## DANIEL J. LITTLEFIELD Principal and Co-founder

Daniel Littlefield is a principal of Modality Solutions. As one of the biopharmaceutical cold chain engineering firm's founders, he has helped establish Modality Solutions as an innovator in the cold chain logistics industry. Dan has exemplified this leadership during Modality Solutions' recent clinical trial operations work in the Democratic Republic of the Congo (DRC), along with its earlier work in Sierra Leone, Liberia, and

Guinea. Since 2015 Dan has spearheaded Modality Solutions' NIH / CDC-sponsored clinical trial operations support for Ebola vaccine and treatments. In 2019, Dan and Modality Solutions engineers supported an Ebola 680-person, controlled clinical trial in the war-torn North Kivu Province of the DRC that resulted in a 90% survival rate for those treated with antibody-based drugs shortly after injection.

In addition to his work with emergency response clinical trials, Dan leads the Modality team's technical and operations effort. With his leadership, Modality Solutions' engineers have provided support for more than 70 successful regulatory outcomes for the full spectrum of biopharma products, including gene and immunotherapies. His expertise in heat transfer, thermodynamics, advanced mathematics, and artificial intelligence have assisted Modality Solutions with cutting edge technology opportunities.

Dan was a presenter at the 2017 17th Annual World Vaccine Congress and the 2016 PRA Vaccine Summit. He is a leading advocate, expert, and sought-after speaker on process improvement, safety, and security for varied industry sectors, including health care, pharmaceutical, packaging, medical device, law enforcement, and defense industries.

During his 18-year career with DuPont, Dan managed a \$250M chemical manufacturing unit with more than a hundred employees. In 2000, he was part of the first group of Six Sigma Black Belts at DuPont. After four years, he was certified as a Master Black Belt (MBB) and as an expert LEAN Practitioner. Dan is a two-time recipient of DuPont's Engineering Excellence Award.

## Work Experience

DuPont Crop Protection NIACHLOR (DuPont/Olin JV) DuPont Specialty Polymers

## Education

Bachelor of Science, Chemical Engineering Master of Science, Chemical Engineering La Porte, TX Niagara Falls, NY Parkersburg, WV

The Ohio State University The Ohio State University

## Certifications

Six Sigma Black Belt, Six Sigma Master Black Belt, Lean Practitioner HAZMAT Technician, HAZMAT Safety Officer, HAZMAT Incident Commander

