

Holistic Approach for Analytical Method Transfer

Nathaniel Hentz, Ph.D.


Director, Scientific Market Development

Artel, Inc.

Key Phases in Assay Automation

Phase 1: Biology



Method

Transfer

Phase 2: Automation



Method Transfers Are Critical



10-40%
method
transfers fail

Many reasons for failure

Poor documentation

Insufficient communication

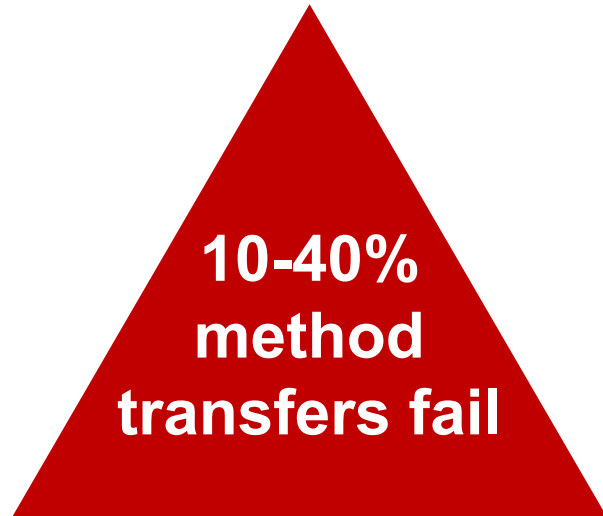
Improper training

Poor equipment qualification

Weak method development/validation

Poor acceptance criteria/specifications

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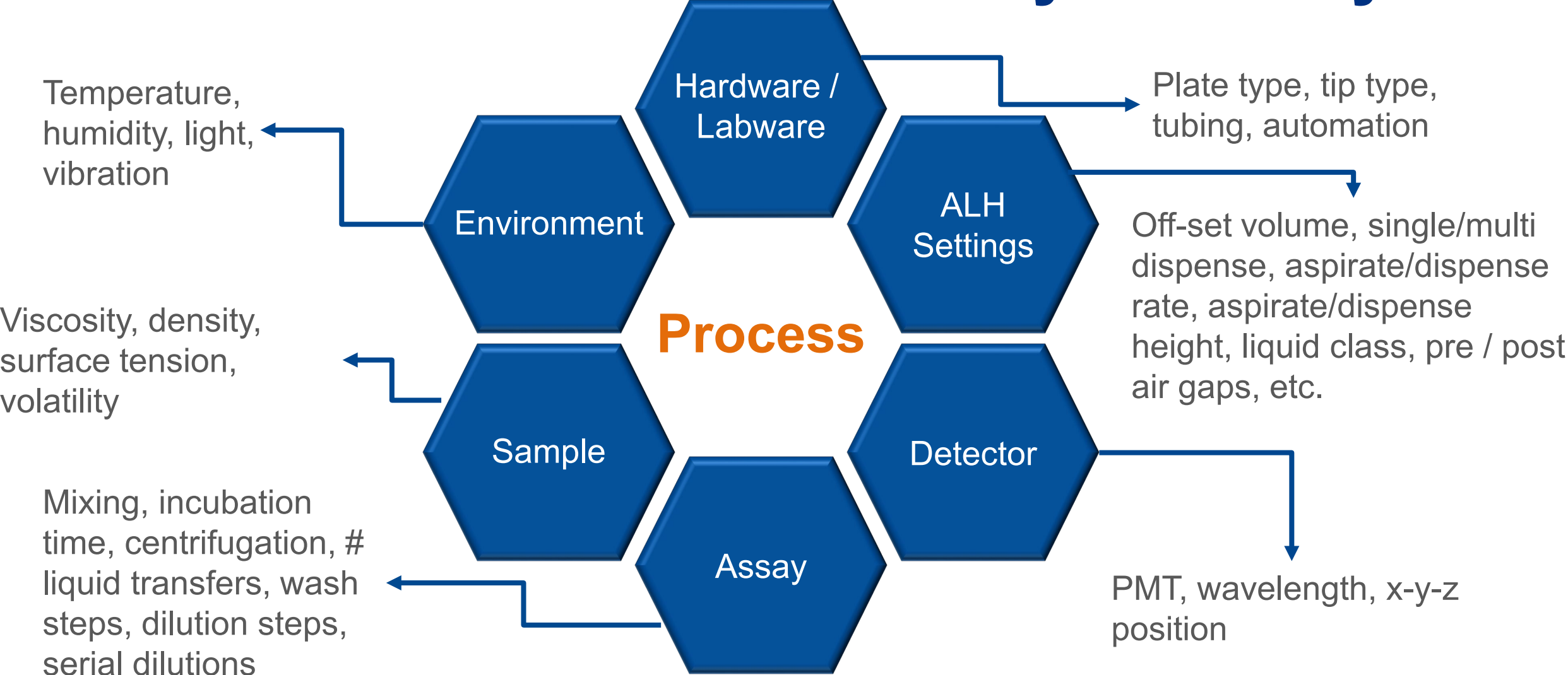
Poor equipment qualification

