# ADVANCED STUDY PROJECT SEMINAR: MEDICAL DEVICES HCMG 890-002 0.5 credit Weds. 4:30-7:30 pm JMHH 240 (11/03/10 – 12/08/10)

## Faculty:

Jeffrey A. Solomon, MD MBAOAssistant ProfessorEUniversity of Pennsylvania School of MedicineOUniversity of Pennsylvania School of Veterinary MedicineThe Wharton School of Business

Heidi Harvie, MD MBA Assistant Professor University of Pennsylvania School of Medicine The Wharton School of Business Office: 1 Silverstein Pavilion, HUP Email: <u>jeffrey.solomon@yahoo.com</u> Office Hours: By appointment

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## **Teacher's Assistants:**

Bryan Marcovici – <u>bmarco@wharton.upenn.edu</u> Aman Kumar, MD - <u>amkumar@wharton.upenn.edu</u>

## **COURSE OVERVIEW**

Successful medical devices are an amalgamation of creative and innovative thinking, clinical expertise, and engineering know-how that endures intense regulatory and reimbursement scrutiny. This course will provide a foundation for understanding the nuances of the medical device industry. It will cover topics ranging from device design and discovery, regulatory issues, marketing, reimbursement, management, and strategy. Classroom activities will be supplemented with optional tours of hospitals, research and manufacturing facilities, and hands-on demonstrations of devices. Though the course is intended primarily for MBA students, it will be open to medical and engineering students as well as to hospital house staff.

#### **COURSE REQUIREMENTS**

- 1) Class is mandatory and shall comprise 10% of overall grade
- 2) Class participation will comprise another 10% of the course grade, which will include a weekly web poll/question based on a required reading. A response to the weekly web poll is due by 3pm the day of the class. There is no poll for the 1<sup>st</sup> class on Nov 3rd.
- 3) There will be two group papers. The first shall comprise 30% of overall grade and the second will comprise 50% of the final grade. There is no in-class final, the second paper serves as the final exam. These will be a group projects and participation is required to pass the class. The topics will be provided.
- 4) The second paper will be due on Friday, Dec 17<sup>th</sup>, at 5pm.

## **READING LIST**

This class will afford students the unique opportunity to interact directly with industry leaders. In order for class discussion to optimize the use of discussion time, background readings are provided for each class and in particular, each individual lecture. It is expected that all readings

will be done prior to the pertinent class and that students will arrive able to discuss the topic in an informed manner. Additional readings may be added in advance of particular classes. All readings will be posted on Webcafe – there is no bulkpack. Certain readings are marked as "required" in the filename.

Wharton Class Schedule: JMHH 240

#### Week one – Nov 3

Jeffrey Solomon MD –Course introduction/overview of IR Kurt Kruger/Raj Denhoy – Current trends in the device market Sean Salmon – Stent Wars – Marketing in hypercompetitive markets

## Week two - Nov 10th

S. William Stavropolous – Billing and Reimbursement Heidi Harvie

## Week Three - Nov 17th

Jim Rushworth – Going direct the case of Boston Scientific and Terumo Christopher White – Advamed

## Week 4 - Nov 22<sup>nd \*</sup> note class is Monday - time/classroom TBD

Terry Fadem – Working with Universities Heidi Harvie

#### Week 5 - Dec 1st

Lucas Buchanan –VC perspective on Medical devices Martin Doyle – Exit Strategies Rob Li, MD – Overview of cardiology devices

## Week 6 - Dec 8th

Jeff Shuren – The FDA and device regulation Jennifer Bragg – Industry perspective on FDA Paul Marcotte, MD – Overview of spinal devices