
BEACON Newsletter

Biomedical Engineering Alliance

July 1, 2000

A Report to Industry

BEACON Redefines Mission Statement and Strategic Objectives

During the past six months, the BEACON Task Force has addressed the issue of "future direction". Following the advice of the BEACON Board of Advisors, steps are underway to establish BEACON as a not-for-profit entity. In the process there has been continual discussion of a redefinition of the BEACON Mission Statement and Strategic Objectives, and the creation of a set of Bylaws appropriate for the BEACON enterprise. As a result of these efforts, it has become apparent that at this stage of BEACON's evolution that the emphasis of our activities should be industrial partnering, collaborative research and professional education.

With this in mind, a statement of these new directions is as follows:

Beacon is a collaborative alliance of academic, industrial and clinical/medical partners. Its primary goal is to promote the partnering of industry, medical institutions and academia to create innovative biomedical science and engineering educational and research efforts.

- ◆ **Facilitate the development of academic and industrial partnering** for both education and research in the field of biomedical science and engineering. These efforts include promoting the creation of collaborative research teams to pursue innovative ideas, and providing guidance to faculty regarding industrial interests and contacts.
- ◆ **Build bridges to other centers and organizations** interested in biomedical research and development. These efforts include interacting with the Biomaterials and Medical Imaging Centers at the University of Connecticut Health Center, The Biotechnology Center at the University of Connecticut at Storrs, and the Biomedical Engineering Program at Yale University for the purposes of establishing lines of communication, sharing information about activities and promoting collaborative efforts where appropriate.

- ◆ Promote the development of educational opportunities (courses, seminars, curriculum, programs, etc) that facilitate a better understanding and the acquisition of specific knowledge and expertise in the field of biomedical science and engineering.

These efforts include the creation of educational opportunities for a wide audience, such as high school, undergraduate and graduate BME students, practicing professionals via continuing education, industry via seminars and programs designed to assist them learn for competitive advantage, medical/clinical community via seminars and specific courses of interest, and the general public via seminars and conferences.

Pfizer Joins BEACON as Corporate Sponsor

Pfizer Pharmaceuticals has joined BEACON as a corporate sponsor for 2000. In joining BEACON, Dr. Edward Pagani expressed his endorsement for BEACON and its commitment to promoting industry supported university research. "This alliance within BEACON is consistent with Pfizer's objective to enrich the technical strength of our region's Bioscience environment as well as the education of biomedical engineering students interested in pharmacological science and biotechnology," states Dr. Pagani. "BEACON is very proud to include Pfizer in our growing list of corporate sponsors for 2000", stated Jeffrey Horn, BEACON's New Industrial Liaison Officer. " Due to efforts underway BEACON will be able to announce many other corporate sponsors soon that will join Pfizer, GE Medical and Kendall Healthcare.

Negotiations Underway for CCSU to Become a BEACON Partner

As the result of discussions with Dr. Joan Calvert, chairperson of the computer science department at CCSU, and several of her faculty, CCSU has decided to initiate discussions in becoming a BEACON partner. Of particular interest is their effort to establish a program in "**Medical Informatics**" which has significant connections/ties to

* 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, Baystate Health System. Corporate Sponsors include Pfizer, Kendall Health Care and GE Medical.

biomedical engineering. Therefore, those individual members participating in BEACON who wish to collaborate with colleagues at CCSU and assist in the development of this program should contact Dr. Joan Calvert ASAP.

Therefore, it is with great pleasure and enthusiasm that we welcome Dr. Joan Calvert, Dr. Bradley Kjell, Dr. Len Lazaar, and Dr. Brian O'Connell.

BEACON Plans Symposium for Fall 2000

Ergonomics is a scientific, technological discipline involving the analysis and design of work to fit the physical and psychological capacities of the worker. It is about "designing for people", and often involves the study of biomechanics/biodynamics and human performance modeling. Because of its importance, BEACON's third annual symposium will focus on "Advances in Biodynamics and Ergonomics: Improving Health and Human Performance and Identifying Opportunities for Technology Transfer".

The primary objectives of this Symposium are: (1) present insights into new research in Ergonomics and Biodynamics highlighting the important emerging roles for biomedical engineers, ergonomists, and health care workers, (2) present examples of successful academic/industrial collaborations in the areas of Ergonomics and Biodynamics, (3) provide information about opportunities for funding, as well as academic/industrial collaborations in these areas, (4) provide an opportunity for students from engineering, ergonomics, and the health sciences to learn about Ergonomics and Biodynamics.

The organizing committee led by Dr. Donald Peterson is delighted to announce that the keynote speaker will be Mr. Charles Jeffres, Assistant Secretary of Labor and Director of OSHA. The one-day Symposium has been divided into three primary sessions that will focus on the various disciplines that influence the development of ergonomic research and applications. Each session will discuss current and forthcoming trends in ergonomics and biodynamics and will identify opportunities for technology transfer and work modification:

- Session I: Ergonomics – Job Re-design and Product Development
- Session II: Engineering Biodynamics – Measurement & Modeling
- Session III: Medical Science – Diagnosis and Intervention

The program also features an open house at the Ergonomic Center and a Poster Session.

This Symposium will be held on Friday, October 27, 2000 at the Keller Auditorium, University of Connecticut Health Center, Farmington, Connecticut. For registration information, contact the BEACON Program Coordinator, Jane Mussehl at jane.mussehl@trincoll.edu. Please mark your calendar and make arrangements for yourself, your colleagues, students, etc., to attend.

BEACON Establishes Closer Ties with BME Programs in Germany

Approximately 2 years ago, it was reported that a number of schools in Southern Germany were in the process of mimicking BEACON in an effort to establish a regional BME program. The institutions involved include the University of Stuttgart, The University of Freiburg Medical School and applied science schools in Sigmaringen and Schweningen. During the first week in June, Dr. Bronzino was invited to deliver the key note address at the "Forum of Medical Engineering" which was a program of lectures to launch the newly approved BS and MS programs in Biomedical Engineering in Sigmaringen and Schweningen.

As part of the activities during this visit, Dr. Bronzino was also invited to meet the research faculty and tour the faculties of all of these institutions. In the process, the directors of these facilities expressed enthusiastically their desire to expand collaboration with BEACON. For example, Dr. Joachim Nagel, director of the BME Ph.D. program at The University of Stuttgart is willing to exchange students and faculty, and Dr. Ronald Zeigler at Sigmaringen is willing to discuss internships in the USA for students from both the BME program as well as the Pharmacology Technology program which has a significant track record of supplying well trained people to the pharmaceutical industry in Germany. This should be of significant interest to biotechnology and pharmaceutical companies in the state.

Anyone interested in pursuing these collaborative efforts should contact Dr. Joseph D. Bronzino.

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