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For Immediate Release

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***SOCIETY FOR BIOLOGICAL ENGINEERING FORMS NEW
CONSORTIUM TO SPEED BIOPHARMACEUTICAL DEVELOPMENT***

**Genomic research tools will lead to faster development, superior quality and
production efficiency for biologics medicines.**

NEW YORK, APRIL 23, 2013 – The Society for Biological Engineering (SBE) has announced the formation of a new consortium of leading pharmaceutical and biotechnology companies to pursue new avenues in Chinese Hamster Ovary (CHO) cell line research. This new effort builds upon earlier cooperative work that successfully completed the sequencing and annotation of the Chinese hamster genome. The results could accelerate the process of drug discovery, while increasing the quality, consistency, and production efficiency of life-saving medicines.

CHO cells are frequently used in the biopharmaceutical industry for the manufacture of biologics, including recombinant blood proteins, antibodies, and enzyme therapeutics. CHO-produced drugs have been used to treat a variety of conditions, from cancers, to anemia, to arthritis. The reach of biologic therapeutics is expected to expand dramatically in the coming years. Critical to advancing this technology is the predictability a producing cell line will preserve its superior quality over its entire life cycle and that the quality of the biologic product will be consistent. The consortium aims to generate the genomic know-how and tools to make these traits predictable.

When fully funded, consortium members will invest more than \$1 million in furthering genomic research tools for CHO cell lines. Member companies expect the research will help address current manufacturing process issues such as enhancing the robustness of biotherapeutic development and assuring the quality of biological drugs.

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“Our first consortium on CHO genome sequencing was successful and, as is often the case in engineering, raised intriguing questions about new directions”, stated June Wispelwey, executive director of the American Institute of Chemical Engineers (AIChE) and SBE. “This second consortium will build on our model of bringing companies and academic researchers together to cooperate on pre-competitive research that solves industrial issues of drug manufacturing and development.”

Dr. Wei-Shou Hu, Distinguished McKnight University Professor in Chemical Engineering and Materials Science at the University of Minnesota’s College of Science and Engineering, is the principal investigator on the project. Dr. Hu agrees that, “with the CHO genome sequenced, we can turn our attention to ways of using that knowledge for more effective, higher quality biotherapeutic production”. The consortium will embark on post-genomic research, and focus on further characterization of the genome, development of tools to predict cell line stability, and instigation of strategies to steer glycosylation pattern.

SBE, investigators from the University of Minnesota, consortium members and researchers from the Bioprocessing Technology Institute (BTI) at the Agency for Science, Technology and Research in Singapore recently met to refine the group’s work plan. “The consortium’s commitment to this research reinforces the community’s focus on rapid, high quality therapeutic proteins through improved cell culture and genomic technologies” commented Dr. Hu.

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Established by the American Institute of Chemical Engineers (AIChE) in 2004, the Society for Biological Engineering (SBE) is a technological community for engineers and applied scientists integrating biology with engineering. 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. For more information, visit <http://bio.aiche.org>.

Founded in the United States in 1908, AIChE is a professional association of more than 45,000 chemical engineers in 92 countries. Through its varied programs, AIChE continues to be a focal point for information exchange on the frontier of chemical engineering research in such areas as energy, sustainability, nanotechnology, biological and environmental engineering, and chemical plant safety and security. More information about AIChE is available at www.aiche.org.