

# Single-Use BioProcessing Automation committee

## *Overview statement*

*Single-use bioprocessing automation is specific and increasingly more used, good practices and education should help to adopt single-use technologies more broadly and would provide insight where the industry should go related to this matter.*

# Team Members

- Stuart Tindal, Sartorius. (Co Chair)
- Hernan Parma, Renolit. (Co Chair)
  
- Genara Andrade, DuPont
- Andrew Wilson, Thermo Fisher Scientific
- Kyle Kolb, Thermo Fischer Scientific
- Greg Love, Bürkert
- Jeffery Leverton, Wood
- Kirsten Strahlendorf, Sanofi
- Charlie Zhang, Sanofi

Active recruiting in-progress

## BPSA

- Jeanette McCool, Senior Director
- Chris Clark, Executive Director

# BPSA Automation Survey



1. Selected 5 pain points from Brainstorm sessions on top pain points related to single-use automation
  - Based on committee members experience.
2. Decided to verify pain points through industry survey.
3. Several channels used to increase the reach of the survey
  - BPSA & company mailing list
  - Aspen Alert mailing thanks to Bürkert
4. Response rate 99 ppl, but only 43 responded to pain points questions
  - Selected pain points confirmed by responders.
  - Only 13 end-users. Did we reach the right audience?
  - Limited data to draw conclusions.
5. Confirmation/Identification of pain points from KOL:
  - Webinars Q1 2023.
  - BPSA 2023 Summit Committee Meeting & Automation Session

# Surveyed Pain Points



## 1. Communication protocols/ decentralized vs centralized control.

- Difficult to connect automation structures (no direct communication between systems), different integration/ interfaces scenarios and options for local to supervisory control.

## 2. Integration into quality records

- Integration of automation data into quality records. Regulatory compliance of automated systems.

## 3. Integrity, leak or CQA testing single-use setup

- As single-use design complexity increases, also the integrity of these designs needs to be controlled/tested. Manual effort no automated solution.

## 4. Sensing performance & duration in single-use solutions

- Poor sensing and actuator performance for single-use offering, precision and accuracy is needed for long processes and control of these parameters.

## 5. Lack of automation in single-use process

- Only a limited amount of single-use process is automated, majority still requires manual intervention.

## 6. *~open input for additional pain point~*