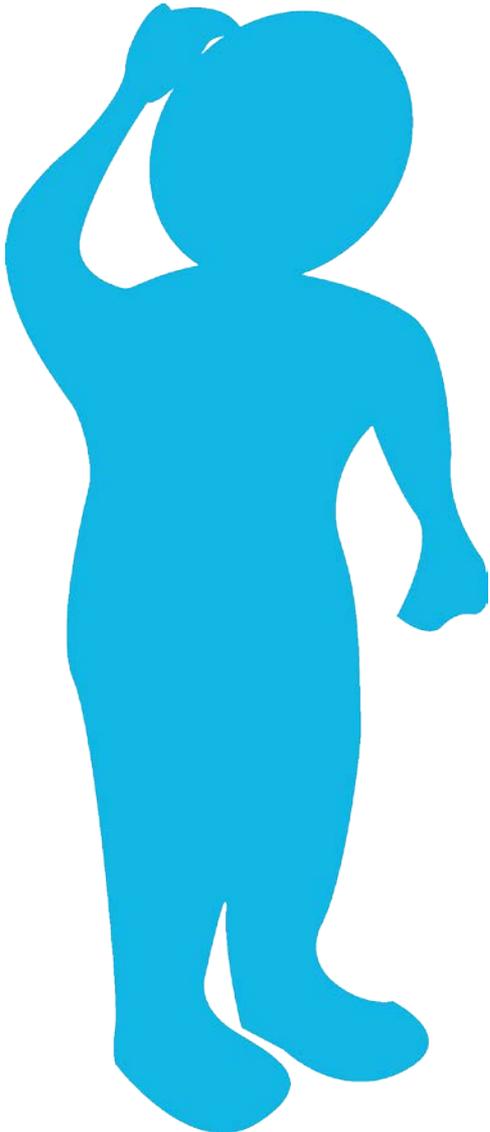# Safety Culture in Life Science Labs—Through the Looking Glass

ABSA, Grapevine, TX
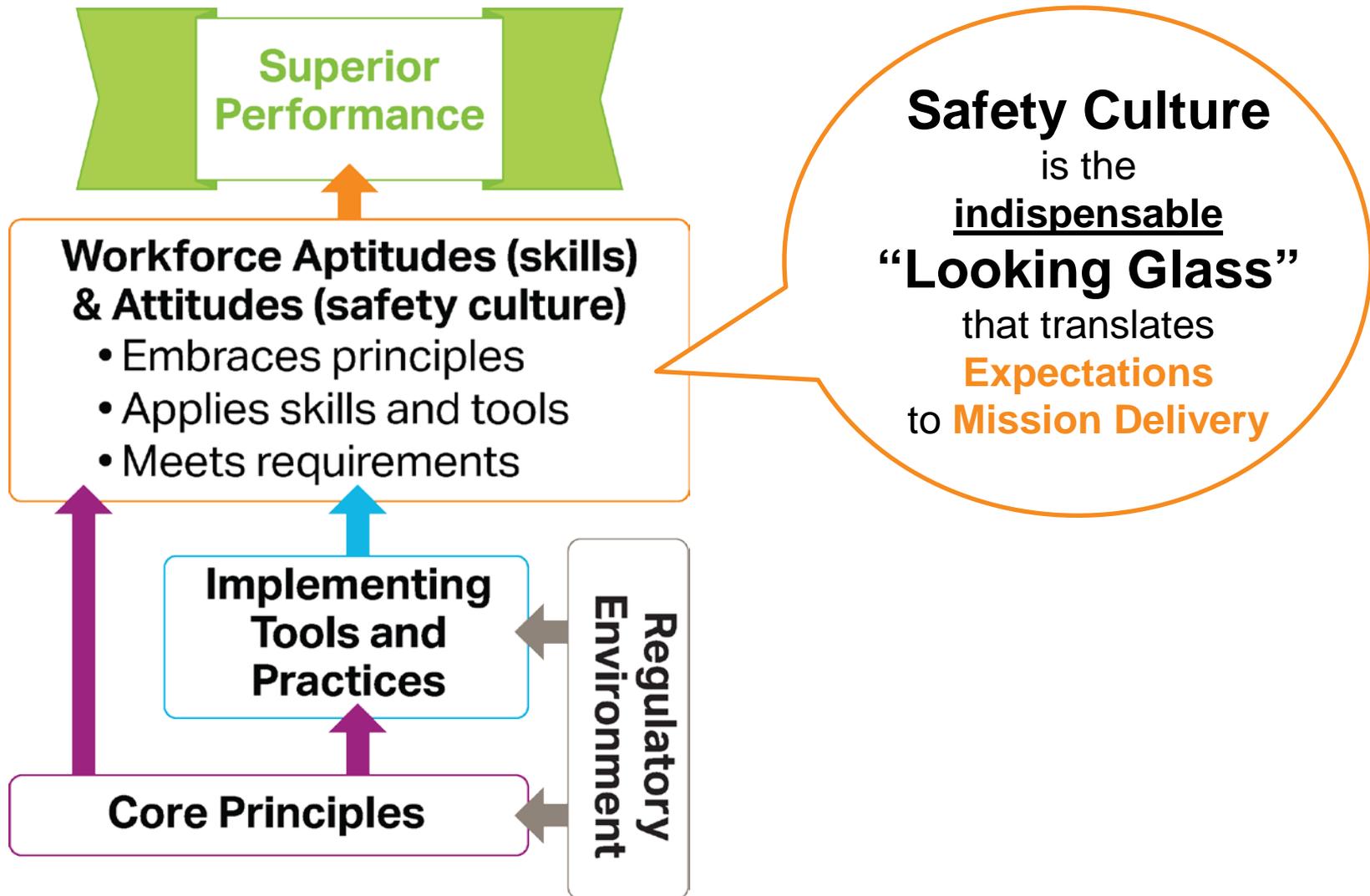
Fitz Trumble & Paul Gubanc

