



BIOMANUFACTURING WORLD SUMMIT **BMWS19**

November 11-12, 2019 | Hilton La Jolla Torrey Pines | San Diego, CA | biomanworld.com

AGENDA

NOVEMBER 10, 2019

6:00 - 7:00 pm

**Boehringer
Ingelheim**

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of the

Drinks Reception



NOVEMBER 11, 2019

7:00 - 7:45 am

Registration and Breakfast

Sponsored By: **emergent**
biosolutions®

7:45 - 7:50 am

Opening Remarks and Important Announcements

7:50 - 8:00 am

Chair's Welcome Address



Pat Yang
Former EVP
at Juno Therapeutics,
Roche and Genentech

8:00 - 8:35 am

Keynote: The Successful History of Biologics Manufacturing Provides Foresights and Strategies for New Bio Modalities

- Establishment of broad communities of practitioners in both manufacturing and process development accelerated maturation of both disciplines
- Convergence of these process and manufacturing technologies was driven by excellence and capacity in selected CMOs
- Manufacturing portability has provided remarkable stories of win-win capacity-exchange between proprietary companies
- Process convergence has resulted in remarkable progress in process yields and cost improvement
- Intro to Vir Bio: Capacity and cost improvements in bio-manufacturing facilitate global access to medicines for Infectious Disease



Michael Kamarck
Chief Technology Officer
Vir Biotechnology

8:35 - 9:10 am

New Modalities, New Players, New Technologies – How Can We Succeed in an Exponential Future?

- Economical and political power shift in an age of the Anthropocene, and biology and computing power converge. Population, volatility and ecosystem pressure grows, whole science and technology leaps
- What is changing for our industry, for technical development and operations?
- What are our challenges and how could we potentially master them?
- Examples of how Bayer Pharmaceuticals addresses challenges in Cell and Gene Therapy, Digital and Leadership



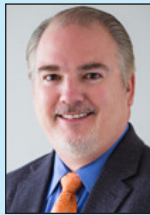
Wolfram Carius
EVP, Pharmaceuticals
Product Supply
Bayer AG

ROOM 1 CHAIR



Pat Yang
Former EVP
at Juno
Therapeutics,
Roche and
Genentech

ROOM 2 CHAIR



Jack Garvey
CEO
Compliance
Architects

ROOM 3 CHAIR

Lonza

Pharma & Biotech



Rajesh Thangapazham
Cell & Gene
Technologies
Regulatory Affairs
Expert
Lonza Pharma & Biotech

9:15 - 9:50 am

The Centenarian and the Start Up: How Merck is Realizing its Biomanufacturing Revolution

- Discuss how today's pipeline and technologies are reshaping our biomanufacturing
- Review case studies and strategies for rapid manufacturing scale up for leading products
- Focus on the criticality of investing in people and robust strategies to support the workforce and culture
- Show opportunities that allow for successful navigation in the future of manufacturing, including leveraging legacy and culture as drivers of change



Karin Shanahan
SVP, Global Biologics
& Sterile Operations
Merck

**BREAKOUT
ROOM 1**
STRATEGIC
MANUFACTURING

1:35 - 2:10 pm

Leveraging Resilience and Reinvention to Advance Pharmaceutical Quality

- The future of pharmaceutical quality and how to get there
- Generating competitive advantage using the principles of resilience and learning agility
- Evolving current quality practices to be more efficient & agile without compromising product quality or supply continuity



Lisa Wyman
VP Quality
Accelaron Pharma

**BREAKOUT
ROOM 2**
QUALITY

9:15 - 9:50 am

**BREAKOUT
ROOM 3**
CELL & GENE
THERAPY

Change Leadership – Building and Driving a High Performing Organization

- Converting strategy into execution and results
- Creating an effective operating system
- Building a compelling case for change
- Achieving agility in times of uncertainty
- Leveraging OE to build, scale and improve the business
- Removing the roadblocks or overcoming the setbacks
- Leading the culture shift



