Fifth International Conference on the Foundations of Systems Biology in Engineering (FOSBE) August, 2015

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FOSBE 2015 continues the successful FOSBE series (2005 Santa Barbara, CA; 2007 Stuttgart, Germany; 2009 Denver, CO; 2012 Tsuruoka, Japan), bringing together academic researchers and educators, industrial practitioners, and government researchers for a 3-day meeting focused on engineering contributions to systems biology. It was predicted by many that the complete sequencing of the human genome would lead to dramatic and rapid advances in human health. What this landmark achievement did, taking a puzzle as an analogy for life, was provide a list of the possible puzzle pieces. The search since has focused on the relationships between this genomic information and the (individual or patient) systemic response or function – the "omics" efforts in mapping proteins (proteomics), metabolites (metabolomics), etc. The field of systems biology, and its translational science counterpart systems medicine, have emerged as the bridge between reductionist molecular and cellular biology approaches and the systems-level understanding required to use this knowledge to advance the human condition. FOSBE 2015 will provide a forum to: (i) review and critically assess the current state-of-the-art; (ii) discuss current and future needs of research, education, and training, and translation to practice; and (iii) identify new directions, opportunities, and challenges in systems biology.

The location of **FOSBE 2015** has not yet been finalized.