# PAGE Building capability for the future





# Why PAGE

# Pharmaceutical industry is at the cusp of transformation





#### **Vision of the Sector**

- Market Share: Grow to USD 120-130 billion by 2030\* from USD 57 Bn today
- Quality as a Culture: Demand for high levels of manufacturing and Quality
   Assurance / Control / Compliance
- Strong Alignment with Government and International regulatory agencies (e.g.US FDA, EMA) for skill and compliance.

#### **Industry Leader Insights**

- Hands-on Training: Manufacturing, Quality, and Engineering teams need hands-on training on actual machines.
- **Faculty:** Qualified trainers / Industry SMEs / ex-FDA regulators focusing on case studies, real life practical training content.
- Future-ready Workforce: Alignment with SOPs and use of technology in training.

### **Purpose and Values of PAGE**





#### **PURPOSE**

"To be the global benchmark in pharmaceutical training for quality and manufacturing excellence offering industry led programs at scale"



#### **VALUES**









These values ensure PAGE isn't just a training initiative, but a world class, long-term, capability-building institute

### Industry leaders as founding members





























# Integrated campuses as 'Hubs' and CoEs as 'Spokes'



Develop **2 hubs at Ahmedabad & Hyderabad** which would be supported by **Spokes as specialized COEs** 



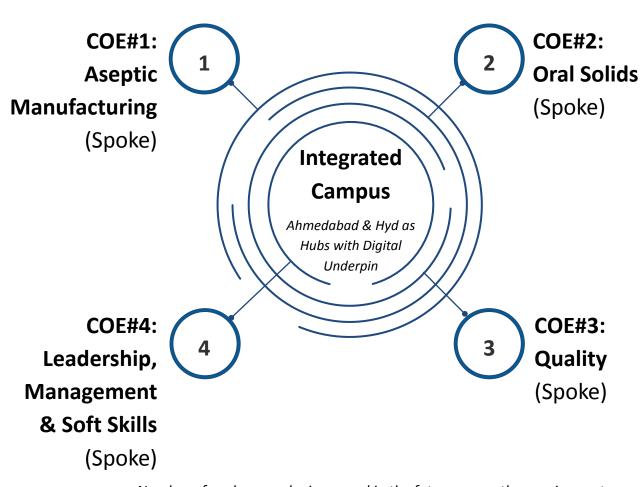
**Short Term**: Launch pilot programs and build full-fledged campuses in Ahmedabad & Hyd as Hubs



Medium Term: Operations in multiple locations (as CoE spokes) across major pharma clusters (Baddi, Bangalore, Goa, Chennai etc.).



Long term: Build for scale. Continuous supply of fresh talent both Tech and Pharmacists Replicable modules in employee training. MSMEs to also get included.



Number of spokes may be increased in the future as per the requirement

# **Program Offerings & Target Learners**



The following programs have been shortlisted based on the market needs, benchmarks, and discussions with the industry leaders comprising of quality, manufacturing, and HR heads.

#### Holistic coverage of employees across the organization for a Cultural Mindset shift





# Operator / Line Supervisors



# or. Managers / Site Leaders



# Proposed Programs

Pharma Graduate
 Certification Program

- Manufacturing: Aseptic processing and sterilization
- Manufacturing: Oral Solids
- Quality culture
- Soft Skills (Behavioral / Managerial)

- All programs applicable for Operator/ Line Managers and
  - Documentation (GMP)
  - FDA 483 Inspection Readiness
  - Simplifying SOPs
  - Root Cause Analysis and Documentation

- Leadership programs curated on specific themes based on company needs.
- Quality culture

# Proposed Delivery Model and Duration

- On-Campus
- 4 weeks / 2 weeks
- Phase 1 pilot started with training for 4 weeks with 8 hours/day
- On campus
- 1-2 weeks

- Hybrid
- 1 week

3 days (in- person).

#### Trainings on emerging technologies (like AI, AR/VR, Blockchain etc.)

<sup>\*</sup>Program Advisory councils formulated for specific program areas comprising of leading practitioners from across organizations to advice on the program design

### How PAGE will help Pharma companies



#### Core Benefits

# Access to a Qualified Talent Pool

- By equipping graduates with job-ready, industry-relevant skills, this program minimizes the need for extensive onboarding or retraining
- PAGE will serve as a Tier-1 talent hub for the pharma industry, developing a strong future pipeline of industry-ready graduates comparable to top-tier institutions

#### **Filling Critical Skill Gaps**

- Bridges the gap between academic learning and advanced technical skills required in modern pharma roles
- With a curriculum continuously aligned to evolving industry standards, companies benefit from graduates whose capabilities match current and future requirements

#### **Support for Employee Growth**

- Existing employees to be nominated by companies for continuous upskilling through PAGE's training programs
- By fostering a culture of lifelong learning, PAGE helps pharma companies futureproof their workforce against evolving industry standards & technological advancements

How We Deliver These Benefits

- The course structure, modules, and delivery will be developed in collaboration with representatives from the partner companies and PAGE's team of industry veterans
- This guarantees the curriculum is always current, relevant, and aligned with dynamic industry needs

