

BEACON Newsletter

Biomedical Engineering Alliance for Connecticut*

June 15, 1998

A Report to Industry

INDUSTRIAL INTERACTIONS/PARTNERING

To facilitate collaborative research between academia and industry, BEACON has established a clearinghouse function designed to efficiently create links between academicians and their industrial colleagues. In the process, interactive meetings have been held with Alexion Pharmaceuticals, Inc., Bayer, CAS Medical Systems Inc., Corometrics Medical Systems, Inc., CuraGen Corp., Levine & Wardlaw, Neurogen Corp., Packard Instrument Co., Perkin-Elmer and U.S. Surgical Corp. to discuss specific projects of interest.

THE INDUSTRIAL INTERNSHIP PROGRAM

To address the need for a skilled workforce to engage in the type of jobs required by biotechnology and medical technology companies, an industrial internship program has been developed for both undergraduate and graduate students with several of our industrial partners. To date, 5 undergraduate students have been placed for the summer of '98 and 4 M.S. BME candidates for the 1998-99 academic year. BEACON is expanding this program for the

DRUG DISCOVERY AND DELIVERY CURRICULUM

1999-2000 academic year.

BEACON has organized a Biosensor Symposium which will be held on the Trinity College campus on Oct. 2, 1998 from 9:00 AM - 6:30 PM. The keynote speaker will be Dr. Buddy Ratner, Director of the University of Washington

To meet a particular need expressed by the pharmaceutical industry, BEACON has assembled a task force consisting of academics and industrial partners to establish a drug

BEACON: A MODEL FOR GERMAN BME PROGRAM

discovery and delivery curriculum. The first course, entitled *Introduction to Drug Design* will be offered at the University of Connecticut Health Center in the Spring of 1999.

The BEACON model has been adopted by the emerging *International Collaborative Biomedical Engineering Union in Southern Germany* (which includes the University of Stuttgart, The University of Freiberg Medical School, and The University of Applied Sciences at Furtwangen and Sigmaringen). Dr. Herbert Maier-Lenz, a clinical pharmacologist, is the director of the German effort and has collaborated with BEACON faculty to design an

BIOSENSOR SYMPOSIUM

appropriate BME curriculum that will enable students in Germany to obtain a B.S., M.S. and Ph.D. in Biomedical Engineering. Student and faculty exchanges are also in the process of development.

Engineering Biomaterials Center. There will be an academic panel of leading experts to provide an overview of basic research areas and opportunities in the development of biosensors; a panel of industrial product developers who will

*BEACON, The Biomedical Engineering Alliance for Connecticut, Collaborative Team:

Trinity College, The University of Connecticut at Storrs, The University of Connecticut Health Center, The University of Hartford Hartford Hospital, The Connecticut Children's Medical Center, John Dempsey Hospital, The Yale-New Haven Hospital, Bridgeport Hospital and the Baystate Medical Center

focus on the challenges industry faces in developing biosensors and will also illustrate successful examples; and a panel of government and agency representatives to address federal, state and private foundation support for biosensor R&D. Details of the symposium can be obtained by contacting BEACON offices directly.

EDUCATIONAL ACTIVITIES

BEACON has successfully coordinated a set of biomedical engineering (BME) course offerings which lead to M.S. and Ph.D. degrees through the University of Connecticut. Presently, there are 50 undergraduate and 35 graduate BME students taking courses. To facilitate the participation of working professionals, most of the BEACON courses will be offered in the greater Hartford area.

BEACON COURSE OFFERINGS

1998-1999 Academic Year

Fall 1998:

Bioinstrumentation	T&TR	2:55-4:10	University of Hartford
Biochemical Engineering	MWF	11:00-12:00	UConn, Storrs
Sensors, Signal Conditioning and Instrumentation	T&TR	3:30-5:00	UConn, Storrs
Electrophysiology	T&TR	4:00-5:15	Trinity College
Biomedical Imaging	M	5:30-8:00	UConn, Storrs
Physiological Systems I	T	6:00-9:00	Trinity College
Human Biomechanics	W	6:00-9:00	University of Hartford
Clinical Engineering Fundamentals	TR	6:00-9:00	Trinity College
Introduction to Biomaterials and Tissue Engineering			

M	6:00-9:00	UConn Health Center
Introductory Ergonomics for Biomedical Scientists and Engineers		

T	6:00-9:00	UConn Health Center
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Spring 1999

Biofluid Mechanics	MWF	9:30-10:20	University of Hartford
Biosignal Analysis	M	6:00-9:00	Trinity College
Tissue Engineering	T	6:00-9:00	UConn Health Center
Advanced Imaging Techniques	W	6:00-9:00	UConn, Storrs
Introduction to Drug Design	TR	6:00-9:00	UConn Health Center
Introduction to Optics and Lasers in Medicine	M	6:00-9:00	Trinity College
Physiological Systems II	T	6:00-9:00	Trinity College
Physiological Modeling	W	6:00-9:00	Distance Learning
Clinical Instrumentation Systems	TR	6:00-9:00	Trinity College
Computational Neuroscience	TBD	TBD	UConn Health Center

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