

SOCIETY FOR BIOLOGICAL ENGINEERING CONSORTIUM SHARES GENOMIC SEQUENCES TO IMPROVE DRUG DEVELOPMENT EFFICIENCIES

Shared Intellectual Property for Chinese Hamster Ovary (CHO) DNA Sequencing increases production efficiencies and drug development tools for life-saving medicines

NEW YORK, March, 2007 – Leading pharmaceutical and biotechnology companies have joined forces under the auspices of the Society for Biological Engineering (SBE) to make breakthrough use of cell line research that's expected to increase the efficiencies of drug development. The companies, including Boehringer Ingelheim, Bristol-Myers Squibb, SAFC Biosciences, Schering Plough, among others, say that this shared research shows great promise for increasing production of biological therapies used for fighting certain cancers, controlling bleeding disorders, treating central nervous system diseases, and boosting blood cell production.

The companies' cooperative research involves the Chinese Hamster Ovary (CHO) cell line, which is used to produce about 70 percent of all biological products. Yet, compared with other mammals and despite its importance to new treatments, available genetic data for the Chinese Hamster is limited.

Consortium members began pooling their resources in 2006 to support the ongoing pre-competitive work of sequencing CHO cDNA. Each member company has designated a representative to the SBE's Project Management Committee and helps guide upcoming research. In return, consortium members receive periodic output of CHO chips, access to annotated data through cDNA libraries, quarterly reports and semi-annual meetings that strengthen each companies' independent efforts in drug development.

"Through the consortium membership, we're gaining new DNA sequence information that's leading to the design of new products that help our customers achieve greater performance in their own manufacturing systems," stated Dr. Kevin J. Kayser of SAFC Biosciences. "For example, once we understand the key factors that control mammalian cell productivity, we can incorporate this knowledge into improved cell culture media formulations." SAFC Biosciences is a leading supplier of critical raw materials, specialty products and services for cell culture manufacturing in the global biopharmaceutical industry.

June Wispelwey, executive director of the Society for Biological Engineering, explained the importance and urgency of the consortium's research. "The underlying technology for making antibodies, therapeutic proteins, and vaccines has matured," Wispelwey said. "That's made speed and efficiency in production much more important." Through SBE, the research is being conducted by the University of Minnesota and the Bioprocessing Technology Institute in Singapore. The two principal investigators are Dr. Wei-Shou Hu, Distinguished McKnight University Professor in Chemical Engineering and Materials Science at the University of Minnesota, and Dr. Miranda Yap, professor and executive director of the Bioprocessing Technology Institute at the Agency for Science, Technology and Research of Singapore.

In addition to organizing and leading the CHO consortium, the Society for Biological Engineering is also conducting the First Conference on Accelerating Biopharmaceutical Development will be held in Coronado, California from March 19 to 22, 2007. The conference theme, “Delivering Cost-Effective, Robust Processes and Methods Quickly and Efficiently,” will be addressed by its keynote speakers Helen Winkle, Director of the Office of Pharmaceutical Science at the FDA's Center for Drug Evaluation and Research, and Roger Perlmutter, Executive Vice President of Research and Development at Amgen.

For more information on the conference or how your company can benefit from participation in the CHO Consortium and SBE Corporate membership, contact June Wispelwey, SBE's Executive Director at junew@aiiche.org.

The Society for Biological Engineering (SBE) is a technological community for engineers and applied scientists integrating biology with engineering. It was established by the American Institute of Chemical Engineers (AIChE), in 2004. Members of SBE come from a broad spectrum of industries and disciplines and share in SBE's mission of realizing the benefits of bioprocessing, biomedical and biomolecular applications. <http://bio.aiiche.org>. Founded in the United States in 1908, AIChE is a professional association of more than 40,000 chemical engineers in 92 countries. Through its varied programs, AIChE serves as a focal point for information exchange on the frontiers of chemical engineering research, including nanotechnology, sustainability, hydrogen fuels, biological and environmental engineering, and chemical plant safety and security. More information about AIChE is available at www.aiiche.org.

#

#

#