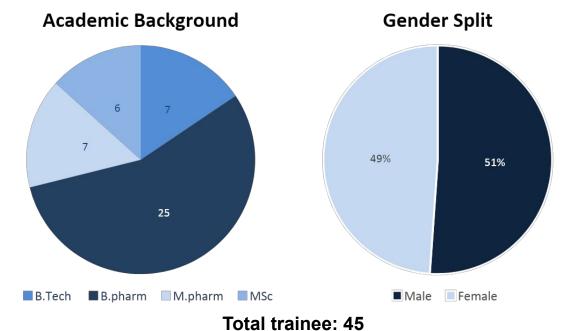


# Pilot programs

### **PAGE Pilot Batch for Freshers | Highlights**







#### Model for the pilot batch

- Blended cohort: Mixed batch comprising of company-hired freshers and PAGE-sourced candidates to ensure a steady, high-quality talent pipeline. PAGE would also include some eligible trainees from economically backward groups.
- Common foundation: All trainees complete a Manufacturing & Quality Excellence baseline so every hire—sponsored or PAGE-sourced—meets the overall shop-floor and QA/QC readiness standards
- Outcome focus: The mix improves capability breadth, comparison of talent pool and immediate deployability across Production and Quality roles.

#### **Trainers for our Pilot batch**



#### **Trainers Brief Profile**



#### Dr. Rajiv Desai (38+ years in Pharma Quality)

Senior Technical Advisor, Indian Pharmaceutical Alliance, Ex- Corporate Quality Head at Lupin, Dr. Reddy's, Mylan, Piramal



#### Amit Kanabar (17+ years in Quality & GMP)

Head of INTAS Centre of Excellence; Ex-Mcleods, Lupin, Alembic; Expertise in QA/QC Training



#### Dr. Ajit Datar (40+ years in Analytical Chemistry)

Professor of Practice, Ruia College; ex-Advisor, Shimadzu Analytical India. Expert in chromatography, spectroscopy & advanced instrumentation



#### Kumar Nanavati (36+ years in Pharma Quality)

Ex-Quality Head, Sun Pharma; Expertise in Microbiology, Sterile, Regulatory Audits & Multi-dosage forms



#### Dr. Pranav Jogani (25+ years in Formulation and R&D)

Ex-Cluster Head, Zydus Lifesciences; Expert in formulation, regulatory affairs & product development



#### Dr. Rajendra Das (29+ years in Engineering & EHS)

Ex-VP Global Engineering & Projects at Sun Pharma and Ex-Director of Engineering, Projects and EHS of Cipla Ltd

### **Modules Overview**





#### Module 1: Foundational Module for Pharma Operations

- Fundamentals of GMP and Manufacturing Practices
- Quality Management System
- Basics of Documentation processes
- Environmental, Health & Safety
- Behavioural & Effective Communication
- Warehousing and Waste Management



- Manufacturing Processes
- Packaging



- Environmental Control & Monitoring
- Manufacturing Processes for Injectables



- Laboratory Best Practices
- <sup>☆</sup>• Wet Analysis
  - Instrumental Methods
    - HPLC
    - Ultraviolet Spectroscopy
    - Gas Chromatography
    - Infrared Spectroscopy
    - Non aqueous titrations
    - Particle size analysis
    - Karl Fisher Analysis
  - Stability Studies
- Microbiology

Modules 1 and 4 are common. We have options of covering all the above modules or break up module 2 as OSD/Injectables/Engineering etc.

### **Industrial Visits**





#### **Emcure (Mehsana)**

- Exposure to OSD manufacturing, sterile manufacturing, packaging, and warehouse operations
- Bridged classroom learning with real-world pharma practices

- Explored Packaging, Tablet Press, and Tooling Divisions
- Observed advanced machinery tablet compression, soft gel encapsulation, bottle filling lines
- Exposure to high-precision CNC machines for punches, dies & compression equipment

#### Parle Global Technologies Pvt. Ltd. (Sanand)



# QC Refresher Program – Pilot batches for employees





#### **Salient Features**



For experienced QC professionals (3–5 years) - focuses on practical problem-solving rather than basic operations



**Refresher on analytical troubleshooting** across key QC instruments and methods, helping participants go beyond SOPs to identify and resolve root causes



**Case-based learning** from real industry deviations, OOS/OOT investigations, and lab incidents



**Bridges knowledge-to-ownership gap** - builds analytical thinking, documentation quality, and confidence in decision-making



Module co-created with industry experts and supported by leading pharma companies, ensuring alignment with current regulatory and operational expectations



#### **OEM-Led Instrument Training**

- Hands-on training by Original Equipment Manufacturers (OEMs) for key QC instruments and software
- Focus on calibration, troubleshooting, and maintenance best practices, not just operation
- Exposure to latest model updates and digital advancements directly from equipment makers
- Enables QC professionals to understand regulators expectations, reduce dependency on service engineers and minimize downtime



#### **Report & Investigation Writing**

- Tailored for mid-level QC associates who initiate most incident and deviation reports
- Training on scientific documentation, root cause articulation, and CAPA to improve data integrity and audit readiness
- Enhances collaboration with QA and strengthens confidence during regulatory audits

Program Outcome



A technically confident, investigation-ready QC workforce - capable of diagnosing issues, documenting precisely, and ensuring analytical reliability



# Looking Ahead

### **Next Steps**

Evolve as a critical partner for skill building for Pharma industry

01	Consolidation of Freshers Training modules with multiple options of skill set building (OSD/Injectables/Engineering etc.)
02	Academia collaboration to create a industry bridge from final year (Internship to Placement)
03	Relook at the Technician /Operator profile and build a steady supply model
04	Replicable and one-time programs on current focus areas with shopfloor employees.
05	Build a world-class training facility in Ahmedabad, followed by Hyderabad.



# Thank you