



**Viral Vectors & Vaccines – Program Chairs:**

**Otto-Wilhelm Merten, PhD** • Généthon  
**Amine A. Kamen, PhD** • McGill University

**Cellular Therapies – Program Chairs:**

**Martin A. Giedlin, PhD** • Poseida Therapeutics, Inc.  
**Gary K. Lee, PhD** • Sangamo Therapeutics, Inc.

**Baculovirus Expression Technology – Program Chairs:**

**Manuel J.T. Carrondo, PhD** • Instituto de Biologia Experimental e Tecnológica (iBET)  
**Clifton E. McPherson, PhD** • Protein Sciences Corporation, A Sanofi Company

**SUNDAY - MARCH 4, 2018**

4:00 pm – 7:00 pm

**Welcome Reception and Registration** in the Granby Ballroom Foyer, Third Floor

**MONDAY - MARCH 5, 2018**

7:00 am – 8:00 am

**Registration and Breakfast** in the Granby Ballroom Foyer, Third Floor

8:00 am – 8:30 am

**Meeting Overview** in Momentum, Third Floor

	<b>Viral Vectors &amp; Vaccines</b> Momentum, Third Floor <a href="#">View Speaker Abstracts &amp; Bios</a>	<b>Cellular Therapies</b> Fusion, Third Floor <a href="#">View Speaker Abstracts &amp; Bios</a>	<b>Baculovirus Expression Technology</b> Energy, Third Floor <a href="#">View Speaker Abstracts &amp; Bios</a>
8:30 am – 9:15 am	<i>OneBac rAAV Scale-Up Production Platform with Serotype-Specific Modulation of AAV Capsid Protein Stoichiometry</i> <b>Sergei Zolotukhin, PhD</b> University of Florida	<i>Successful Manufacturing of T-Cell Therapies: Challenges and Opportunities</i> <b>Cenk Sumen, PhD</b> Hitachi Chemical Advanced Therapeutics Solutions, LLC	<i>The Complete Genome Sequences of Two Trichoplusia ni Cell Lines</i> <b>Dominic Esposito, PhD</b> Frederick National Laboratory for Cancer Research and <b>Yu Fu</b> University of Massachusetts Medical School
9:15 am – 10:00 am	<i>Biological Activity of Additional AAV Subpopulation in AAV Gene Therapy Product</i> <b>Marian Bendik</b> Shire	<i>Cell Therapy: Islet Isolation and Transplant Quality Control Release Considerations</i> <b>Lisa Stehno-Bittel, PhD</b> Likarda, LLC	<i>Cervarix Vaccine: From Baculovirus Technology to the First Human BEVS-Based Vaccine</i> <b>Isabelle Knott, PhD</b> GlaxoSmithKline Biologicals
10:00 am – 10:30 am	<b>Morning Break in the Exhibit Area</b>		
10:30 am – 11:00 am	<b>Technology Workshop</b> <i>Consideration for Biosafety Testing of Viral Vectors and Vaccines</i> SGS Vitrology	<b>Technology Workshop</b> <i>Design of Experiments and Multivariate Data Analysis in the Future of Cell Therapy and Regenerative Medicine</i> Sartorius Stedim North America Inc.	<b>Technology Workshop</b> <i>A Chemically-Defined Baculovirus-Based Expression System for Enhanced Protein Production in Sf9 Cells</i> Thermo Fisher Scientific
