Course No 274346

Medical Technology Development & Enterprising

Course Director: U. Rosenschein MD
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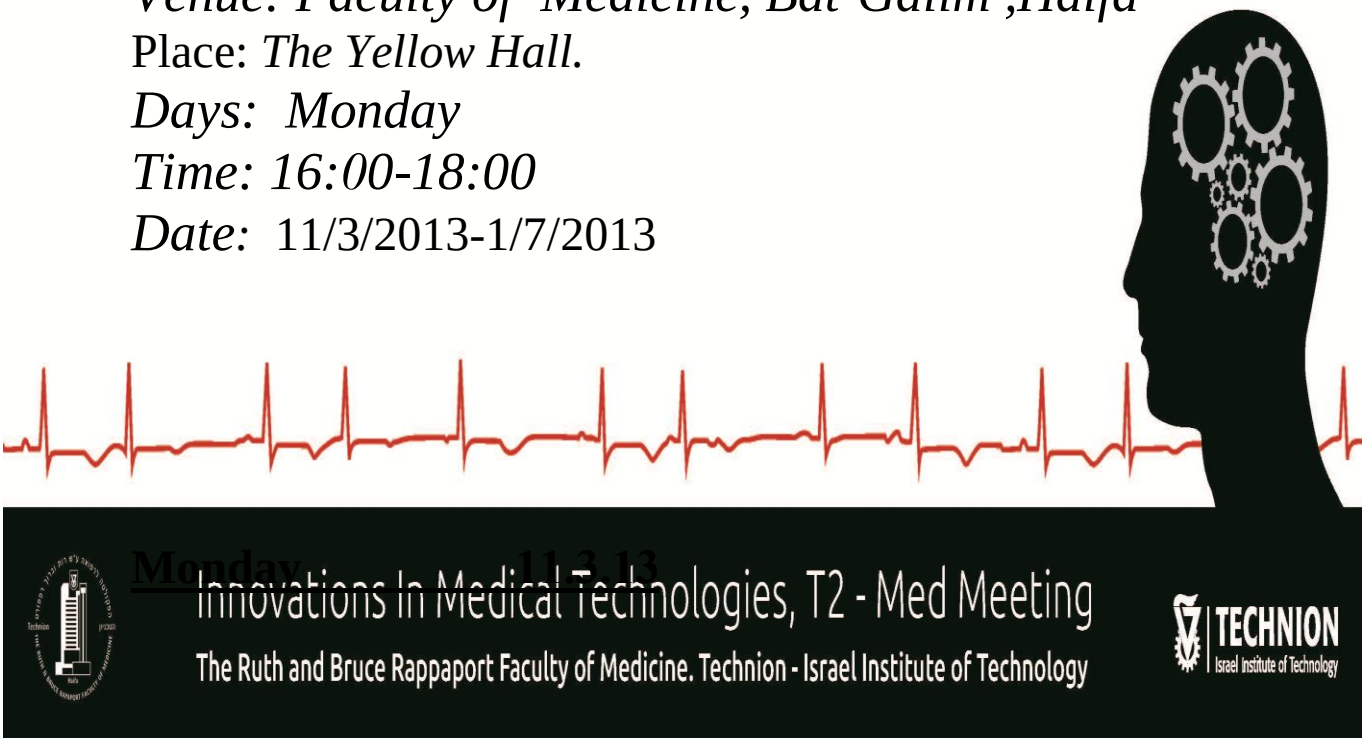
Venue: Faculty of Medicine, Bat-Galim ,Haifa
Place: *The Yellow Hall.*
Days: Monday
Time: 16:00-18:00
Date: 11/3/2013-1/7/2013



Monday 11.3.13

16:00-16:50

Introduction

U. Rosenschein MD

17:00-17:50

The Nature of Disruptive Technology

Objective: Describe the nature of disruptive technology development vs the nature of linear technology development

A. Marom

Monday 18.3.13

16:00-16:50

In Vivo Experiments in Medical Device Development.

Objective: Describe the principles and models of in vivo experiments of a novel technology

R. Shofti PhD

17:00-17:50

Fund Raising -"New Paradigms and old Dogmas"

Objective: Teach how to fund a project from Seed money to Exit.

D. Megido MD

Monday 8.4.13

16:00-16:50

Project Evaluation-What Should I Analyze of When I Have a Great Idea.

Objective: Teach the elementary variable to assess the viability of a novel idea.