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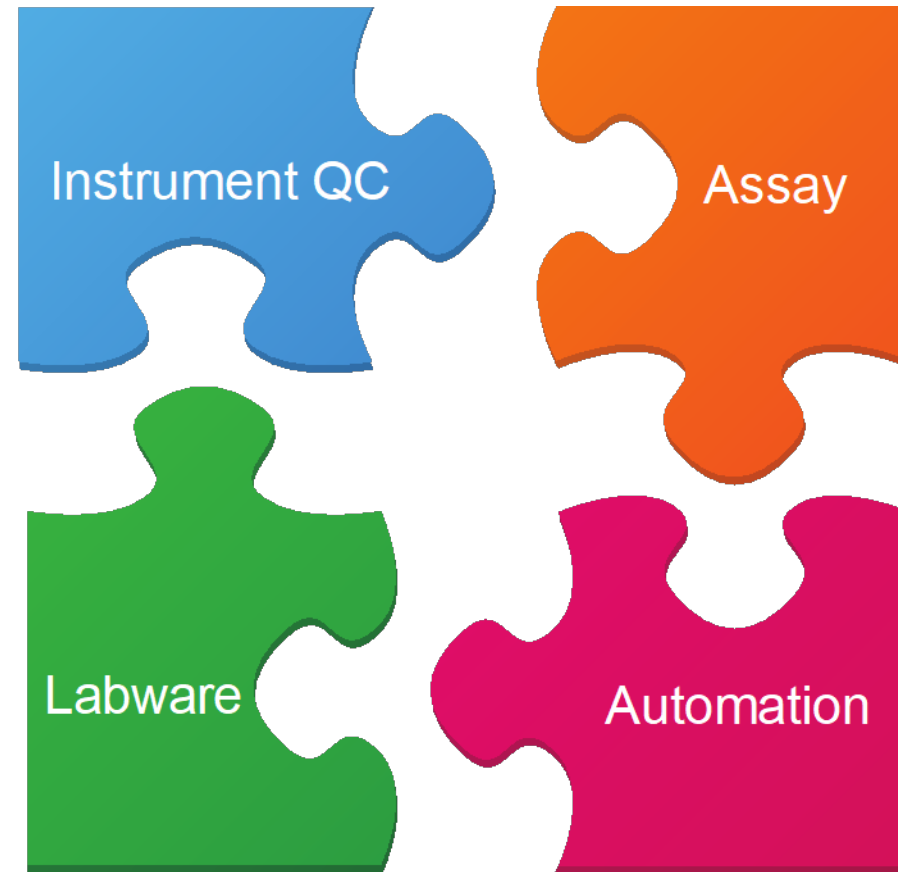
Poor acceptance criteria/specifications

