



**Dr. Lin Zhang**  
**Associate Research Fellow, Bioprocess R&D, Pfizer (USA)**

### **Abstract**

#### **Improving Mammalian Cell Line Development Process through Innovated Automation Approaches**

The rapid development of mammalian cell lines for clinical and commercial monoclonal antibody supply element in bringing biotherapeutics to the market. As cell line performances are modulated by molecular ranging from transcription, posttranscriptional processing, translation, posttranslational processing to selection of transfected cell lines are typically screened to isolate clones with desirable performance attributes. Current screening methods are time-consuming, labor intensive and prone to cross-contamination and errors. To meet the increasing numbers of biologic drug candidates require dependable high-throughput automation to expediently deliver drug supplies to the clinical programs. The automation strategies used at Pfizer for human biologics using mammalian cell culture with a focus on the key challenges encountered during its development will be presented.

### **Biography**

Lin Zhang is an Associate Research Fellow in Pfizer's Global biologic group based in St. Louis, MO. Since joining Pfizer in 2002, Lin leads a lab responsible for the development, optimization and characterization of cell lines used for the production of biotechnology-derived therapeutic drug candidates. Lin's group also has responsibility for process development activities focusing on the evaluation and implementation of novel expression platform as well as enabling technologies for cell line development. Prior to Pfizer, Lin was a senior scientist at Sigma-Aldrich, where she led a lab that had a direct responsibility for the conception and development of products in the areas of protein expression and bioassay development from ground up. Lin received her Ph.D. in medicinal chemistry from Purdue University, West Lafayette, IN and a B.S degree in medicine from Dr. Bethune medical school, China.