Stephen Hill
Chief Technical Officer
Lyell Immunopharma

9:55 - 11:35 am

Pre-Arranged One-to-One Meetings

10:00 am – 10:20 am: Meeting Slot 1/Networking
10:25 am – 10:45 am: Meeting Slot 2/Networking
10:50 am – 11:10 am: Meeting Slot 3/Networking
11:15 am – 11:35 am: Meeting Slot 4/Networking

11:40 AM - 12:15 PM

**WORKSHOP
BREAKOUT
ROOM 1**

Leveraging Predictive Technologies to Ensure Supply Chain Health – Case Study

- Deployed artificial and business intelligence to detect events that may create product availability issues, demand and supply related
- Implemented an automated management alarm and escalation system, emails and text messages, to accelerate response to supply-impacting events
- Implemented demand-driven scheduling system to connect production mix with actual demand
- Connected and integrated data across multiple platforms, e.g. PLCs, ERPs, QMS, LIMS, etc.



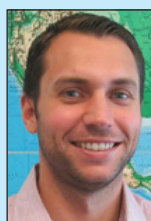
Jaime Velez
Co-Founder
Operations & Quality Systems Improvement Experts
(OQSIE)

11:40 AM - 12:15 PM

**WORKSHOP
BREAKOUT
ROOM 2**

Stainless Steel to Single-Use: Transitioning Our Culture and Processes

- Utilizing a capital investment to spawn culture change at a mature manufacturing site
- Implementing equipment and automation platforms globally to boost speed to market
- Sharing past experiences with single-use bioprocessing technologies and our evolving strategy to support them



Jim Green
Single Use Technology
(SUT) Platform Lead
Bayer Biotechnology
Division

A Case Study
Brought to you by



11:40 am - 12:15 pm

WORKSHOP
BREAKOUT
ROOM 3

Are We There Yet? The Digital Transformation Journey

- The buzzwords abound: digital transformation.....Industry X.0.....Industry 4.0.....but what are some practical approaches to achieving the promised benefits?
- What does digitalization actually mean in terms of transforming the biopharma product lifecycle?
- What are best practices to accurately assess and benchmark the capabilities of my organization and develop a transformation plan?
- Hear some recent experiences of successful digitalization initiatives in biopharma R&D and manufacturing
- Learn from a variety of diverse perspectives for quantifying real benefits and what pitfalls to avoid (hint: don't focus just on technology)



Ron Rossbach
Sr. Life Sciences Industry Consultant
Emerson Automation Solutions

12:20 - 12:55 pm

BREAKOUT
ROOM 1
STRATEGIC
MANUFACTURING

Scaling Gene Therapy Manufacturing: What is Our Goal?

- Highlighting the scale-up opportunity for dramatic patient benefit through the lens of a patient
- Outlining the inextricable link between manufacturing and the patient experience for autologous cell therapies
- Considering the different scaling goals: commercial viability, reliability, patient access, etc.



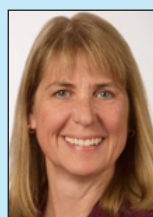
Derek Adams
Chief Technology and Manufacturing Officer
bluebird bio

12:20 - 12:55 pm

BREAKOUT
ROOM 2
QUALITY

The Evolution of a Quality Management System: Present and Future State

- How does the QMS evolve to enable flexibility and demonstrate value?
- What options are there to employ a continuous improvement thinking to the QMS?
- Can big data and risk management enable decision making?
- The importance to engage your organization for effective change management



