

GEN Genetic Engineering & Biotechnology News

Tools | Technologies | Trends

2012 Planning Calendar

Delivering the Best in Biotech...
From Bench to Business

GEN Genetic Engineering & Biotechnology News
VOLUME 32, NUMBER 1 | Tools | Technologies | Trends | JANUARY 1, 2012

Biobusiness
A robust global pipeline suggests strong growth for biologics, in places you'd expect. **14**

Drug Discovery
Structural Modeling, Improved Assays are Breaking Obstacles to Kinase Inhibitors. **22**

OMICS
Getting the most from a single sample prep. **34**

Bioprocessing
Tutorial: Octet and Multi-Analyte Software Tools. **36**

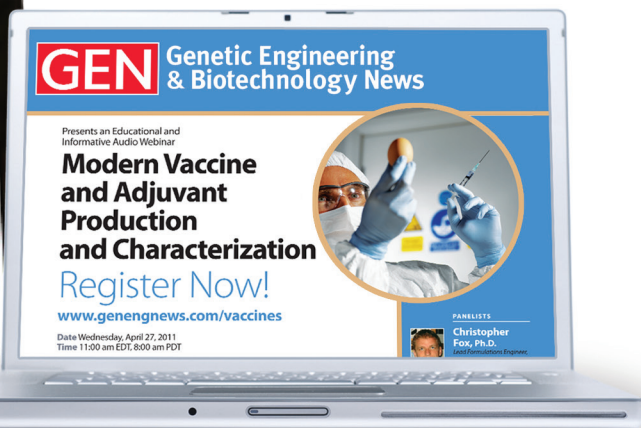
Translational Medicine
CROs are rapidly increasing their offerings in response in Pharma. **42**

Protein Expression
Josh P. Roberts
The three most important things when expressing pre-clinical products are: optimize, optimize, optimize. As a result, the industry is looking to vendors for solutions. In the study, we asked the 352 global respondents products and services their suppliers are developing for the industry, and asked, "What are the top areas you want your suppliers to focus their developing on?"

Biosimilars Still Easing Out of the Gate
Angelo DePalma
The industry is looking to vendors for solutions (Figure). In the study, we asked the 352 global respondents this year to consider the new products and services their suppliers are developing for the industry, and asked, "What are the top areas you want your suppliers to focus their developing on?"

