.

יום שלישי, י"ט בטבת תש"ע, 5 בינואר 2010
ההרצאה תחל בשעה 10:00
אודיטוריום בניין היי-טק (בניין 37 חדר 202) קומה 2
לפני ההרצאה יוגש כיבוד קל (9:30)