Patricia Lufburrow
VP, Global Quality Operations
BioMarin Pharmaceuticals

12:20 - 12:55 pm

BREAKOUT
ROOM 3
CELL & GENE
THERAPY

Manufacturing a Cure: Advancing Cellular Therapies Towards Commercialization

- How should our industry build upon current cell therapy advances to create even more advanced and complex biopharmaceutical treatments
- Understanding how facility and process validation considerations change and become even more important when dealing with cell therapies
- Illustrating how investing in the relevant science directly informs product knowledge
- Demonstrating that this hard-won internal expertise can be harnessed into developing a successful new modality for cell therapies
- How to manage and maximize internal and external capacity to overcome product supply challenges



Therese Choquette
Analytical Project Leader
Novartis

12:55 - 1:55 pm

LUNCH-AND-LEARN ROUNDTABLE DISCUSSIONS

Themed lunches are sponsor- or delegate-led roundtable discussions on specific industry issues and challenges during Day One's lunch hour. Each roundtable will be led by an expert in the field. Limited seating is available, so please sign up for your preferred topic on site. Choose from:

On Time and Right First Time to Market: Early Engagement of Manufacturing with R&D to Speed Delivery of New Medicines to Patients

AstraZeneca



John Higgins
Director, Global
Technical Operations
AstraZeneca

Implementing QbD in Cell & Gene Therapy



Nick Keener
Sr. Director Vector
Process Development
bluebird bio

The Evolving Landscape of Cell and Gene Therapy Manufacturing and Development



Abhinav Shukla
VP and Head,
Manufacturing
CRISPR Therapeutics

Leveraging Induced Pluripotent Stem Cell (iPSC) Technology to Create Allogeneic Cell Therapies

Fate
THERAPEUTICS



Wen Bo Wang
SVP Technical
Operations
Fate Therapeutics

Strategies to Address the Viral Vector Capacity Dilemma



Olivier Loeillot
General Manager
of Bioprocess
GE Healthcare
Life Sciences Business

Optimizing Quality in Apheresis Starting Materials for Cellular Therapeutics



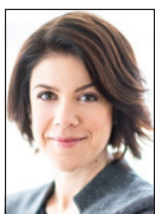
Rob Piperno
Director
Cell & Gene Therapy QA
GSK

Acceleration and Innovation Enablers: Post-Approval Change Management



Mihaela Simianu
Executive Director,
Engineering,
Head of Sterile Liquids
Commercialization
Merck

How do You Scale Your Platform While You Continue Learning?



Kathrin Jinivizian
Head External
Manufacturing
& CMC Strategic
Operations
Moderna Therapeutics

Translating Successful Research into Industrialized Medicine - Commercialization Challenges and Strategies for Cell and Gene Therapy



Ran Zheng
Chief Technical Officer
Orchard Therapeutics

Advancing Tomorrow's Medicines—
Overcoming the Manufacturing
Challenges of Today

patheon

by Thermo Fisher Scientific

Paul Jorjorian

VP & General Manager, Biologics

Chris Murphy

VP & General Manager, VVS

Thermo Fisher Scientific

Machine Learning to Support Visual
Inspection in Biopharmaceutical
Manufacturing



the dev masters

Arshad Khan

Chief Data Scientist

theDevMasters

Live-Virus CMC and Manufacturing
Strategies: From Vaccines to Viral
Immunotherapy to Cell-Gene Therapy
Applications for Emerging Organizations

TURNSTONE
BIOLOGICS



Manny Otero

SVP, Technical
Operations

**Turnstone
Biologics, Inc.**

Transforming Quality
Management with Cloud

veeva

Paola DePaso

Director, Vault Quality

Veeva Systems

Best Practices for Overcoming
Big Challenges in Your
Manufacturing Digital Journey



WERUM

KÖRBER SOLUTIONS

Samantha Zoleta

Manager Sales and Business Consulting

Werum IT Solutions

1:55 - 2:30 pm

**BREAKOUT
ROOM 1**
STRATEGIC
MANUFACTURING

Technology Roadmap for the Biopharmaceutical Industry

- Proving that the most valuable data in manufacturing is from production itself
- Choosing the right goals and outcomes to make a difference
- Connecting disparate IT systems together into a unified whole
- Building a scalable approach for the enterprise, step-by-step: Start small to go big
- Illustrating successful projects with concrete examples