11:00 am – 11:30 am	<b>Technology Workshop</b> <i>Scaling Up and Industrializing the Production of Viral Vectors and Cells for Therapeutic Use</i> Pall Life Sciences	<b>Technology Workshop</b> <i>Development of Commercially Viable Manufacturing Processes for Cell and Gene Therapy Applications</i> Lonza	<b>Technology Workshop</b> <i>Laser Force Cytology: A Novel Technology for Rapid Quantification of Viral Infectivity and Label-Free Cellular Analysis</i> LumaCyte
11:30 am – 12:00 noon	<b>Technology Workshop</b> <i>Industrial Platform Purification of AAV</i> BIA Separations	<b>Technology Workshop</b> <i>Gibco™ LV-MAX™ Lentiviral Production System for Cell Therapy Applications</i> Thermo Fisher Scientific	
12:00 noon – 1:30 pm	<b>Lunch in the Exhibit Area (Poster Session from 1:00 – 1:30 pm)</b>		
1:30 pm – 2:15 pm	<i>The Development and Intensification of a Lentiviral Vector Manufacturing Process Using Stable Cell Lines</i> <b>Lesley Chan, PhD</b> bluebird bio Inc.	<i>CAR T-Cells with Non-Viral Gene-Editing Technology</i> <b>David L. Hermanson</b> Poseida Therapeutics, Inc.	<i>Towards Routine Manufacturing of Gene Therapy Drugs – Requirements for Further Improvements – Example: AAV</i> <b>Otto-Wilhelm Merten, PhD</b> Généthon
2:15 pm – 3:00 pm	<i>Viral Vector Manufacturing: Challenges and Solutions</i> <b>Hanna P. Lesch, PhD</b> FinVector Vision Therapies OY	<i>Enhancing CAR T-Cell Specificity for Malignancy and Maintaining Durable Persistence in Solid Tumor Models</i> <b>Avery D. Posey Jr., PhD</b> University of Pennsylvania	<i>Enabling Access to a Norovirus Virus-Like Particle-Based Vaccine Through Advanced Manufacturing Process Design</i> <b>Scot Shepard</b> Takeda Pharmaceuticals U.S.A., Inc.
3:00 pm – 3:30 pm	<b>Afternoon Break in the Exhibit Area</b>		
3:30 pm – 4:15 pm	<i>Characterization of Stability-Indicating Assays for Viral Vectors</i> <b>Lawrence C. Thompson, PhD</b> Pfizer, Inc.	<i>Metabolomics: Enabling Understanding and Optimization of Bioprocesses and Immunotherapies</i> <b>Kendra Hightower, PhD</b> Metabolon, Inc.	<i>Bioprocess Engineering of Insect Cells for Pseudotyped VLP Expression and Optimization</i> <b>António M. Roldao, PhD</b> Instituto de Biologia Experimental e Tecnológica
4:15 pm – 5:00 pm	<i>Analytical Strategies on Quantification of Adeno-Associated Virus (AAV) Empty Capsids to Support Process Development</i> <b>Xiaohui Lu, PhD</b> Biogen	<i>Achieving High Quality Cell-Based Measurement: Application to Process Controls and Potency Assays</i> <b>John T. Elliott</b> National Institute of Standards & Technology	<i>Tweaking Baculovirus Expression Vectors to Stabilize Transgenes and Polish Enveloped VLP Vaccines</i> <b>Gorben P. Pijlman, PhD</b> Wageningen University