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We're Each Confronted with Many Expectations

- Mission
- Compliance
- Cost
- Schedule
- Accountability
- Safety
- Efficiency
- Reliability
- Repeatability

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A Simple Model Offers Clarity

Superior Performance

Workforce Aptitudes (skills) & Attitudes (safety culture)
- Embraces principles
- Applies skills and tools
- Meets requirements

Implementing Tools and Practices

Regulatory Environment

Core Principles

Safety Culture is the **indispensable** "**Looking Glass**" that translates **Expectations** to **Mission Delivery**

History

- **Safety Culture**
  - Chernobyl (1986) Nuclear
  - Piper Alpha (1988) Oil & Gas
  - Challenger (1986) Aerospace
  - Bhopal (1984) Chemical

- **Safety Climate**

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Classical Safety Culture Definition

– Institute for Nuclear Power Operation (INPO)

– Occupational Safety & Health (OSHA)

– National Aeronautics Space Administration (NASA)

– Focused heavily on what it looks like and determining measureable traits

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Emotional Safety Culture Definition

– Focused on personal **values** and emotional connection:

- **I**ntegrity

- **C**uriosity

- **H**umility

– Supported and sustained organizationally by:

- **L**eadership

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Values

– **I**ntegrity
- Doing the right thing, even when no one is watching.
- Believe the indications—until you can prove they are wrong.

– **C**uriosity
- Always wondering what could go wrong—even if it hasn't yet.
- Questioning why a system's behaving that way.

– **H**umility
- There is always more left to learn—and I can learn something from listening.
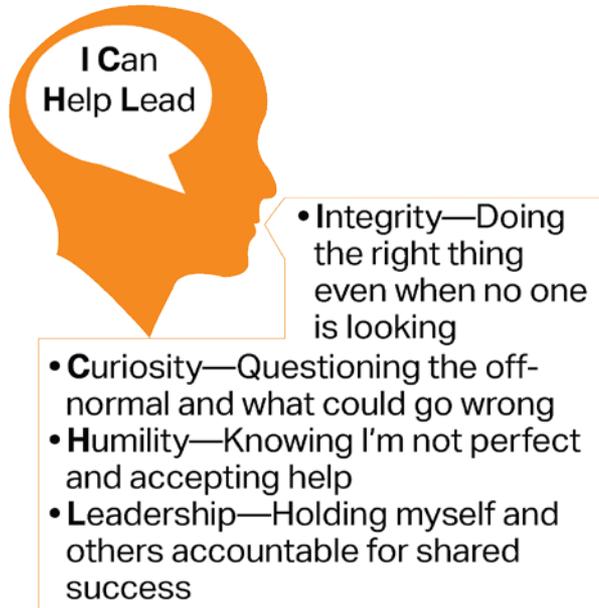- "Because I said so"—is not an acceptable reason.

– **L**eadership
- Has nothing to do with titles or power.
- Personal and professional accountability—for yourself and others.