Jun Huang

Director/Team Leader,
Process Monitoring, Automation & Control
Pfizer

1:55 - 2:30 pm

**BREAKOUT
ROOM 2**
QUALITY

Innovative Quality Systems: Fit for the Future to Enable Personalized Medicine

- Demonstrating that Quality Systems as they exist today are not adequate for the next generation of innovative products
- Identifying and managing instances of noncompliance with GMPs
- Developing a quality system infrastructure to ensure compliance in a fast-growing company
- Placing quality and compliance as the core strength of your organization and the industry
- Identifying, mitigating and preventing high-risk events through integration, automation and collaboration
- Ensuring a strong quality and compliance focus with CMOs, partners and suppliers



Ronan Farrell

Head of Quality and Compliance
Roche

1:55 - 2:30 pm

**BREAKOUT
ROOM 3**
CELL & GENE
THERAPY

The Quest for Compliant, Reliable, Cost-Effective Viral Vector Supply to Meet the Rapidly Growing Demand

- Approaches to successfully transition viral vectors from small scale clinical trial use into cGMP approved commercial supply
- Next generation processing and analytics to enable increased vector supply capability
- Use of specialist viral vector CDMO's vs building in-house capability
- Oxford Biomedica's ongoing capacity and technology investments to meet our partners growing supply needs



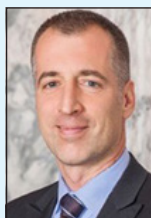
Nick Page
Chief Operations Officer
Oxford BioMedica

2:35 pm - 3:10 pm

**WORKSHOP
BREAKOUT
ROOM 1**

Global Talent Trends in Biomanufacturing 2019

- An update on talent trends: what does it (seem to) take to make it to the top?
- Should I lead, over the next 10 years, the way I lead over the past 10 years?
- Culture: what is it (really) and how can we transform it as leaders?



Pascal Bécotte
*Co-Leader, Corporate Officers
Sector (Global Functions)
& Global Leader, Operations
& Supply Chain Practice*
Russell Reynolds Associates

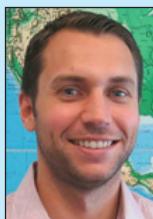
2:35 pm - 3:10 pm

**WORKSHOP
BREAKOUT
ROOM 2**



SUT Facility Design Considerations

- History of Single-Use technology in BioPharm
- Why SUT versus traditional SS? What are the pros and cons of each?
- SUT-specific design considerations:
 - Ergonomics/ Life Safety/ Code Compliance
 - Spatial Relationships/ Adjacencies
 - Regulatory Compliance
 - Mode of Operation
 - Modularity/ Repeatability
- Walking through an SUT facility case study



Jim Green
*Single Use Technology
(SUT) Platform Lead*
**Bayer Biotechnology
Division**



Bob Allen
*Sr. Technical
Director*
Fluor

2:35 pm - 3:10 pm

**WORKSHOP
BREAKOUT
ROOM 3**

Cold Chain Validation Best Practices Including Immunotherapy

- Review recent FDA feedback on immunotherapy submissions
- Understanding damage boundaries for therapies
- Defining your operating space for transportation hazards
- Putting it all together: Cold chain validation strategies for monoclonal antibodies, antibody-drug conjugates, and cell therapies



Gary Hutchinson
President
Modality Solutions



Dan Littlefield
Principal
Modality Solutions



3:15 - 4:25 pm

Pre-Arranged One-to-One Meetings

3:15 pm – 3:35 pm: Meeting Slot 5 / Networking

3:40 pm – 4:00 pm: Meeting Slot 6 / Networking

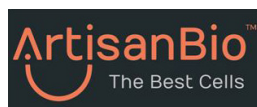
4:05 pm – 4:25 pm: Meeting Slot 7 / Networking

3:50 - 4:25 pm

Industry Focus Groups

These roundtable discussions will run during the morning of Day Two's pre-arranged one-to-one meetings. Each group will be hosted by a moderator who will guide the conversation through issues, challenges, and opportunities drawn from delegate profiles relevant to specific industry sectors.

