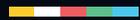


# The Laboratory Transformation and Improvement Program

Developed by

**POWER** *of* **PROCESS**



Endorsed by



- ✓ *Accredited*
- ✓ *Practical*
- ✓ *Short*
- ✓ *Affordable*
- ✓ *Scalable*



Institute of  
Biomedical Science

# The Laboratory Transformation and Improvement Program

## Program purpose

This program will assist laboratory leaders and teams in recognizing the need for change and identifying problems, pain points, and opportunities to solve and improve laboratory performance. This program will develop the ability of laboratory leaders to transform laboratory resources into the new desired state to ensure their future relevance.



**10 HOURS**  
Asynchronous e-learning



**TIME COMMITMENT**  
1,5 Hours per week over 8 weeks



**BONUS**  
Case Study

## Program content

1. Introduction
2. Change, Transformation, and Culture
3. Understanding the Laboratory Value Chain
4. The Laboratory as a Process
5. Problem-solving
6. Understanding Laboratory Performance
7. Gathering Performance Data
8. Level One Mapping
9. Level Two Mapping
10. Collecting Human Resources Information
11. Collecting Equipment Data
12. Turnaround, Takt, and Cycle Time
13. Points of Interest and Demand
14. LIS Data
15. Brainstorming
16. Checksheets
17. Pareto Analysis
18. 5-Why Analysis
19. Cause and Effect Diagrams
20. Waste
21. Scenario Development
22. Evaluating Improvements
23. The Business Case
24. Implementation
25. Change Management
26. Performance Improvement in Practice - A Case Study
27. Your Own Workplace Project

## Special requirements

Delegates must be proficient in using a computer, and MS Office, especially MS Excel. A Stable internet connection is required.



## Accreditations

- 10 Contact Hours – American Society for Clinical Laboratory Science (PACE)
- 10 Hour Credits – Royal College of Pathologists
- 10 CEUS – Level 1 Society of Medical Laboratory Technologists of South Africa (SMLTSA)

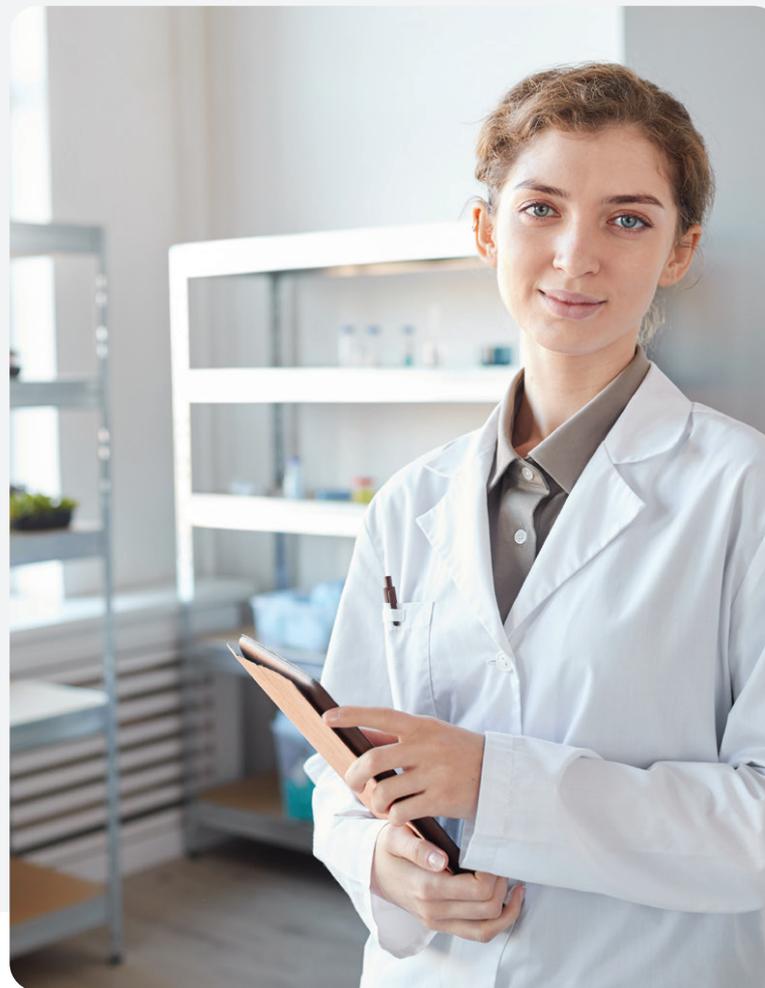
## Commercial support disclosure

The Laboratory Transformation and Improvement Program is a product of Power of Process (Pty) Ltd.

