

## NUCLEIC ACIDS

Production of DNA and RNA Biotherapeutics

SAVANNAH, GEORGIA USA

MAY 8–10, 2023

Chaired By:



**Lawrence C. Thompson, PhD**  
Pfizer, Inc.



**Lili Belcastro, PhD**  
Bristol-Myers Squibb Company

### SUNDAY • MAY 7, 2023

4:00 pm – 7:00 pm

**Registration and Welcome Reception** in Pulaski, First Floor

### MONDAY • MAY 8, 2023

8:00 am – 9:00 am

**Registration and Breakfast** in the Exhibit Hall (Madison Ballroom, First Floor)

9:00 am – 9:30 am

**Meeting Overview** in Pulaski, First Floor

9:30 am – 10:10 am

*Current Approaches & Challenges Concerning RNA Analytics for the Successful Development of an mRNA Vaccine*  
**Lawrence C. Thompson, PhD**  
Pfizer, Inc.

10:10 am – 10:40 am

**Morning Break** in the Exhibit Hall

10:40 am – 11:20 am

*mRNA — Analytical Tools to Support Adoption of This Modality*  
**Fouad Atouf, PhD**  
US Pharmacopeial Convention (USP)

11:20 am – 11:30 am

**Water Break**

11:30 am – 12:00 Noon

*Highly Agile Facility Designs for Manufacturing Cell, Gene, and mRNA & DNA Therapies*  
**Technology Workshop**  
Exyte

*All of the meals and activities shown in the program are included with your registration fee.  
Times are Eastern Daylight Time (EDT).*

**MONDAY (continued) • MAY 8, 2023**

12:00 Noon – 1:10 pm **Lunch** in the Exhibit Hall • (Poster Session from 12:30 – 1:10 pm)

1:10 pm – 1:50 pm *New Tools for Discovering and Mapping Nucleic Acid Modifications*  
**Peter Dedon, MD, PhD**  
Massachusetts Institute of Technology (MIT)

1:50 pm – 2:00 pm **Water Break**

2:00 pm – 2:40 pm *RNA Wars: RNA Viruses Versus the RNA Biology of the Cell*  
**Jeffrey Wilusz, PhD**  
Colorado State University

2:40 pm – 3:10 pm **Afternoon Break** in the Exhibit Hall

3:10 pm – 3:50 pm *Establishing a High-Throughput CE-SDS Platform for Multiple Applications on Gene Therapy Analytics*  
**Wei-Chiang Chen, PhD**  
Sanofi US

3:50 pm – 4:00 pm **Water Break**

4:00 pm – 5:00 pm *Development of mRNA Vaccines at Lightspeed... A Regulatory Perspective*  
**Walter Richard Pelt, II**  
followed by a Panel Discussion with:  
**Walter Richard Pelt, II, Michael Parks, Adrienne K. Stafford, and Andrew S. Nelson**  
Pfizer, Inc.

6:00 pm – 8:00 pm **Reception** in the Exhibit Hall

**TUESDAY • MAY 9, 2023**

7:30 am – 8:30 am **Breakfast** in the Exhibit Hall

8:30 am – 9:10 am *Fieldable Automated DNA Synthesis Technology*  
**John Nelson, PhD**  
GE Research

9:10 am – 9:20 am **Water Break**

9:20 am – 10:00 am *Phase 1 Results from the First NIST Genome Editing Consortium Interlab Study*  
**Samantha Maragh, PhD**  
National Institute of Standards & Technology (NIST)

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**TUESDAY (continued) • MAY 9, 2023**

10:00 am – 10:30 am

**Morning Break** in the Exhibit Hall

10:30 am – 11:10 am

*Analytical Framework Considerations to Support Successful mRNA Programs*

**Khaled Yamout**

TriLink BioTechnologies, part of Maravai LifeSciences

11:10 am – 11:20 am

**Water Break**

11:20 am – 12:00 noon

*A Newly Developed, Quick to mRNA Manufacturing Process*

**Swap Ghosh**

Pfizer, Inc.

Free Afternoon with Recommended Group Activities

*Lunch on your own!*

12:00 noon – 6:00 pm

• **Guided Trolley Tour of Historic Savannah** •

• **Guided Walking Tour of Bonaventure Cemetery** •

*See the registration desk to sign up for activities (first come, first served)!*

6:00 pm – 9:00 pm

**Garden Party Banquet** at the historic Green-Meldrim House

**WEDNESDAY • MAY 10, 2023**

7:30 am – 8:30 am

**Breakfast** in the Exhibit Hall

8:30 am – 9:10 am

*Utilizing Novel DNA Technologies as Templates for HDR with Non-Viral Gene Delivery*

**Sophie Sichel, PhD**

Bristol-Myers Squibb Company

9:10 am – 9:20 am

**Water Break**

9:20 am – 10:00 am

*DNA Matrices for mRNA Production*

**Christoph Kröner, PhD**

BioNTech

10:00 am – 10:30 am

**Morning Break** in the Exhibit Hall

10:30 am – 11:10 am

*RNA Genomics Technologies: Accelerating RNA Therapeutics*

**Marco Blanchette, PhD**

Eclipse BioInnovations

11:10 am – 11:20 am

**Water Break**

11:20 am – 12:00 Noon

*NGS for Adventitious Agent Detection and Critical Quality Attribute Assessment: Considerations and Outcomes*

**Qiu Ruan, PhD**

Genedata, Inc.

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12:00 pm – 1:30 pm

**Lunch** in the Exhibit Hall • **(Poster Session from 1:00 – 1:30 pm)**

1:30 pm – 2:10 pm

*Highlights from the Molecular Toolkit for E. coli Cell Bank, DNA Plasmid, and mRNA Product Characterization*

**Christopher J. Wang**

Merck & Co., Inc.

2:10 pm – 2:20 pm

**Water Break**

2:20 pm – 3:00 pm

**Poster Finalist Presentations and Awards**

3:00 pm

**Meeting Adjourns**

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*Due to circumstances beyond the control of meeting organizers, this program is subject to change without notice.*

REV 05/04/2023