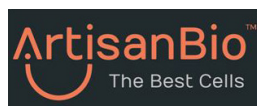
CELL AND GENE THERAPY FOCUS GROUP Better Cells for Better Therapies, The Promise and Practicalities of Synthetic Biology



Tanya Warnecke
Chief Technology
Officer
ArtisanBio



Raja Srinivas
Co-Founder
Asimov



Nick Timmins
VP, Cell
Technologies and
Entrepreneur in
Residence
ArtisanBio



Philip Lee
COO and
Co-Founder
**Senti
Biosciences**

4:30 - 5:05 pm

Cell and Gene Therapies and the Dawn of the Next Chapter of Biopharmaceutical Production

- What are some of the unique challenges and opportunities in commercializing live modalities like CAR-T?
- Weighing the pros and cons of centralized versus decentralized production models for these new treatments
- Discussing how our industry's quality culture informs these new products from R&D right through to the patient
- Offering lessons learned from the first generation of cell and gene therapies. How will their example inform what we are doing now?
- Setting timelines for the future: What are we going to be able to do next year, five years from now, and ten years from now? What are we doing to get there?
- Filling the innovation pipeline: What can we as an industry do to support the creation and discovery of new live modalities?



Tim Moore
President
& Chief Technology Officer
PACT Pharma

5:05 - 6:00 pm

Panel: Setting Ambitious Goals to Improve the Biopharmaceutical Ecosystem

- Discussing how all the moving pieces of our industry fit together. Is the status quo really the best way to interact with one another? What forces have driven us into our current relationships, and to what extent can we reshape our industry's landscape?
- Moving beyond just People, Processes, and Technologies when we talk about improvement. With Blue Sky Thinking, what would we change if we could?
- Seeking ways out of zero-sum thinking to create mutually advantageous business operations
- Bringing in additional perspectives from other industries and organizations to examine our businesses from the outside looking in
- Remembering that the patient always come first, even when discussing better ways of doing business. How will the new direction we forge together also redefine our ability to serve patients' needs?



Alison Moore
Chief
Technology
Officer
**Allogene
Therapeutics**



Charles L. Cooney
Robert T. Haslam Professor
of Chemical Engineering,
Emeritus, and Faculty
Director, Emeritus
Deshpande Center for
Technological Innovation
MIT



Jerry Cacia
SVP, Head
Global Technical
Development
Genentech



Pascal Bécotte
Co-Leader, Corporate Officers
Sector (Global Functions)
& Global Leader, Operations
& Supply Chain Practice
Russell Reynolds Associates

6:00 - 7:00 pm



Proud Sponsor
of the

Drinks Reception



6:00 - 7:00 pm

NEW TO BMWs19: HANGOUTS

From 6:00 pm onwards there will be three different 'Hangout' areas set up in the Exhibition Hall, each beside a bar. These are unmoderated opt-in networking opportunities for attendees to engage with their peers about the content and issues they enjoyed during the day's sessions. Choose the topic that interests you most and congregate at the appropriate Hangout.

**STRATEGIC
MANUFACTURING
HANGOUT**



**QUALITY
HANGOUT**



**CELL & GENE THERAPY
HANGOUT**



7:30 - 8:25 am

Registration and Breakfast

Sponsored By: **emergent**
biosolutions®

7:45 - 8:20 am

SESSION BREAKOUT ROOM 2 STRATEGIC MANUFACTURING



Smart Operations, Smart Business: Achieving End-to-End Performance with Smart Factory and Digital Transformation

- Define “Smart Factory” and the dimensions of performance
- Explore why companies may not reap value from Smart Factory initiatives and how to overcome barriers
- Understand how to balance the need for digital capabilities against the objective to be lean and nimble
- Identify opportunities to turn real-time data and insights into profitable business decisions that could effectively meet demand reducing inventory levels and costs
- Understand what talent strategies smart factories need and future of work implications
- Get to the bottom line: How is Smart Factory changing the way work is done on the shop floor and what this could mean in terms of dollars and cents?



