

May 9 - 11, 2023 | Boston, MA

www.cell-line-engineering-development-summit.com

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FEBRUARY 17
AND SAVE UP TO
\$1,500



Novel Cell Line Engineering & Development Summit

Engineer & Develop a Stable, Scalable Host Cell Line for ATMPs to Accelerate Speed-to-Clinic

Advancing Your Host Cell Line Engineering &
Process Development Capabilities for a
Robust, Reproducible Expression System &
Compliant Scale-Up Platform to Reduce COGs

Expert Speakers Include:



Abhisek Mitra
Senior Scientist
AstraZeneca



Xiaozhi Ren
Director, CMC,
Cell Line & Process
Development
Vedere Bio II



Christopher Locher
CEO
**Versatope
Therapeutics**



Gilles Michel
Associate Scientific
Fellow
Takeda



Tiffany McIamarrah
Senior Scientist
Sanofi



Yves Durocher
Head, Stable Cell
Line Development for
Manufacturing
NRCC

Past Attendee, Process Development:

It was a great opportunity to interact and learn from experts in the field.
Very well organized to ensure interaction and networking

Amgen, Past Attendee

Creating a Stable, Precisely Engineered, and Scalable Cell Line for Advanced Therapies

The inaugural **Novel Cell Line Engineering & Development Summit** this May is the only **ATMP focused**, forward facing meeting dedicated to overcoming the current challenges in cell line development and engineering.

New technology, pioneering cell lines and approaches are now enhancing **stability, scalability and productivity**, increasing efficiency, reducing cost of goods and accelerating patient access!

Take advantage of this exciting space, join industry leaders sharing their expertise on incorporating automation, upgrading media, and liaising with regulatory authorities to develop a superior expression platform.

Presentations from some of the most influential innovators such as **Sanofi, Takeda, Vedere Bio, AstraZeneca, Versatope Therapeutics, Novartis** and **MIT** create an unmissable opportunity to collaborate and network across cell line development and cell line engineering. Join industry experts at the **Novel Cell Line Engineering & Development Summit** to pave the way towards stable, high quality, scalable expression systems for clinic.

Past Attendee, Process Development Series:

Excellent opportunity to network with speakers from scientists to industry leaders! The scope of this summit was not limited to innovation but also to discuss common challenges in the process development making this attractive to biotech professionals!

Beam Therapeutics, Past Attendee

Your Unmissable Key Takeaways



Harness the potential of **microbial factories, insect cell lines and controlled expression** and more. See how to optimize cell media and culture with **SUNY Polytechnic Institute**.



Tackle **regulatory considerations and quality control required to achieve speed to clinic** for a variety of cell lines and cell engineering approaches. Hear from **Ring Therapeutics** to make approval easier.



Develop a fully scalable cell line, knowing how to approach bottlenecks such as density thresholds, cell media and genetic with **Versatope Therapeutics**.



Incorporate automation in the lab to speed up cell line development, reducing the timescale and resources required to produce ATMPs with **Sanofi**.



Increase the **safety and precision of cell line engineering**. Hear from the likes of **Takeda** and **AstraZeneca** on a variety of approaches such as **Landing Pad** and **Transposases**, aiming to engineer cells for reliable and robust expression.

WELCOME

SPEAKERS

AGENDA

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Your Expert Speakers

Novel Cell Line Engineering
& Development Summit

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Saurabh Sen
Associate
Director, Cell Line
Development,
Genomic Medicine
Unit & Mammalian
Platform
Sanofi



Christopher Locher
CEO
**Versatope
Therapeutics**



Mauricio Umaña
Senior Director,
Regulatory Affairs &
CMC Lead
Ring Therapeutics



Abhisek Mitra
Senior Scientist
AstraZeneca



John Zuris
Director, Editing
Technologies
Editas Medicine



Xiaozhi Ren
Director, CMC,
Cell Line & Process
Development
Vedere Bio II



Fabio Caliendo
Scientist, Weiss
Lab of Biological
Engineering
MIT



Zhiwei Song
Principal Scientist
**Bioprocessing
Technology
Institute**



Gilles Michel
Associate Scientific
Fellow
Takeda



Runia Roy
Postdoctoral Fellow
**SUNY Polytechnic
Institute**



Sampath Kumar
Senior Director &
Head of Cell Line
Development
Takeda



Yves Durocher
Head, Stable Cell
Line Development
for Manufacturing
NRCC



Tiffany Mclamarrah
Senior Scientist
Sanofi



Ying Shen
Associate Scientific
Fellow
Takeda



David Auslaender
Senior Principal
Scientist
Novartis



Nathan Lewis
Associate Professor
of Pediatrics &
Bioengineering
UCSD



**Abhishek
Chatterjee**
Professor
Boston College

Past Attendee, Process Development:

■ ■ A really important event to attend to avoid major mistakes in decision making processes as soon as CMC manufacturing becomes a priority in your gene therapy development plans ■ ■

EG472, Past Attendee

Workshop A

9.00am - 12.00pm

Contrasting a Variety of Approaches to Cell Line Engineering for ATMPs

This workshop will cover:

- Reviewing and comparing the leading techniques such as CRISPR/Cas9, TALENS, Transposases or Landing Pad with recombinases and their suitability for gene engineering and integration of large payloads
- Evaluating how the use of either target integration or random integration affects the timeline of advanced therapies
- Comparing how each approach to cell line engineering impacts the productivity of cells and consistency of product

Workshop Leaders



John Zuris
Director, Editing Technologies
Editas Medicine



Yves Durocher
Head, Stable Cell Line Development for Manufacturing
NRCC



Fabio Caliendo
Scientist, Weiss Lab of Biological Engineering
MIT



David Auslaender
Senior Principal Scientist
Novartis



Nathan Lewis
Associate Professor of Pediatrics & Bioengineering
UCSD

Workshop B

1.00pm - 4.00pm

Examining the Scalability & Risks of Up-And-Coming Cell Lines for Production of Advanced Therapies

This workshop will cover:

- Reviewing the properties and scalability potential of new cell lines that are yet to receive regulatory approval
- Assessing the potential and possible safety risks of using an SF9 baculovirus cell line expression system
- Elucidating on the possibility of Baby Hamster Kidney (BHK) cell lines to carry the risk of evolving undesirable cell properties
- Highlighting concerns and challenges posed by the use of murine myeloma cell line (NSO)

Workshop Leaders



Christopher Locher
CEO
Versatope Therapeutics



Mauricio Umaña
Senior Director, Regulatory Affairs & CMC Lead
Ring Therapeutics



Runia Roy
Postdoctoral Fellow
SUNY Polytechnic Institute

Past Attendee, Process Development:

“The conference was very thoughtfully put together with reasonable sized segments of presentations and a clear theme, with carefully designed networking activity interspersed in between”

Eli Lilly, Past Attendee

Conference Day 1

Wednesday, May 10

Novel Cell Line Engineering
& Development Summit

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WELCOME

SPEAKERS

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8.00 Welcome Coffee and Registration

9.00 Chair's Opening Remarks

Optimizing Cell Line Development to Increase Scalability

9.15 Fireside Chat: Discussing the Hurdles in Developing a Fully Scalable Cell Line

- Exploring approaches towards increasing the scalability of established cell lines
- Tackling density thresholds, cell media and productivity decreases
- Regaining control of cell lines, reducing genetic drift, and increasing stability



Christopher Locher
CEO
Versatope Therapeutics



Sampath Kumar
Senior Director & Head of Cell Line Development
Takeda



Nathan Lewis
Associate Professor
of Pediatrics &
Bioengineering
UCSD

10.00 Enhancing Cell Line Development & Bioprocess Optimization with Actionable Omics, AI, & Systems Biology

- Understanding that high-throughput technologies are inherently observational, but can be adapted to inform cell line development and process optimization
- Achieving actionable omics through properly designed experiments, AI, and systems biology to increase productivity
- Integrating omics with an understanding of the cellular machinery, allowing for a connection between the intracellular metabolism and bioreactors or media to increase bioprocessing efficiency



10.30 Morning Refreshments & Speed Networking

Innovation in Cell Line Engineering to Regain Control of Expression

11.30 Highlighting the Power of Using Transposases for Targeted Gene Integration

- Encapsulating the ability of engineered transposases as a newer, faster and safer gene integration tool
- Understanding the biological implications and mechanisms of semi site-specific integration
- Exploring the impact of using transposases for gene editing on the timeline and scalability of Advanced Therapy Medicinal Products