Mary Ann Liebert, Inc. publishers

Biotechnology from bench to business | www.genengnews.com



- Editorial Focus
- Meeting Distribution

Mary Ann Liebert, Inc.  publishers

www.genengnews.com

2012 Planning Calendar **GEN**

Color Key

● OMICS ● Drug Discovery ● Translational Medicine ● Bioprocessing

	EDITORIAL FOCUS	MEETING DISTRIBUTION
January 1 Reservation: 12/06/11 Material: 12/14/11	Nucleic Acid Sample Prep High-Content Analysis CROs Single-Use Bioprocessing Systems High-Throughput Protein Expression	Peptalk: The Protein Science Week, January 9-13, San Diego, CA High-Content Analysis, January 10-13, San Francisco ESACT UK, January 11-12, Loughborough, U.K. Plant & Animal Genome XX, January 14-18, San Diego CMC Strategy Forum, January 22, San Francisco WCBP, January 23-25, San Francisco
January 15 Reservation: 12/21/11 Material: 12/29/11	RNAi Stem Cells Automation for Drug Discovery Biobanking Cell Culture Media Tech Focus e-Newsletter Next-Generation Sequencing	Drug Delivery Partnerships, January 25-27, Las Vegas Biomanufacturing Summit, January 30-31, San Diego Washington Vaccine Forum, January 30 - February 1, Washington, DC Cell & Gene Therapy Forum, January 30 - February 1, Washington, DC Functional Genomics, February 2-3, Frankfurt, Germany Stem Cells World Congress, February 2-3, San Diego SLAS, February 4-8, San Diego Bangalore India BIO, February 6-8, Bangalore
February 1 Reservation: 1/09/12 Material: 1/13/12	Epigenetics Protein Characterization Cell-Based Assays Imaging, In Vivo Cell-Line Optimization	Electronic Data in Clinical Trials, February 7-8, Miami AAAS Annual Meeting, February 16-20, Vancouver, Canada Antibodies Asia, February 20-23, Shanghai 7th Annual Biomarkers Congress, February 21-22, Manchester, U.K. Cell Line Development & Engineering, February 21-23, Shanghai AsiaTIDES, February 28 - March 1, Tokyo
February 15 Reservation: 1/17/12 Material: 1/25/12	miRNA PCR Protein Interaction Analysis/SPR Molecular Diagnostics CMOs Tech Focus e-Newsletter Stem Cells	Molecular Medicine Tri-Conference, February 19-23, San Francisco Biopharmaceutical Development & Production Week, February 27 - March 2, San Diego Process & Analytical Methods Validation, February 27-28, San Diego Technology Transfer for Biopharmaceuticals, February 27-28, San Diego Outsourcing Manufacturing of Biopharmaceuticals, February 27-28, San Diego Cell Culture World Congress, February 28 - March 1, Munich Recombinant Protein & Complex Biologic Development & Production, February 29 - March 2, San Diego
March 1 Reservation: 2/06/12 Material: 2/10/12  Ad Impact Study	Next-Generation Sequencing Transfection Trends in LC/MS Regenerative Medicine Vaccine Production Tech Tips Section Single-Use Technology	XGEN Congress, March 5-9, San Diego PITTCO 2012, March 11-15, Orlando Vaccines World Summit, March 12-16, Hyderabad, India ADME & Predictive Toxicology Congress, March 13-14, Munich Discovery Chemistry Congress, March 13-14, Munich 2nd International Conference of the Flow Chemistry Society, March 13-14, Munich National Postdoctoral Association Meeting, March 16-18, San Francisco ABRF 2012, March 17-20, Orlando BIO-Europe Spring, March 19-21, Amsterdam, Netherlands BioPharma Asia Convention, March 19-22, Singapore Drug Discovery World Asia, March 19-22, Singapore Biologic Manufacturing World Asia, March 19-22, Singapore