**Artel MVS can address these issues*

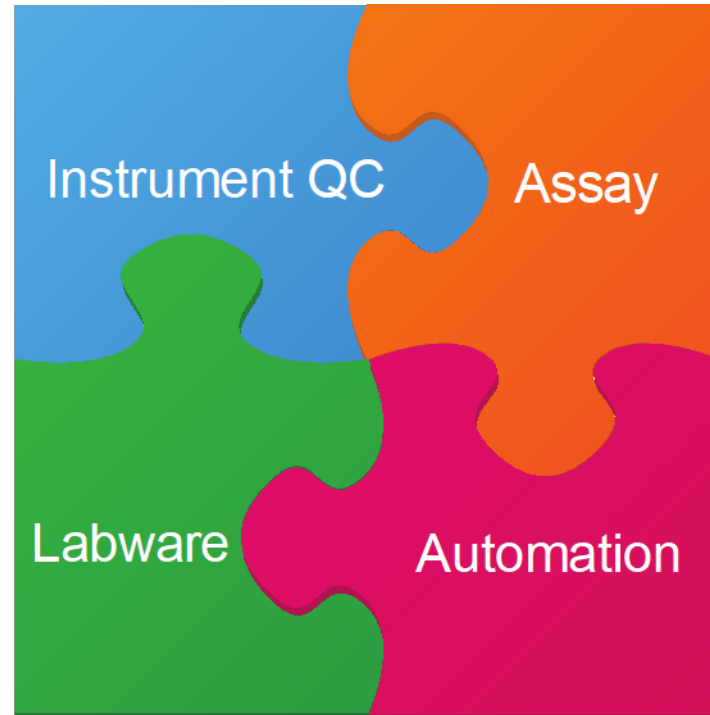
Parameters that Effect Assay Variability