Abhisek Mitra
Senior Scientist
AstraZeneca



John Zuris
Director, Editing
Technologies
Editas Medicine

12.00 Achieving Extremely Efficient Transgene Insertion to Gain Control of Expression

- Using Sleek technology to increase the efficiency of gene knock-in via CRISPR
- Harnessing the security and promoter strength of essential genes to gain control over expression
- Reducing off target effects and variable yields with precise gene insertion



Fabio Caliendo
Scientist, Weiss
Lab of Biological
Engineering
MIT

12.30 Extracting the Capacity of Automated Sense & Response Mechanisms to Control Conditional Gene Expression

- Exploring how automated sense and response mechanisms can be used to optimise productivity and increase reliability of expression platforms
- Understanding how aiming for inducible expression in mammalian cell lines could achieve greater control over expression levels and increase the versatility of various cell lines
- Reducing toxicity and increasing productivity to enhance better scale up



Conference Day 1

Wednesday, May 10

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1.00 Lunch & Networking

Mitigating Cell Line Development Risks to Accelerate Regulatory Approval



Mauricio Umaña
Senior Director,
Regulatory Affairs &
CMC Lead
Ring Therapeutics

2.30 Navigating the Pathway to Regulatory Approval for Advanced Therapies Using Cell Line Development

- Laying out the analytical measures and regulatory considerations required to produce a high quality product using mammalian cell lines
- Exploring the changes in approach and analysis needed when using non-mammalian cell lines
- Elucidating how variations in plasmid sources and choice of vector affect the regulatory hurdles encountered. Covering LVs, AAV and Anelloviral therapies



Yves Durocher
Head, Stable Cell
Line Development for
Manufacturing
NRCC

3.00 Assessing the Usefulness and Quality of the Stable Pool Approach for Achieving Clinic

- Contrasting the stable cell pool approach with traditional methods in terms of scalability and speed
- Using random integration to achieve biophysical and biochemical comparability to clones produced via target integration
- Demonstrating how screening, assays and stability studies can be employed to reduce the risks posed



3.30 Afternoon Poster Session & Networking

Understanding the Biological Hurdles to Increase Productivity

4.30 Panel: Tackling the Biological Hurdles Presented at Scale Up

- Addressing how the low yield caused by cell density and aggregation can be overcome
- Eliminating batch variability: Why scale out is less preferable and less consistent
- Regaining oxygen control at industrial scale to enhance cell growth and productivity



Zhiwei Song
Principal Scientist
**Bioprocessing Technology
Institute**



Xiaozhi Ren
Director, CMC, Cell Line & Process
Development
Vedere Bio II



Abhishek Chatterjee
Professor
Boston College



Abhishek Chatterjee
Professor
Boston College

5.15 Employing Virus Based Delivery Platforms to Fine Tune the Expression Casette

- Isolating limiting components to enhance the multi-component genetic circuit for unnatural amino acid incorporation.
- Adapting virus assisted directed evolution of engineered tRNAs in mammalian cells to increase scalability
- Progressing development of stable cell lines for unnatural amino acid incorporation

5.45 Chair's Closing Remarks & End of Day 1

Conference Day 2

Thursday, May 11



8.30 Morning Coffee

9.15 Chair's Opening Remarks

Innovations in Cell Line to Reduce Timescale



Christopher Locher
CEO
Versatope Therapeutics

9.30 **Optimizing Cell Line Expression Using Microbial Factories for Better Scale Up**

- Encapsulating an alternative, virus free approach to mammalian protein expression
- Using bioinformatics to inform the development process
- Addressing issues in scale up by using the microbial factory approach



Tiffany McLamarrah
Senior Scientist
Sanofi

10.00 **Capitalizing on the Power of Next Generation Sequencing to Speed Up Characterisation**

- Learning how NGS can sequence many DNA molecules simultaneously, and how it can be used effectively
- Defining the advantages of reading at transcriptome level before progressing onto proteomics
- Characterizing the increase of bioinformatics necessary for employing next generation sequencing



10.30 Morning Refreshments & Networking

Developing Cell Culture & Media for Enhanced Expression



Saurabh Sen
Associate
Director, Cell Line
Development,
Genomic Medicine
Unit & Mammalian
Platform
Sanofi