M. Berman

17:00-17:50

Innovation and Medicine – 20 Years Perspective.

S. Eckhouse PhD

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Monday 22.4.13

16:00-16:50

V*alvular Heart Disease- Applying engineering principles to treat of aortic stenosis.*

Objective:Describe the basic concepts of valvular heart disease and the ventor story.

E. Schwemental MD, PhD

17:00-17:50

Catheter-Based Solutions for Valvular Heart Disease

Objective: Describe the challengs and solutions in development of the first catheter based valve therapy and the PVT story

A. Bash

Monday 29.4.13

16:00-16:50

Stem Cells Therapy in Cardiology - Past, Present & Current challenges

Objective: Describe the unmet needs and expectations, reality and the future of stem cell therapy

L. Gepstein MD

17:00-17:50

From Basic science Laboratory to Biotech Company- 20 Years Perspective

M. Flugelman MD

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Monday 6.5.13

16:00-16:50

When Proteomics, Ionics and Electronics Meet – Bridging The Gap Between the World

Objective: Describe the potential interface between biology, electronics and Mechanics.

I. Levi PhD

17:00-17:50

Intellectual Property in Medical Device Development.

Objective: Describe basic concepts (e.g. patent, freedom to operate) and teach the basics principles of intellectual property.

M. Fenster

Monday 13.5.13

16:00-16:50

Coronary Artery Disease - The Problem, Solutions and Current Unmet Needs.

Objective: Describe the basics of coronary artery disease , the history (problems/ Needs and solution) and current challenges and unmet needs.

A. Lubovitch

17:00-17:50

Development of a Dedicated Cardiac CT - The Arienta story.

U. Dafni

Monday 20.5.13

16:00-16:50

Structural Heart Disease –The Problem, Solutions & Current Needs.

Objective: Describe the basic concepts of structural heart diseas. The History (problems/Needs and solution) and current challenges and needs

E. Brukheimer MD

17:00-17:50

The iPAD Revolution and Patient Care

McKesson and the iPAD project.

O. Ben-Kohav

Monday 27.5.13.

16:00-16:50

Heart Failure -The Problem, Solutions & Current Unmet Needs.

Objective: Describe the basic concepts of heart failure. History (problems/needs) technology solutions, current challenges and unmet Needs.

O. Amir MD

17:00-17:50

Cardiac Assist Devices –The Solution for the Heart Failure?!

Objective: Describe the needs, challenges and solution in developing an "artificial heart"

A. Landesberg MD, PhD

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Monday 10.6.13

16:00-16:50

Non-Invasive Imaging in Cardiology –The Problems, Solution and Unmet Needs.

Objective: Describe the challenge and solutions of non invasive cardiac imaging and navigation. Describe current unmet needs/challenges

R. Rubinshtein MD

17:00-17:25

From a Battlefield Technology to Medicine*: The Given Imaging Story*

G. Idan-PhD

17:25-17:50

Holographic Medicine -The RealView Story

S. Gelmann

Monday 17.6. 13

16:00-16:50

Regulatory Thresholds and Clinical Trials in Medical Device Development.
Objective: Teach the pivotal role of regulatory process and clinical trials from feasibility,CE mark, FDA, and post marketing studies.

T. Abudi

17:00-17:50

Futuristic Navigation Technologies- The Mediguide Story.

G. Strommer

Monday 24.6.13

16:00-16:50

Device Therapy for Hypertension – The Cardiosonics Story
Objective: Describe the basic concept of hypertension and the recent introduction of medical technology.

TBD

17:00-17:50

Therapeutic Ultrasound - from Catheter Based Technologies to Non Invasive Stroke Therapy - 20 Years Perspective.

U. Rosenschein
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Monday 1.7.13

16:00-16:50

Materials and Technologies in Medical Device Development.
Objective: Describe the choice of materials and technologies available for medical device development.

G. Somech

17:00-17:50

Medical Device Development- "Create Like God"
Objective: describe the history and future of technology based solution for Cardiac diseases.

K. Richter PhD

17:00-17:50

Summary & Discussion

U. Rosenschein MD.

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Bibliography

- The ART of the START
  Guy Kawasaki.

- The Innovator's Dilemma

Clayton M. Christensen.

- The End of Medicine
  Andy Kessler.

Final Examination

1. Take Home Project.
2. Group assignment (~ 3 Students).
3. Describe a medical device idea and the plan how to develop it –using the knowledge acquired during the course.
4. ~5 pages. Double space. ≤12 points font.