Jian Irish
SVP, Global Head
of Manufacturing
**Kite, A Gilead
Company**



Chris Stevens
Head of Manufacturing
Spark Therapeutics

Deloitte.



Matt Humphreys
Principal, Life Sciences
Supply Chain and
Network Operations
Leader
Deloitte Consulting LLP

8:25 - 8:35 am

Chair's Welcome Address



Pat Yang
Former EVP
at Juno Therapeutics,
Roche and Genentech

8:35 - 9:10 am

Manufacturing Autologus Ex Vivo Genetically Modified Cell Therapies have Challenges, but the Future is Bright

- Review the supply chain
- Examine the contributors of costs
- Solution for industrial scale viral vector manufacturing
- Cell processing and viral transduction hubs
- Rapid analytics for product testing
- Brighter future for patients with fitter cell therapies



Joseph Tarnowski
SVP, Cell & Gene Therapy, R&D
Medicinal Science and Technology
GSK

9:10 - 9:45 am

Keynote: When Your Process Equipment is a Raw Material and Your Raw Material is a Human: The Adaptation of Biotechnology CMC Skills to Cell Therapy

- CMC/Operations disciplines have an important role in the commercialization of powerful new cell therapies
- Well understood development principles can be applied, though there are challenges
- It is important to identify when to draw on experience and when to adapt/grow to address gaps
- Comparability is key in an emergent technology space, but may be limited by product understanding
- Growing development skills to advance important new medicines



Alison Moore
Chief Technology Officer
Allogene Therapeutics

9:50 - 10:25 am

BREAKOUT ROOM 1 STRATEGIC MANUFACTURING

The Future of Biomanufacturing: Leveraging Flexible Networks, Quality Culture and Cutting Edge Innovation

- How biomanufacturing can address the dichotomy of small volume precision medicines and high volume blockbuster drugs
- Building flexible global manufacturing networks to meet our industry's evolving needs
- Leveraging cutting edge innovation to maximize process intensification and augment flexibility
- Creating high performance teams and building and maintaining a culture of quality, reliability and innovation as key differentiator and foundation for continued success



**Boehringer
Ingelheim**



Jens Vogel
President & CEO, BI Fremont Inc.
Boehringer Ingelheim
Biopharmaceuticals GmbH

9:50 - 10:25 am

BREAKOUT ROOM 2 QUALITY

How to Ensure Quality and Compliance in Turbulent Times

- Discussing best practices to maintain a quality and compliance focus during times of change and uncertainty
- Providing a mechanism to ensure management is engaged, accountable and able to react quickly to unexpected events
- Clarifying responsibilities and opening up lines of communication, coordination, and collaboration between teams in transition
- Using Quality Systems to proactively detect potential trends and actions to take before the trend becomes an issue
- Offering examples of positive outcomes and lesson's learned to provide the audience with tools to help monitor impact to quality and compliance during times of change



Tina Self
VP Quality
Bayer AG

9:50 - 10:25 am

BREAKOUT ROOM 3 CELL & GENE THERAPY

Learnings from Launching LUXTURNA™ and Considerations for Building Gene Therapy Supply Chains of the Future

- Understanding the unique challenges in launching the first ever FDA approved Gene Therapy
- Discussing emerging technologies to support innovative and individualized product supply strategies
- What best practices can we borrow from current pharma supply chains?
- Exploring challenges for managing gene therapy supply chain risk