11.30 **Rationalizing the Applications & Conveniences of Producer Cell Lines**

- Reporting on the technical and time-scale advantages of using producer cell lines during transfection
- Choosing the right producer cell line for each product
- Optimizing cell culture and process development to enhance the performance of producer cell lines



Xiaozhi Ren
Director, CMC,
Cell Line & Process
Development
Vedere Bio II

12.00 **Advancing HEK293 Cell Line Development Processes to Boost Productivity**

- Reviewing approaches to achieve a true suspension cell line, increase productivity and achieve full capsid potential
- Learning how to define a good suspension HEK293 cell line for AAV production
- Using a chemically defined medium to decrease cell line aggregation without using additional reagent



Runia Roy
Postdoctoral Fellow
SUNY Polytechnic Institute

12.30 **Re-examining Current Methods of Transfection to Increase Specificity & Cost-Effectiveness**

- Identifying more specific transfection techniques to minimise off target effects
- Understanding how the cost of goods and resources can be minimised with a change in technique
- Mapping the way to more precise, efficient and reliable transfection methods



1.00 Lunch & Networking

Conference Day 2

Thursday, May 11

Utilizing Screening & Assays for Precise Characterization



Zhiwei Song
Principal Scientist
**Bioprocessing
Technology Institute**

2.00 Advancing Characterisation with Selection Markers to Find the Best Candidates Quickly

- Harnessing selection markers to easily and to generate and isolate rare high producing stable clones.
- Increasing cell line productivity using an attenuated glutamine synthetase selection system alongside methionine sulfoximine.
- Translating learnings from clonal selection for antibody production in CHO cells.



Gilles Michel
Associate Scientific
Fellow
Takeda

2.30 Carrying out Precise Initial Stage Screening & Harnessing Inducible Expression to Maximise Viral Titres

- Reliably isolating highly productive clones via enhanced initial stage screening
- Employing tetracycline inducible system to control expression of toxic genes and gain control over lentiviral and AAV platforms
- Making the most out of automated High Throughput techniques to ensure high quality, complete data



3.00 Afternoon Break & Networking

Evaluating and Enhancing Current Practices



David Auslaender
Senior Principal
Scientist
Novartis

4.00 Achieving Speed to Clinic Using Plasmid Based Cell Engineering

- Harnessing plasmid based engineering techniques to improve multi-specific expression in CHO cell lines
- Accelerating the CHO cell line development process with FACS sorting
- Optimizing productivity and quality by selectively deleting genes to create an improved phenotype and reduce protein clipping



Ying Shen
Associate Scientific
Fellow
Takeda

4.30 Learnings to Take from Cell Line Development of Biologics to Advance Viral Vector Production

- Evaluating the potential learnings from cell line engineering approaches; target integration, transposases, cell surface displays and inducible systems to generate high productivity clones
- Enhancing the selection of final clones with clonality, achieving cell line stability and next generation sequencing confirmation
- Adapting advanced automation and high-throughput screening during the cell line development process

5.00 Chair's Closing Remarks

5.15 Close of Summit

Partner with Us

The **Novel Cell Line Engineering & Development Summit** paves the way in the field of advanced therapies,, providing the best space to connect and build relationships with the community, pioneering stable, scalable and affordable cell lines.

As biotechnology and pharmaceutical companies navigate new cell lines, media and cell culture decisions and aim for an increase in automation, they look for reliable collaborative industry partners to provide **raw materials, bioreactors and single cell printers, proprietary cell lines and media as well as vectors, engineered enzymes, and apparatus.**

Partner with this Summit to demonstrate your ability to help solve the most critical challenges encountered by key thought leaders at the cell line engineering and development stage. Help make advanced therapies more accessible to patients.

Partner with us to:



Showcase your technology and innovation, become critical for the advancement of cell line engineering and development to a clinical scale.

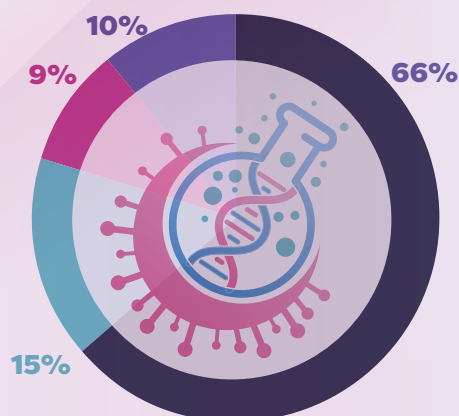


Connect face-to-face with senior decision makers, building relationships with potential clients and partners.