GEN 2012 Planning Calendar

Color Key

● OMICS

● Drug Discovery

● Translational Medicine

● Bioprocessing

	EDITORIAL FOCUS	MEETING DISTRIBUTION
March 15 Reservation: 2/16/12 Material: 2/22/12	<p>RNA Analysis Cellular Analysis ADME/Tox Cancer Biomarkers Advances in Expression Systems</p> <p>Tech Focus e-Newsletter PCR</p>	<p>Advances in Biodetection and Biosensors, March 28-29, Edinburgh, Scotland</p> <p>Single Cell Analysis Congress, March 28-29, Edinburgh, Scotland</p> <p>Advances in Microarray Technology, March 28-29, Edinburgh, Scotland</p> <p>Lab on a Chip European Congress, March 28-29, Edinburgh, Scotland</p> <p>AACR Annual Meeting, March 31 - April 4, Chicago</p> <p>5th Annual Proteins Congress, April 2-3, London</p> <p>2nd Vaccines Congress, April 2-3, London</p> <p>ISBioTech Annual Meeting, April 2-4, Rosslyn, VA</p>
April 1 Reservation: 3/06/12 Material: 3/09/12	<p>Gene-Expression Analysis Assay Development Stem Cells Bioreactors/Fermentors Cell Culture Optimization</p>	<p>World Vaccine Congress, April 10-13, Washington, DC</p> <p>Biologics World Korea, April 16-19, Seoul</p> <p>PDA Annual Meeting, April 16-20, Phoenix</p> <p>Drug Discovery Chemistry, April 17-19, San Diego</p> <p>Bioprocess International Europe, April 18-19, Prague</p> <p>China Pharmaceutical R&D Summit, April 23-26, Shanghai</p> <p>Biosimilars Asia, April 23-26, Shanghai</p> <p>Vaccines China, April 23-26, Shanghai</p> <p>World Pharmaceutical Congress, April 24-25, Shanghai</p> <p>Biomarkers in Diagnostics & Therapeutics, April 25-26, Singapore</p> <p>Bio tech 2012, April 25-27, Tokyo</p>
April 15 Reservation: 3/15/12 Material: 3/23/12	<p>siRNA GPCRs Flow Cytometry Oligo Manufacturing Post-Translational Modifications</p> <p>Tech Focus e-Newsletter Biomarker Discovery</p> <p>Tech Tips Section Next-Generation Sequencing</p>	<p>Advances in qPCR, April 19-20, Boston</p> <p>Genomics Research, April 19-20, Boston</p> <p>RNAi & miRNA World Congress, April 19-20, Boston</p> <p>Epigenetics, April 19-20, Boston</p> <p>Next Gen Sequencing, April 19-20, Boston</p> <p>Flow Chemistry Congress, April 23-24, Boston</p> <p>Bio-IT World Conference & Expo, April 24-26, Boston</p> <p>NIH Spring Research Festival, April 25-27, Bethesda, MD</p> <p>World Congress on Industrial Biotechnology & Bioprocessing, April 29-May 2, Orlando</p> <p>Biological Assays, April 30-May 2, Boston</p> <p>Drug Delivery & Formulation America Summit, April 30 - May 1, San Diego</p> <p>PEGS Summit, April 30-May 4, Boston</p> <p>Interphex, May 1-3, New York City</p> <p>Sample Prep, May 3-4, San Diego</p> <p>BIO-FORUM 2012, May 9-11, Shanghai</p>
May 1 Reservation: 4/06/12 Material: 4/11/12	<p>qPCR Antibody Microarrays Metabolomics Biomarker Discovery Protein Purification & Recovery CMOs</p>	<p>Molecular Diagnostics Europe, May 10-11, London</p> <p>American Society of Gene & Cell Therapy, May 16-19, Philadelphia</p> <p>LES Spring Meeting, May 15-17, Boston</p> <p>World Stem Cells and Regenerative Medicine Congress, May 21-23, London</p> <p>Late Phase Drug Development, May 23-24, Singapore</p>

2012 Planning Calendar **GEN**

Color Key

● OMICS

● Drug Discovery

● Translational Medicine

● Bioprocessing

	EDITORIAL FOCUS	MEETING DISTRIBUTION
<p>May 15 Reservation: 4/17/12 Material: 4/25/12</p>	<p>Protein Sample Prep Mass Spec CROs Synthetic Biology Biosimilar Production</p> <p>Tech Focus e-Newsletter miRNA and Cancer</p>	<p>TIDES, May 20-23, Las Vegas ASMS Conference on Mass Spectrometry, May 20-24, Vancouver, Canada Biomarker World Congress, May 21-23, Philadelphia European Lab Automation 2012, May 30-31, Hamburg, Germany Next Generation Antibody Manufacturing, May 30-31, Boston Single-Use Applications for Biopharmaceutical Manufacturing, June 4-6, San Francisco Vaccine Production Summit, June 4-6, San Francisco World Pharma Congress, June 5-7, Philadelphia Antibody China Summit, June 6-7, Shanghai Cell Line Development & Engineering, June 6-8, San Francisco World Pharmaceutical China Summit, June 6-8, Shanghai RNAi & Nanotechnology, June 11-12, London 13th Annual Drug Discovery Leaders Summit, June 11-12, Zurich Drug Discovery & Development, June 11-14, Tokyo Next Generation Summit, June 12-13, Prague Modern Challenges in Therapeutic Protein Production, June 14, London</p>
<p>June 1 Reservation: 5/07/12 Material: 5/11/12</p>	<p>Automated Nucleic Acid Sample Prep HPLC Kinase Assays Cellular Reprogramming (IPS) Downstream Process Bottlenecks</p>	<p>Engineered Antibodies, June 13-14, Berlin HPLC, June 16-21, Anaheim, CA BIO International Convention, June 18-21, Boston Achema, June 18-22, Frankfurt, Germany BioPharma China Convention, June 20-21, Beijing The European Human Genetics Conference, June 23-26, Nurnberg, Germany ELRIG- Next Generation Sequencing, June 26, Cambridge, U.K. BioChina International, June 26-27, Shanghai CPHi China, June 26-28, Shanghai Biopharmaceutical Raw Materials, June 27-28, Cologne, Germany</p>
<p>June 15 Reservation: 5/16/12 Material: 5/24/12</p>	<p>miRNA Advances in Liquid Handling Small Molecule Drug Discovery Protein Characterization- Biomarkers Difficult to Express Proteins</p> <p>Tech Focus e-Newsletter Single-Use Systems for Bioproduction</p> <p>Tech Tips Section PCR</p>	<p>Next Generation Protein Therapeutics Summit, June 25-27, San Francisco Bioprocessing and Stem Cells Europe, June 27-28, London Bioengineering and Nanotechnology, June 24-27, Berkeley, CA Innovation in Phase I Clinical Development, June 25-27, Boston Clinical Trials Supply & Logistics, June 25-27, San Francisco ADMET, July 9-10, London</p>
<p>July Reservation: 6/07/12 Material: 6/13/12</p> <p>Application Note Issue</p>	<p>RNA Seq Biomagnetic Separations Single-Cell Analysis Tissue Engineering Peptide Synthesis CMOs</p> <p>Tech Focus e-Newsletter Transfection and Gene Transfer</p>	<p>ISMB, July 15-17, Long Beach, CA Bioplasma World Asia, July 18-19, Hong Kong Stem Cell & Regenerative Medicine, July 18-20, San Francisco Drug Diagnostics & Development, August 6-8, San Francisco</p>