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A Mnemonic to Remember

- **I**ntegrity
- **C**uriosity
- **H**umility

Our Work

Leadership

I Can
Help **L**ead

- **I**ntegrity—Doing the right thing even when no one is looking
- **C**uriosity—Questioning the off-normal and what could go wrong
- **H**umility—Knowing I'm not perfect and accepting help
- **L**eadership—Holding myself and others accountable for shared success

I CAN HELP LEAD

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Case Studies

- NIH/FDA discovery of Small Pox outside containment (7/2014) [1]

- CDC potential Anthrax exposure (7/2014) [2]

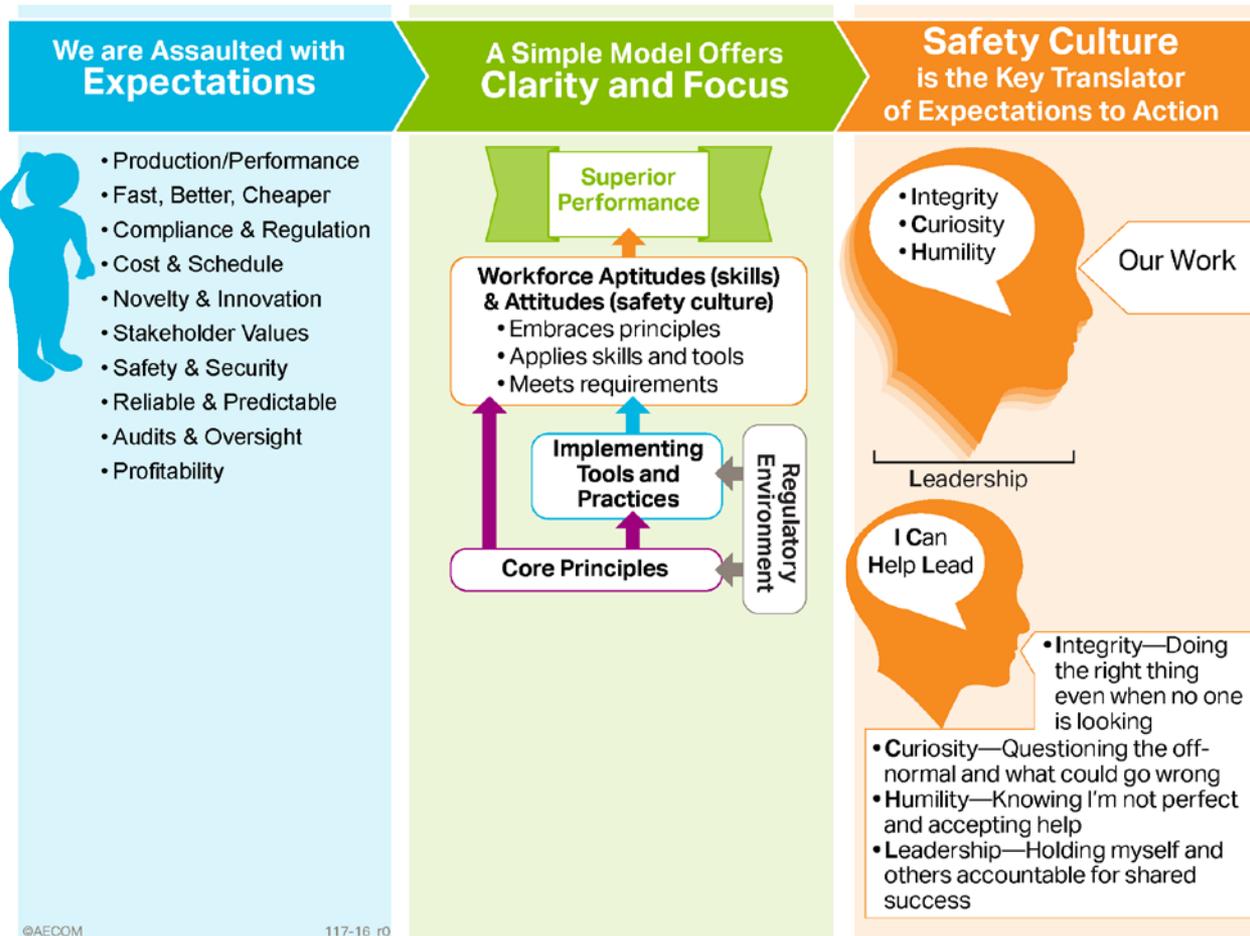- Dugway distribution of viable Anthrax spores (5/2015) [3]

[1]http://docs.house.gov/meetings/IF/IF02/20160420/104823/HHRG-114-IF02-20160420-SD003.pdf
[2]http://www.cdc.gov/about/pdf/lab-safety/Final_Anthrax_Report.pdf
[3]https://assets.documentcloud.org/documents/2691592/Dugway-Proving-Ground-Anthrax-Shipment-AR-15-6.pdf

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Putting it all together

"I Can Help Lead"
A Safety Culture Model

How Do I Get Started?

1. Select a Safety Culture Model that works for you

2. Obtain Leadership buy-in and support

3. Baseline your current safety culture

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Thank you.

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