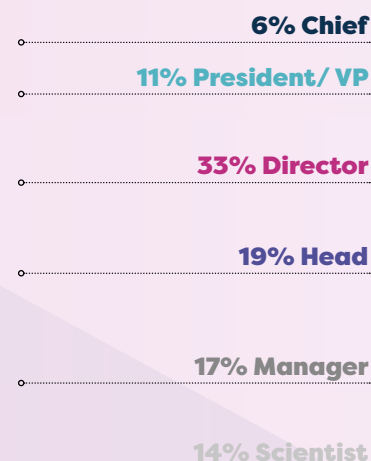
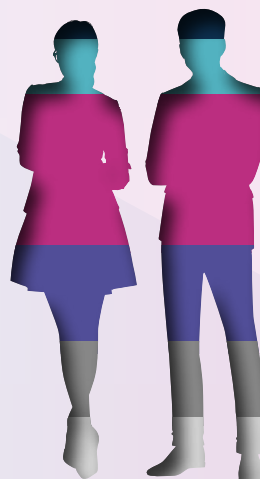
Secure one of our branding or speaking opportunities to drive brand awareness and distinguish yourself from your competitors.

Company Type:



Drug Developers
Regulatory Agencies
Equipment Manufacturers
CDMOs

Audience Seniority:



*Audience breakdown based on similar events in the series

Past Attendee, Process Development:

It is a fantastic meeting
CEO, Heartseed Inc., Past Attendee

GET INVOLVED



Kiran Thomson
Partnerships Director
Tel: (+1) 6174554188
Email: sponsor@hansonwade.com

Ready to Register?

3 Easy Ways To Book

-  www.cell-line-engineering-development-summit.com
-  Tel: +1 617 455 4188
-  Email: register@hansonwade.com

-  Harness the potential of innovative technologies and approaches to enhancing cell line engineering and development for ATMPs.
-  Increase the scalability and reduce the timeline and cost of goods of advanced therapies produced using cell lines.
-  Confidently navigate the path to achieving regulatory approval and speed to clinic, even for up-and-coming cell lines and alternative cell engineering methods.

Secure Your Place Now

Drug Developer Pricing	Book By February 17 & Save \$1,400	On The Door
Conference + 2 Workshops	\$2,897 (save \$1,400)	\$4,297
Conference + 1 Workshop	\$2,498 (save \$1,150)	\$3,648
Conference Only	\$2,099 (save \$900)	\$2,999
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Do you work for a Not-for-Profit organization? Email us at info@hansonwade.com to inquire about attending

Team Discounts*

- 10% discount – 3 Attendees
- 15% discount – 4 Attendees
- 20% discount – 5+ Attendees

Make the most of **Novel Cell Line Engineering & Development Summit** by attending with colleagues or registering your team. By attending as a group, you and your colleagues can make the most of the pre-conference workshops and networking sessions to ensure you leave with valuable connections and actionable insights.

VENUE

Hilton Boston Back Bay

40 Dalton St, Boston, MA 02115

https://hiltonbostonbackbay.reservationstays.com/requests/Y5Dvb3y1indroCNI74ESMg/hotels/dlVavDW2?expand_params=true

TERMS & CONDITIONS

Full payment is due on registration. Cancellation and Substitution Policy: Cancellations must be received in writing. If the cancellation is received more than 14 days before the conference attendees will receive a full credit to a future conference. Cancellations received 14 days or less (including the fourteenth day) prior to the conference will be liable for the full fee. A substitution from the same organization can be made at any time.

Changes to Conference & Agenda: Every reasonable effort will be made to adhere to the event programme as advertised. However, it may be necessary to alter the advertised content, speakers, date, timing, format and/or location of the event. We reserve the right to amend or cancel any event at any time. Hanson Wade is not responsible for any loss or damage or costs incurred as a result of substitution, alteration, postponement or cancellation of an event for any reason and including causes beyond its control including without limitation, acts of God, natural disasters, sabotage, accident, trade or industrial disputes, terrorism or hostilities.

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