GEN 2012 Planning Calendar

Color Key

● OMICS

● Drug Discovery

● Translational Medicine

● Bioprocessing

	EDITORIAL FOCUS	MEETING DISTRIBUTION
August Reservation: 7/06/12 Material: 7/13/12	RT-PCR CGH Arrays Cellular Analysis Imaging, Molecular Bioreactors/Fermentors mAb Production Tech Focus e-Newsletter Protein Characterization	Society for Industrial Microbiology, August 12-16, Washington, DC BioProcess International China, August 21-22, Shanghai ELRIG Drug Discovery, September 5-6, Manchester, U.K. Southeast Asia Pharmaceutical Forum, September 10-13, Singapore Asia Pharma R&D Leaders Summit, September 12-13, Shanghai Applying Next-Generation Sequencing, August 13-15, Providence BioPharma Australasia Convention, August 23-24, Sydney PDA/FDA Joint Regulatory Conference, September 10-12, Baltimore
September 1 Reservation: 8/06/12 Material: 8/10/12  Ad Impact Study	Transfection Next-Gen Sequencing Data Management Protein Profiling Imaging, Live Cell Bioprocess Monitoring Control	International Conference on Alzheimer's Drug Discovery, September 10-12, Jersey City Protein Formulation Development Summit, September 10-12, Boston Cell Therapy Bioprocessing, September 11-12, Arlington, VA Mass Spec, September 11-14, San Diego Partnerships in Clinical Trials, September 12-14, Shanghai Pharmaceutical IT Congress, September 17-18, London Next-Generation Sequencing, September 17-18, London IICS, September 17-19, Berlin
September 15 Reservation: 8/16/12 Material: 8/24/12	Protein Expression 3-D Cell Culture Cell-Based Assays Biobanking Protein Therapeutic Formulation Tech Focus e-Newsletter Gene-Expression Analysis	Biopharm America Summit, September 19-21, Boston ADAPT, September 19-21, Philadelphia Biological Production Summit, September 24-26, Dusseldorf MIPTec 2012, September 24-27, Basel, Switzerland CE Pharm, September 30 – October 4 Leaders in Biobanking Congress, October 1-2, Chapel Hill, NC Discovery on Target, October 1-3, Boston Interphex Puerto Rico, October 4-5, San Juan Bio-IT World Europe, October 9-11, Vienna 2nd Oncology Biomarkers Congress, October 10-11, Manchester, U.K. Systems Biology Europe, October 16-17, Madrid
October 1 Reservation: 9/06/12 Material: 9/10/12 Corporate Capabilities Issue	Nucleic Acid Sample Prep Compound Management Animal Models Single-Use Bioprocessing Systems CMOs Tech Tips Section Gene Expression	ELRIG- Flow Cytometry and Imaging, October 10-11, Alderley Park, U.K. Pacific Rim Summit, October 10-12, Vancouver Society for Neuroscience, October 13-17, New Orleans LES Annual Meeting, October 14-17, Toronto Biologic Manufacturing China, October 17-18, Shanghai Bioproduction, October 24-25, Berlin Indian Lab Automation, October 30-31, Mumbai, India
October 15 Reservation: 9/13/12 Material: 9/21/12	Target Enrichment RNA Analysis Biomarkers for Drug Discovery PCR-Based Diagnostics Bioprocess Scale-Up Tech Focus e-Newsletter Epigenetics	Well Characterized Biologicals, October 30 - November 1, Washington, DC PEGS Europe, November 6-8, Vienna Bio Europe, November 12-17, Hamburg