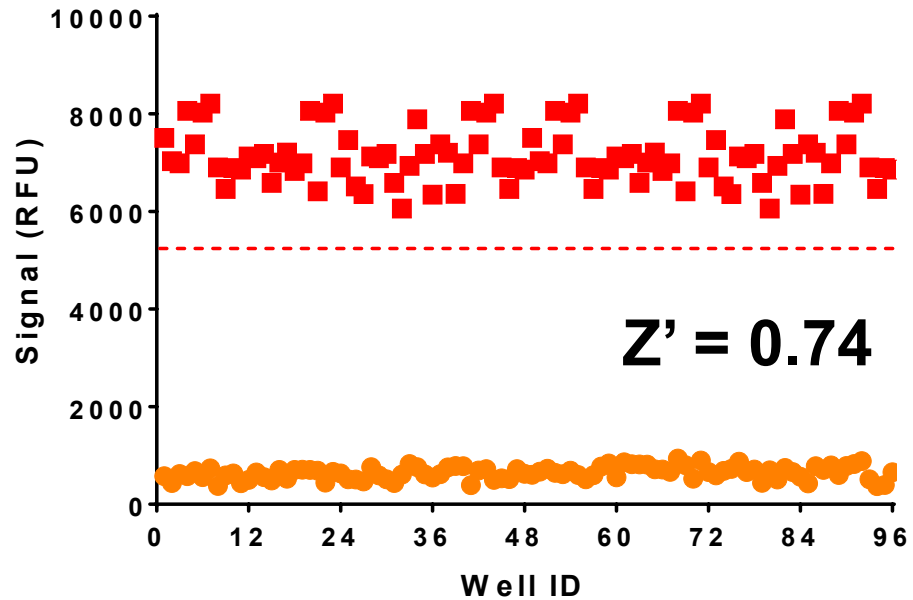
The Problem



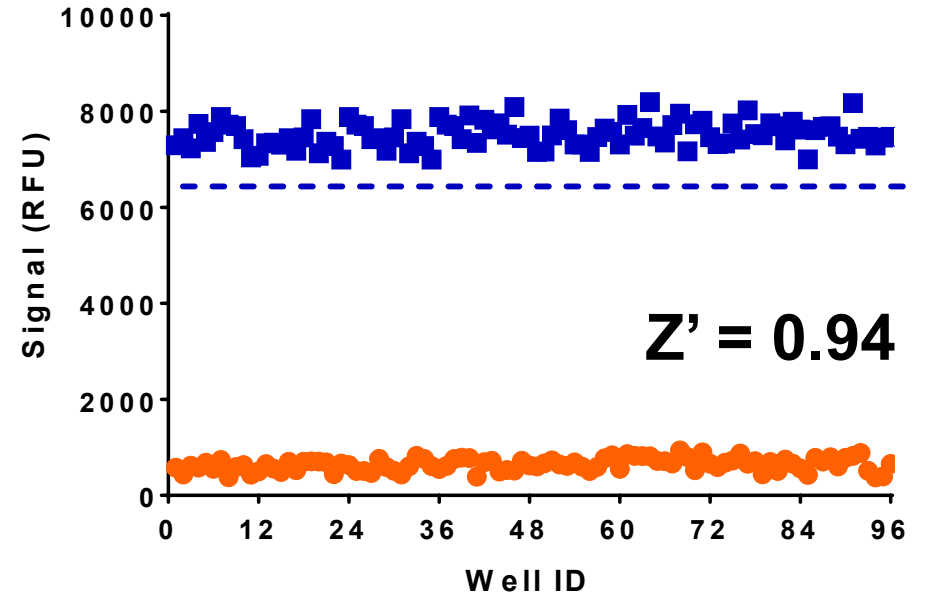
The Solution



The Result

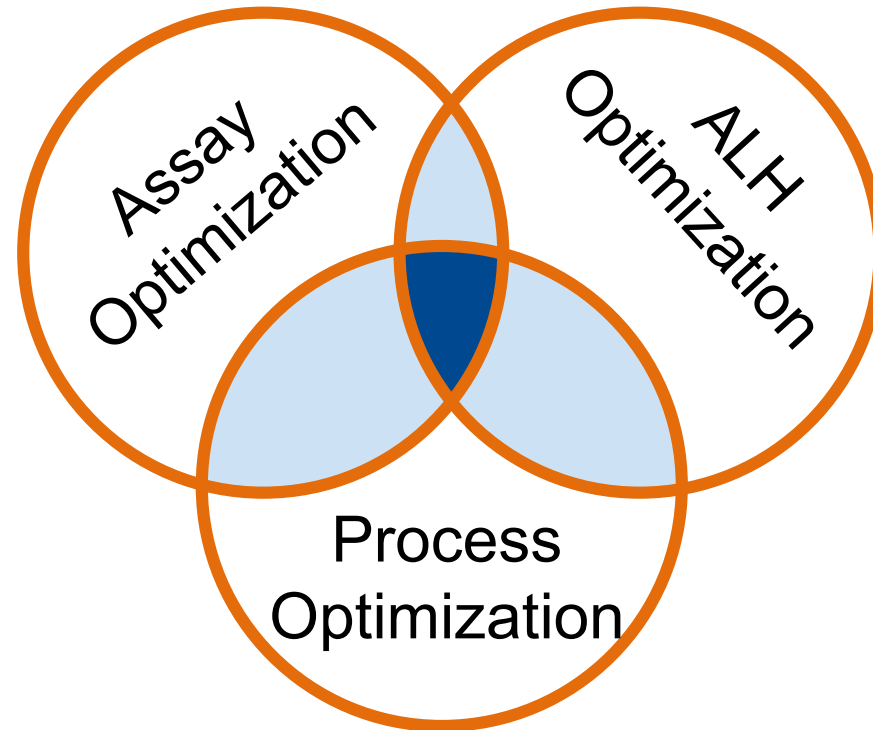


Good Assay

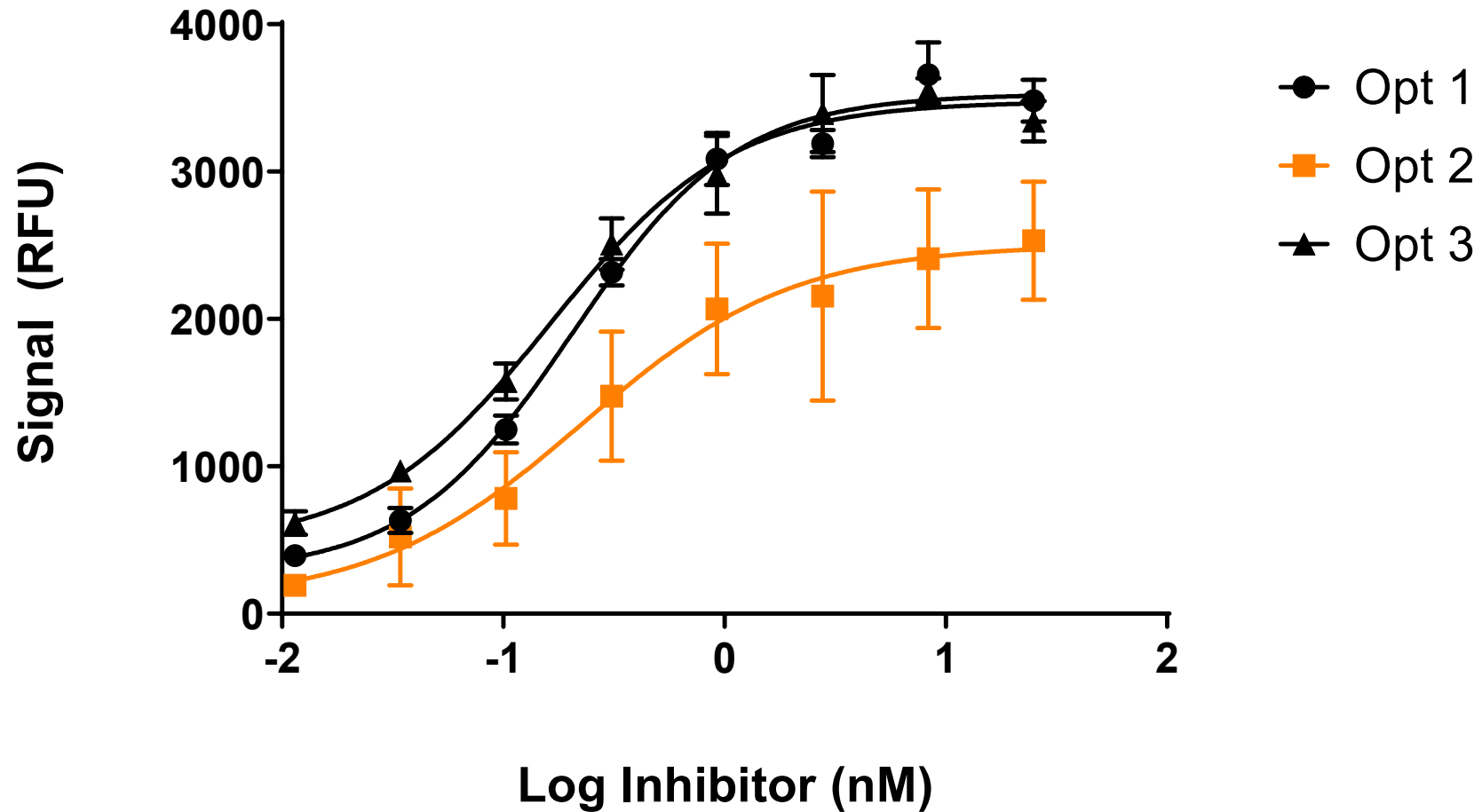


Better Assay

How is This Accomplished?



The Result



Value Proposition

**Minimize
overall
variability**

**Reduce error
rates**

**Improve data
resolution**

**Speed
method
transfer**

Q&A

Thank You

Would you like more information?

1. N. Hentz and E. Avis. Improving Assay Performance Using a Process Optimization Approach; SLAS2017 poster.
2. N. Hentz and T. Knaide. Effect of Liquid-Handling Accuracy on Assay Performance; *J. Lab. Automation*, 2014, 19(2) 153–162.
3. <http://www.artel-usa.com/resource-library/>