5:00 pm – 6:00 pm

**Plenary Session** in Momentum, Third Floor: **Air Handling for Viral Vector Suites**  
**Christian D. Lynch** • FDA CBER, **Mark F. Witcher, PhD** • NNE, and **Kim L. Nelson, PhD** • CRB

6:00 pm – 8:00 pm

**Reception in the Exhibit Area**

	<b>Viral Vectors &amp; Vaccines</b> Momentum, Third Floor	<b>Cellular Therapies</b> Fusion, Third Floor	<b>Baculovirus Expression Technology</b> Energy, Third Floor
7:30 am – 8:30 am	<b>Breakfast in the Exhibit Area</b>		
8:30 am – 9:15 am	<i>Analytical Issues for AAV Gene Therapy Products: Vector Genome Titration and Full/Empty Viral Particles Quantification</i> <b>Christine Le Bec, PhD</b> Généthon	<i>High Throughput Identification of Naturally-Occurring T-Cell Receptors with Therapeutic Potential Against Tumor-Associated, Viral, and Neoantigens</i> <b>Adria Carbo, PhD</b> Adaptive Biotechnologies	<i>Simplifying Membrane Protein Purification: Introducing a Fluorescent BEVS Protein System that Enhances Protein Production and Greatly Simplifies Detergent Screening</i> <b>Kendra Steele, PhD</b> ParaTechs Corporation
9:15 am – 10:00 am	<i>Many Ways Lead to Rome for Assessing the Genetic Stability of a Viral Vector</i> <b>Pepijn Burgers, PhD</b> Janssen Vaccines & Prevention B.V.	<i>Improving the Preservation of T-Cells</i> <b>Chia-Hsing Pi</b> University of Minnesota	<i>Adventitious Viruses Contaminating Insect Cell Lines</i> <b>Christoph Geisler, PhD</b> GlycoBac LLC
10:00 am – 10:30 am	<b>Morning Break in the Exhibit Area</b>		
10:30 am – 11:15 am	<i>Novel Purification Process to Obtain Pure AAV Vectors of 1e+16 vg in a Single Run of Conventional Ultracentrifuge</i> <b>Haifeng Chen, PhD</b> Virovek, Inc.	<i>T-Cell Activation Co-Stimulatory Ligands on a Dissolvable Substrate to Modulate T-Cell Output</i> <b>Sean H. Kevlahan, PhD</b> Quad Technologies	<i>Regulatory Updates and Using Virus-Like Particles to Inform Norovirus Vaccine Design</i> <b>Robin Levis, PhD</b> and <b>Gabriel I. Parra, PhD</b> FDA CBER
11:15 am – 12:00 noon	<i>Scalable Lentiviral Vector Production Using Stable HEK293 Suspension Cells</i> <b>Aziza P. Manceur, PhD</b> National Research Council Canada	<i>Analytical Considerations Associated With the Development of Novel Modalities</i> <b>Sunetra Biswas, PhD</b> Kite, A Gilead Company	<i>Comparative Transcriptome Analysis of AcMNPV Infection in the Midgut of Host Insect <i>Trichoplusia ni</i>, and in a <i>T. ni</i> Cell Line</i> <b>Gary W. Blissard, PhD</b> Boyce Thompson Institute
12:00 noon – 12:45 pm	<i>Testing Approaches for Viral Vectors Used in Gene Therapy: Novel Methods and Regulatory Expectations</i> <b>Leyla Diaz, PhD</b> MilliporeSigma BioReliance® Services	<b>Lentivirus Reference Standard Working Group Meeting</b> in Energy, Third Floor	
12:45 pm – 2:00 pm	Free Afternoon with Recommended Group Activities:		
12:45 pm – 6:00 pm	<b>River Cruise on the <a href="#">Victory Rover</a> • Admission to <a href="#">Nauticus</a> and the <a href="#">Battleship Wisconsin</a> • Guided Historical Walking Tour • Guided Engine Room Tour</b>		
6:00 pm – 9:00 pm	<b>Psychedelic Banquet at <a href="#">Half Moore</a> featuring <a href="#">BJ Griffin</a> &amp; the <a href="#">Galaxy Groove</a></b>		

