

# 2018 PDA INTRODUCTION TO ARTIFICIAL INTELLIGENCE (AI) IN BIOTECHNOLOGY OPERATIONS WORKSHOP

1-November-2018 | Westin Singapore | Singapore, Singapore

## Instructors:

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## AGENDA

### THURSDAY, 1-NOVEMBER

8:00 – 12:15 | **Registration Open**

9:00 – 9:15

#### Introductions and Overview

- Exercise 1: Poll Everywhere of participant experience with AI
- Facilitator and participant Introductions
- Overview of the workshop

9:15 – 10:00

#### Introductions and Overview

- What is Artificial Intelligence (AI)?
- Historical perspective on AI
- Defining major AI focus areas
  - What is Natural Language Processing?
  - What is Machine Learning?
  - What is Deep Learning?
- Framework for applying AI

10:00 – 10:15 | **Break**

10:15 – 11:00

#### Applying AI to Quality Operations

- Regulatory motivation
- Exercise 2: Breakout group identification of use cases where Natural Language Processing (NLP) could support Quality Management System Vigilance.
- Common methodologies used to explore text-heavy information
- Case Study: Applying AI to trending deviations

11:00 – 11:45

#### Applying AI to Manufacturing Operations

- Business motivation
- Exercise 3: Breakout group identification of use cases where AI could assist in your supply chain
- Case Study: Applying AI to component or raw material root cause analyses

11:45 – 12:00

#### Final Thoughts

- Amgen Lessons-learned
- Regulatory Validation Concerns
- External Resources