Ryan Bartock
Head of Supply Chain
and Network Strategy
Spark Therapeutics

10:25 - 11:15 am

Pre-Arranged One-to-One Meetings

10:30 am – 10:50 am: Meeting Slot 8 / Networking

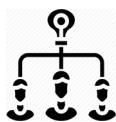
10:05 am – 11:15 am: Meeting Slot 9 / Networking

10:25 - 11:15 am

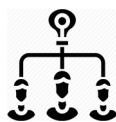
NEW TO BMWS19: INTERACTIVE THINK TANKS

During the Day Two Morning Networking Break there will be three different 'Interactive Think Tank' areas set up in the Exhibition Hall. These are pre-scheduled networking opportunities for attendees to get together in small groups to brainstorm and discuss issues of common interest. Delegates will find their assigned topic on their colored schedule in their delegates kits. Signage will direct you to the table for the appropriate Think Tank.

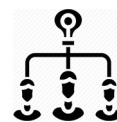
INTERACTIVE THINK TANK DIGITAL TRANSFORMATION TACTICS & STRATEGIES



INTERACTIVE THINK TANK TALENT ATTRACTION, TRAINING, & RETENTION



INTERACTIVE THINK TANK CMO/CDMO CHALLENGES



10:40 - 11:15 am

Industry Focus Groups

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BIOPROCESSING FOCUS GROUP

Intensification, Integration and Interrogation - The Future for Biomanufacturing

- Addressing patients needs
- Fulfilling the business case
- Managing quality, speed, cost and flexibility



Massachusetts Institute of Technology



Charles L. Cooney

*Robert T. Haslam Professor of Chemical Engineering,
Emeritus, and Faculty Director, Emeritus Deshpande
Center for Technological Innovation
MIT*

11:20 - 11:55 am

Case Study: Challenges and Opportunities in Analytical Development for Cell and Gene Therapies

- With no standardized methods in analytical development of cell and gene therapies, we must define our own best practices
- Looking at the evolution and industrialization of analytical development in biologics over the past 20 years: what did we learn and how can we leverage it now?
- With the current speed of evolution, what new tools will emerge to help us solve these complex challenges
- The high cost of analytical development and need for greater efficiency begs the question how do we get to where we need to be... And where do we need to be?



Stacey Ma
*EVP Technical Operations
Sana Biotechnology*

12:00 - 12:35 pm

**WORKSHOP
BREAKOUT
ROOM 1**

Improving Product Quality During Technical Transfers

- The definition of Technology Transfer and its many applications
- Planning for tech transfer the “right way,” using “Calculated Risk Reduction” and other tools to ensure all bases are covered
- Common pitfalls and best practices – what to do, and what not to do
- Ways to ensure optimal planning and execution using actionable tools



**PROPHARMA
GROUP®**



Eric Good
*Director, Compliance
ProPharma Group*

12:00 - 12:35 pm

**WORKSHOP
BREAKOUT
ROOM 2**

Digital Transformation in Pharma Manufacturing for Quality and Productivity

- How pharma can learn state-of-the-art manufacturing from a more digitally advanced industry
- Connecting the plant: Turning data into knowledge and end-to-end business orchestration
- Successful industry 4.0 pharma use cases
- Integrating systems to create transparency and effective and timely decision-making
- Examining how improved quality also creates efficiencies and measurable cost savings



Amy Doucette
*Americas Manager
and Global Strategic Accounts
Applied Materials*

12:00 - 12:35 pm

**WORKSHOP
BREAKOUT
ROOM 3**

Top Lessons Learned When Choosing a Digital Manufacturing Strategy

- A case study from Atara Bio's experience on how when and why to digitize
- Taking the first step: how building digital capabilities can streamline production for scaling up success
- Obstacles faced and overcome