## WEDNESDAY - MARCH 7, 2018

	<b>Breakfast in the Exhibit Area</b>		
7:30 am – 8:30 am	<b>Breakfast in the Exhibit Area</b>		
8:30 am – 9:15 am	<i>Challenges in Process Development and Industrialization for Live Virus Vaccine: Flavivirus Experience Using a Vero Cell Line</i> <b>Etienne Boutry</b> Sanofi Pasteur SA	<i>Chemically-Defined Culture Media for Advancing Cell Therapy Technology</i> <b>Jessie H.T. Ni, PhD</b> Irvine Scientific	<i>Control Using BEVS: From Promoters to CRISPR</i> <b>Marc G. Aucoin, PhD</b> University of Waterloo
9:15 am – 10:00 am	<i>Large-Scale Manufacturing of Clinical-Grade rAAV in an Academic Setting: How Efficacy, Versatility, Space, and Cost Drive Process and Development Toward Sustainable Methods</i> <b>Nathalie A. Clément, PhD</b> University of Florida	<i>The Role of Leukapheresis and Elutriation in Cell Immunotherapy Manufacturing</i> <b>Joseph M. Roig</b> Terumo BCT	<i>HER2 Cancer Vaccine Optimization by Combining Drosophila S2 Insect Cell Manufacturing with a Novel VLP-Display Technology</i> <b>Willem "Wian" A. de Jongh, PhD</b> Expres2ion Biotechnologies
10:00 am – 10:30 am	<b>Morning Break in the Exhibit Area</b>		
10:30 am – 11:15 am	<i>Novel Stable Lentiviral Vector Producer Cells: Overcoming Viral Vector Cytotoxicity</i> <b>Ana Sofia Coroadinha, PhD</b> Instituto de Biologia Experimental e Tecnológica	<i>Engineered Pluripotent Cell-Derived NK Cells as a Cornerstone Approach for Off-the-Shelf Cancer Immunotherapy</i> <b>Bahram "Bob" Valamehr, PhD</b> Fate Therapeutics, Inc.	<i>Progress on the Genome of the Spodoptera frugiperda Sf9 Cell Line</i> <b>Arifa S. Khan, PhD</b> FDA CBER
11:15 am – 12:00 noon	<i>Retroviral and Lentiviral Production in Disposable Bioreactor: Development and Scaling Up of Upstream and Downstream Process Steps</i> <b>Francesca Bellintani</b> MolMed S.p.A.	<i>Optimizing the CAR T-Cell Supply Chain</i> <b>Kimberly Lounds-Foster</b> Celgene Corporation	<i>rAAV Vector Development and Large-Scale Manufacturing Using BEVS Technology</i> <b>Jacek Lubelski, PhD</b> uniQure N.V.
12:00 noon – 1:30 pm	<b>Lunch in the Exhibit Area (Poster Session from 1:00 – 1:30 pm)</b>		
1:30 pm – 2:15 pm	<i>The Use of Automation in the Development of Lentiviral Vector Packaging and Producer Cell Lines</i> <b>Helen Maunder, PhD</b> Oxford BioMedica plc	<i>Automated, Closed System Manufacturing of CAR T-Cells</i> <b>Jon Ellis</b> Thermogenesis Corp.	<i>PEI-Mediated Transient Transfection of Insect Cells for the Expression of Recombinant Proteins in Stirred-Tank Bioreactors</i> <b>Christopher W. Kemp, PhD</b> Kempbio, Inc.
2:15 pm – 3:00 pm	<i>CAP-GT, a Platform Addressing the Production Challenge</i> <b>Nicole Faust, PhD</b> Cevec Pharmaceuticals GmbH	<i>Regulatory Approval of Modern Gene-Based Cancer Immunotherapies — CAR T-Cells — A Product Perspective</i> <b>Xiaobin "Victor" Lu, PhD</b> FDA CBER	<i>Biochemical and Biophysical Characterization of Adeno-Associated Viruses Produced by Triple Transfection in HEK293 Cells and with Insect Cells/Baculovirus Expression System</i> <b>Eric Horowitz, PhD</b> Voyager Therapeutics
3:00 pm – 3:30 pm	<b>Afternoon Break in the Exhibit Area</b>		
3:30 pm – 4:15 pm	<i>Pushing the Boundaries of Adeno-Associated Virus Characterization for Enhanced Product and Process Understanding</i> <b>Thomas Wesley Powers</b> Pfizer, Inc.	<i>Integrated, Closed System PAT Analytics for Advanced Auto Feedback Control of Critical Process Parameters — Reactive Analytics</i> <b>Dan Kopec</b> Sartorius Stedim Biotech	<i>Performance of High Cell Density Fed-Batch Process at Small- and Large-Scales</i> <b>Jamal Meghrou, PhD</b> Protein Sciences Corporation, A Sanofi Company
4:15 pm – 5:00 pm	<i>A Suspension Vero Cell Line for Production of Viral Vaccines and Viral Therapeutics</i> <b>Steven E. Pincus, PhD</b> FUJIFILM Diosynth Biotechnologies Texas, LLC	<i>Tumor Infiltrating Lymphocytes: Streamlining Manufacturing for Multi-Center Clinical Trials and Commercialization</i> <b>Linda L. Kelley, PhD</b> H. Lee Moffitt Cancer Center & Research Institute	<i>HepE Viral Nanoparticle (HEVNP): A Multifunctional Platform for Oral Delivery</i> <b>Chun C. Chen, PhD</b> Astrid Pharma
5:00 pm	<b>Meeting Adjourns</b>		