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Waltham, Massachusetts, USA



Featuring a tour of the Genzyme Facility in Allston Landing, MA, USA

# Cell Culture Scale-Up

September 24-26, 2007

**Mammalian Cell Line Development, Scale-Up and Productivity**

*Please join us as we discuss the methods that have been most successful, and explore the techniques that could provide the processing solutions needed for the next generation of products.*

Designed for cell culture personnel in production as well as process and cell line development, this meeting will feature case histories from the industry's leading product developers. We will cover the key aspects of cell line development, banking, and characterization; plus critical scale-up and productivity issues such as inoculum preparation, media formulation, feed and harvest strategies, oxygen delivery, and process control optimization for a wide range of biological products including antibodies, recombinant proteins, and viruses.

### Conference Co-Chairs

**Greg Dean, Ph.D - Cambridge Antibody Technology**

**Geoffrey Hodge - Xcellerex, Inc.**



### Topics:

- Gene Selection and Insertion
- Cell Line Development
- Expression Enhancement
- Media Development
- Sensor and Process Automation Technology
- Feed and Harvest Strategies
- Oxygen Delivery
- Cell Characterization

- Master and Working Cell Bank Development
- Viral Infection Optimization

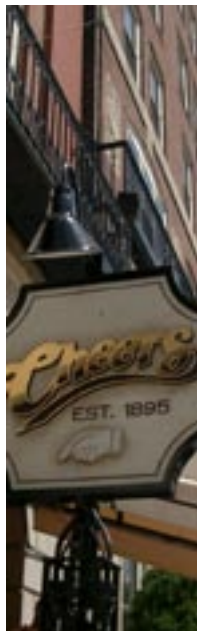
### Applications:

- Antibodies
- Recombinant Proteins
- Viral Vaccines
- Viral Gene Vectors



# Cell Culture Scale-Up

## Mammalian Cell Line Development, Scale-Up and Productivity



### SUNDAY, SEPTEMBER 23, 2007

4:00-6:00 pm **Registration and Welcome Reception**

### MONDAY, SEPTEMBER 24, 2007

7:00-8:00 am **Registration, Continental Breakfast - Meeting Room Foyer**

8:00-8:30 am **Introduction**

Keith L. Carson - Wilbio  
Greg Dean, Ph.D - Cambridge Antibody Technology and  
Geoffrey Hodge - Xcellerex, Inc. - Co-Chairmen

8:30-9:15 am **Evaluation of Temperature Shifts for Rapid and Enhanced Protein Production Using Stable CHO Pools**

Celina de la Cruz Edmonds - Merck & Co., Inc.

9:15-10:00 am **From Transfection to Cell Banks: Project Challenges and Triumphs**

Greg Dean, Ph.D. - Cambridge Antibody Technology

10:00-10:30 am **Break - Exhibit Area**

10:30-11:15 am **Scale-Up of Innovative Disposable Bioreactors Based on Tide Principle**

Lewis Ho, Ph.D. - IDL Bioservices LLC

11:15-Noon **Development of a Platform Approach to Medium and Expression Optimization: Case Studies Using Antibody Producing Cell Lines**

Abdul Wajid, Ph.D. - XOMA Corporation LLC

Noon-1:30 pm **Lunch and Poster Session - Exhibit Area**

1:30-2:15 pm **Development of a Platform Cell Culture Process for Vaccine Production in Vero Cells with Trypsin-free Cell Expansion in Bioreactors**

Wenlin Zeng, Ph.D. - MedImmune Vaccines

2:15-3:00 pm **From DNA to the Clinic: Faster, Better, and More**

Ronald Fedechko, Ph.D. - Pfizer, Inc.

3:00-3:30 pm **Break - Exhibit Area**

3:30-4:15 pm **Large Scale Cell Culture Process: Scale-up, Technology Transfer, and Raw Material Effects**

John Fann, Ph.D. - Abbott Bioresearch Center

4:15-5:00 pm **Evaluating pH Sensor Technologies in Cell Culture Processes: Effects of Process Conditions on the Measurements**

Victor Saucedo - Genentech, Inc.

5:00-5:45 pm **On-Line Measurement And Control of Viable Cell Density In Cell Culture Manufacturing Processes**

John Carvell, Ph.D. - Aber Instruments Ltd

6:00-7:30 pm **Reception - Exhibit Area**

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## **TUESDAY, SEPTEMBER 25, 2007**

- 7:30-8:30 am **American Breakfast - Exhibit Area**
- 8:30-9:15 am **High-Yield Production of Hemagglutinin Protein In Fed-Batch Cultures Using BEV System**  
Jamal Meghrous - Protein Sciences Corporation
- 9:15-10:00 am **Reaching Extremely High Protein & Antibody Expression 30-80PG/Cell/Day In Three Weeks In Fast-Growing CHO Cells**  
Mizhou Hui, M.D., Ph.D. - AmProtein
- 10:00-10:30 am **Break - Exhibit Area**
- 10:30-11:15 am **Manufacturing Enzyme Replacement Therapies for the Treatment of Rare Lysosomal Storage Disorders**  
Phillip Madeira - Genzyme Corporation
- 11:15-Noon **Fed-Batch versus Perfusion with Microcarriers: An Economical Study**  
Christian Kaisermayer, Ph.D. - University of Natural Resources and Applied Life Sciences
- Noon-1:30 pm **Lunch and Poster Session - Exhibit Area**
- 2:30-5:00 pm **Genzyme Facility Tour in Allston Landing**
- 5:00-9:00 pm **Happy Hour on your own in Harvard Square**

## **WEDNESDAY, SEPTEMBER 26, 2007**

- 8:00-9:00 am **Breakfast - Exhibit Area**
- 9:00-10:00 am **Technical Workshops I**
- 10:00-10:30 am **Break - Exhibit Area**
- 10:30-11:30 am **Technical Workshops II**
- 11:30-12:15 pm **Scale Down Model Qualification in Support of Commercial Manufacturing**  
Aimee Lehman - Genentech, Inc.
- 12:15-1:30 pm **Lunch and Poster Session - Exhibit Area**
- 1:30-2:15 pm **High Titer, Stable Cell Lines Use Novel Synthetic Genetic Elements**  
Andrew Sandford - Selexis USA  
(co-author, Cori Gorman, Ph.D. - Selexis USA)
- 2:15-3:00 pm **Design and Interpretation of Viral Studies for Column Re-use & Cleaning Procedures**  
Ailsa Shepherd - BioReliance Corporation
- 3:00-3:30 pm **Break - Exhibit Area**
- 3:30-4:15 pm **An Alternative Method for Cell Line Adaptation**  
William Hermans - Blue Sky Biotech, Inc.  
(co-author, S. Edward Lee, Ph.D. - Pfizer Global Research & Development)
- 4:15-5:00 pm **Strategies Applied To the Development of a Platform Fed-Batch Process for the Production of Monoclonal Antibodies**  
Julie Barker - Genzyme Corporation
- 5:00-5:45 pm **High Throughput Technology for the Production of Synthetic Gene Promoters that Can Be Used for a Significant Increase in Protein Production in Mammalian Cells**  
Sung Ho Hahm, Ph.D. - Raphagen, Inc.

*Due to circumstances beyond the control of the conference organizers, the program is subject to change.*