Joe Maguire
*Sr. Director, IT
Atara Biotherapeutics*

**A case study
brought by:**



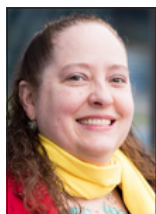
WERUM
KÖRBER SOLUTIONS

12:35 - 1:35 pm

LUNCH-AND-LEARN ROUNDTABLE DISCUSSIONS

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Quality (QA/QC) Challenges of Managing External Contract Manufacturing Organizations (CMOs)



Kim K. Burson, PhD
*Head of
Quality Assurance
& Quality Control
Denali Therapeutics*

Attracting, Developing, and Retaining Women in Biopharmaceutical Manufacturing



Christina Yi
*Chief Operations
Officer
Dendreon*

Collaboration Studies: Cultivating Successful Relationships



Denise Steckel
*Head, Clinical
Collaborations
Management
Genentech*

**Semi-Continuous Downstream
Processing Strategies and
Enabling Technologies for
Supply Chain Flexibility**



GlaxoSmithKline



Antonio Ubiera

*Sr. Director, Downstream
Process Development,
BioPharm Product
Development and Supply
GSK*

**Real-Time Release for Biologics—
Using Innovative Technologies**



Carin Huibers

*Global Platform Leader,
Large Molecules
Janssen*

**Supply Chain Management for
Complex Cell Therapy Products**



Dave DiGiusto

*Chief Technical Officer
Semma Therapeutics*

1:35 - 2:10 pm

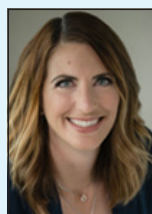
**BREAKOUT
ROOM 1
STRATEGIC
MANUFACTURING**

Industrialization of Drug Discovery: Manufacturing and Discovery Reimagined Through Artificial Intelligence

- Illustrating how AI is already changing the small molecule side of the pharmaceutical industry in both drug discovery and R&D
- Extrapolating from these examples to suggest biopharmaceutical manufacturing applications
- Drawing parallels from the industrialization of biologics manufacturing. How far away are we, and what should we as an industry be doing now to get ready?
- Discussing what small pilot programs and early test cases might look like, and the timelines involved in moving from proof of concept to industry-wide applications



RECURSION
pharmaceuticals



Tina Larson

*Chief Operating Officer
Recursion Pharmaceuticals*

1:35 - 2:10 pm

**BREAKOUT
ROOM 3
CELL & GENE
THERAPY**

Compliant, Creative, and Efficient C&Q Strategies to Bring up New Manufacturing Facilities of Cutting Edge Off-the-Shelf Allogenic CAR-T Immunotherapies

- Strategies to minimize impact caused by long-lead time items when bringing up a facility
- Building relationships between commissioning, qualification, and systems to improve staging
- Establishing creative system boundaries which focus on patient and product risks increases efficiencies without compromising compliance



Merrick Endejann

*Sr. Validation Manager
Cellestis*

2:15 - 2:50 pm

Panel: Staying Ahead of the Curve in the Increasingly Complex Regulatory World of Cell and Gene Therapy

- Discussing the growing regulatory complexity in the world of pharmaceutical manufacturing. How are new guidelines and regulators' expectations during inspections changing?
- Taking a process-based approach to impact assessment, and customizing a setup that identifies and acts on signals proactively
- Bringing a structured approach to your advocacy within your network of industry and trade organization connections
- Embracing the idea that keeping things simple even in a complex environment generates the best outcomes



**Murali
Bilikallahalli**
VP & Head
Technical
Operations
Acceleron Pharma



José Eduardo Vidal
SVP, Quality
Assurance and
Process Sciences
*Atara
Biotherapeutics*



Snehal Patel
VP and JuMP Site Head
Juno Therapeutics



Prentice Curry
SVP, Quality
and Compliance
*Kite,
A Gilead Company*

2:50 - 3:00 pm

Chair's Closing Address



Pat Yang
Former EVP
at Juno Therapeutics,
Roche and Genentech