2012 Planning Calendar **GEN**

Color Key

● OMICS ● Drug Discovery ● Translational Medicine ● Bioprocessing

	EDITORIAL FOCUS	MEETING DISTRIBUTION
November 1 Reservation: 10/05/12 Material: 10/11/12	RNAi Cell Signaling Assay Development High-Resolution Image Analysis Advances in Protein Production	American Society of Human Genetics, November 6-10, San Francisco BioPharma India Convention, November 26-27, Mumbai VacChina, November 28-29, Shanghai
November 15 Reservation: 10/16/12 Material: 10/24/12	Gene-Expression Profiling Mass Spec Sample Prep Microfluidics for Drug Discovery CROs Cell-Line Optimization Tech Focus e-Newsletter Advances in Imaging	CMC Strategy Forum Japan, December 3-4, Tokyo
December Reservation: 11/06/12 Material: 11/12/12 Application Note Issue	Epigenetics Flow Cytometry ADME/Tox Multiplexing Systems Biology Bioprocess Filtration Tech Focus e-Newsletter Cell-Line Optimization	American Society for Cell Biology, December 15-19, San Francisco

GEN Genetic Engineering & Biotechnology News

Genetic Engineering & Biotechnology News

140 Huguenot St., 3rd Floor
 New Rochelle, NY 10801-5215
 tel: (914) 740-2100
 fax: (914) 740-2106
 www.genengnews.com

GEN Group Publisher

Sande Giaccone
 tel: (914) 740-2211
 sgiaccone@genengnews.com

Senior Vice President Global Sales & Marketing Asia Display and Classified

Harriet I. Matysko
 tel: (914) 740-2182
 fax: (914) 740-2112
 advertising@genengnews.com

East Coast Sales Manager

Monica Lieberman
 tel: (914) 740-2173
 fax: (914) 740-2106
 mlieberman@genengnews.com

Midwest Sales Manager

Sharon Spitz
 tel: (888) ADS-4-GEN
 (888-237-4436)
 fax: (914) 740-2112
 sspitz@genengnews.com

West Coast Sales Manager

Mary Tonon
 tel: (415) 331-5333
 fax: (415) 887-6694
 mtonon@genengnews.com

North America Classified Sales Manager

Victoria Palusevic
 tel: (914) 740-2167
 fax: (914) 740-2112
 vpalusevic@genengnews.com

Europe & Australia Display Sales Manager

Hilary Turnbull
 tel: +44 (0) 1875 825700
 fax: +44 (0) 1875 825701
 hturnbull@genengnews.com

Europe & Australia Classified Sales Manager

Emily Watson
 tel: +44 (0) 1875 825700
 fax: +44 (0) 1875 825701
 ewatson@genengnews.com

Director of Advertising Production

Anne Chin Aleong
 tel: (914) 740-2178
 fax: (914) 740-2106
 achin@genengnews.com

www.genengnews.com