

# ANDREW LARRIGAN

Director, Technical Operations



As the Director of Technical Operations at Modality Solutions, Andrew Larrigan leads all testing operations, providing strategic and technical oversight to ensure testing approaches align with client needs, regulatory expectations, and evolving industry guidance. He oversees transportation simulation and cold chain testing programs supporting biologics, pharmaceuticals, gene and cell therapies, and combination medical device products across global distribution networks.

Andrew is a recognized expert in the design of realistic, risk-based transport simulation studies. For more than 10 years, he has designed and executed over 250 studies supporting 100+ regulatory filings. His work spans evaluation of drug product robustness, device functionality, plunger movement characterization, packaging durability, label integrity, and thermal performance. He has experience with all primary, secondary, and thermal packaging configurations across controlled room temperature, refrigerated, frozen, deep frozen, and cryogenic supply chains.

His experience also includes supporting clinical trial operations in challenging and resource-constrained environments. Andrew has participated in on-site evaluations of cold chain distribution systems and the development of mitigation strategies for vaccines and life-saving therapies, including work in West Africa during the 2016 Ebola epidemic. These experiences directly inform his practical, real-world approach to distribution testing and risk assessment.

In addition to client-facing technical leadership, Andrew maintains high standards for laboratory and facility operations. He has built and managed preventative maintenance and equipment calibration programs, led multiple laboratory upgrades and expansion efforts, and played a key role in the launch of Modality Solutions' Greenwood facility, ensuring consistent, high-quality testing outcomes under both standard and expedited timelines.

## Affiliations

ASTM International - D10 Packaging Committee, Second Vice-Chair

Institute of Packaging Professionals (IOPP)

International Safe Transit Association (ISTA)

Parenteral Drug Association (PDA)

## Education

Bachelor of Science, Chemical Engineering

The Ohio State University