## Program scope

The Laboratory Transformation and Improvement Program addresses the following knowledge areas:

- Recognizing the need for change and transformation to ensure the future relevance of the laboratory
- Understanding the laboratory ecosystem, process, and performance in a fast-changing environment
- Gathering and analyzing laboratory performance data from different sources using various tools
- Identifying and addressing problems, pain points, and opportunities within the laboratory
- Developing and testing scenarios to solve multiple issues and pain points
- Creating a business case and plan for implementation
- Managing change using the Kurt Lewin Model



## Learning objectives and outcomes



### LEARNING OBJECTIVE 1:

**Do an environmental screening and recognize the need for transformation and change to ensure the laboratory's future relevance.**

Delegates will discover and gain insights about external factors that could negatively impact the laboratory, like the political and socio-economic environments, the economy, current technology, and legislation. Delegates will learn about transformation as a change management strategy that re-aligns processes, people, systems, infrastructure, and technology with the laboratory's mission, vision, and strategic objectives when aligning with changes in the healthcare macro or business environment.

2

**LEARNING OBJECTIVE 2:****Understand laboratory performance and processes operating in the laboratory value chain.**

Delegates will discover and gain insights into how the lab must constantly balance cost-efficiency with service delivery as well as continuity within its value chain. They will explore the levers to improve overall performance to deliver a quality test result at an affordable price and within a reasonable turnaround time. Delegates will learn how to look at processes, the inefficiencies that could occur and identify better working methods.

3

**LEARNING OBJECTIVE 3:****Gather and analyze laboratory performance data.**

Delegates will delve deeper into the details of targets and target setting to determine where the lab is in terms of current performance and where it could be using the triangle of pain. The delegates will also learn more about performance data, data sources, process parameters definitions, and data collection plans.

4

**LEARNING OBJECTIVE 4:****Identification of laboratory problems, pain points, and opportunities.**

Delegates will gain insights into problem definitions and how to approach them as a function of their causes. They will learn how to use different tools and methodologies to get to the root cause of the problem and resolve them.

5

**LEARNING OBJECTIVE 5:****Scenario development and testing to solve multiple problems and pain points within the laboratory.**

5. Delegates will learn to develop basic MS Excel simulations to resolve problems and pain points to improve the laboratory process. Delegates will also learn to evaluate improvement initiatives by considering system constraints, sensitivities, and alternative scenario development.

6

**LEARNING OBJECTIVE 6:****Developing the business case, plan for implementation, and change management.**

Delegates will learn how to ensure the alignment of the project with the strategic objectives of the lab. They will learn how to identify possible risks and manage them proactively. They will gain insights into how to structure the business case for project implementation, planning for project execution, and managing different types of change, change resistance, and the impact of change on the laboratory organization.

7

**LEARNING OBJECTIVE 7:****Laboratory performance improvement in practice - a case study**

Delegates will learn how to integrate everything learned through an integrated case study that will improve the performance of a laboratory.

8

**LEARNING OBJECTIVE 8:****Embed learning and build muscle memory through the implementation of a workplace project.**

Delegates will have the optional opportunity to identify a performance improvement project in their laboratory and execute it in tandem with the course. This will help them to build muscle memory while engaging with the course content. They will use the following structure to implement what they have learned into the workplace:

- Conducting an external/internal business analysis
- Develop an understanding of the laboratory process
- Gather and analyze laboratory performance data
- Identify problems, pain points, and opportunities
- Using tools to solve problems, pain points and opportunities
- Developing and testing scenarios
- Building the business case and plan for implementation
- Implementation and change management
- Monitoring and adjustments

# Qualification of instructional personnel



**Andre Gouws**

*Instructor*

Andre is a seasoned skills development professional with over 27 years of experience in the learning and development sphere. He holds a degree in electrical engineering with an international diploma in teaching and training. He has completed the Management Advanced Program through Wits Business School and is a certified NQF assessor, moderator, and workplace coach. André's passion for helping people reach their potential is evident through his hands-on teaching methods. He is known to inspire, motivate, and develop people to help them achieve their business objectives and career aspirations. His engineering background, combined with human resources experience and business management acumen, provides him with a unique skill set to research, develop, and deliver skills development programs that truly impact the bottom line. He is passionate about laboratories and their role in the quality of life and making us live longer, healthier and stronger. With this in mind, he has developed the Power of Process skills development programs that help laboratories enhance patient care through business management and laboratory performance improvement in a rapidly changing environment. He has also authored a textbook called "[The Guide to Management for Laboratory Leaders](#)" that is available at [Amazon.com](#)



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